TENDER SPECIFICATION

Ref: BHEL/PSSR/SAS/SCT/T-05/2026-27 **Date: 15.05.2026**

Capital Overhauling of HIP & LP Turbines for 2 nos. Units (both KN Series Turbines) as per SOW at NALCO CPP (120MW) Angul

DUE DATE FOR SUBMISSION: **11.00 Hrs. – 25.05.2026**

VOLUME-1
TECHNICAL BID & PRICE BID

BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
Power Sector - Southern Region - Services After Sales,
BHEL Integrated Office Complex (3rd Floor),
TNEB Road, Pallikaranai, Chennai - 600100.

Contd./-

NOTICE INVITING TENDER (NIT)

Submission only through E-Procurement Portal

https://eprocurebhel.co.in

Note: Bidder may download Tender Documents from web sites

To

Dear Sir / Madam

Sub: NOTICE INVITING TENDER

Online Sealed offers in two part bid system are invited from reputed & experienced bidders (meeting PRE QUALIFICATION CRITERIA as mentioned below) **through E-Procurement Portal** https://eprocurebhel.co.in **only**, for the subject job by the undersigned on the behalf of BHARAT HEAVY ELECTRICALS LIMITED as per the tender document. Following points relevant to the tender may please be noted and complied with.

This tender shall be under category of National Competitive Bidding (NCB).

1.0 Salient Features of NIT

Sl. No	ISSUE	DESCRIPTION	
i	TENDER NUMBER	**BHEL/PSSR/SAS/SCT/T-05/2026-27 Date:15.05.2026**	
ii	BROAD SCOPE OF JOB	**Capital Overhauling of HIP & LP Turbines for 02 nos. Units (both KN Series Turbines) as per SOW at NALCO CPP (120MW) Angul**	
iii	DETAILS OF TENDER DOCUMENT		
A	VOLUME-1 (Technical Bid)	1. NIT, Technical Conditions of contract and Annexures 2. HEALTH, SAFETY AND ENVIRONMENT PLAN FOR SITE OPERATION by SUBCONTRACTORS (Doc. No.HSEP:14 (Rev.01) Dtd.20.01.2020) 3. GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB]	Applicable
B	VOLUME-2 (Price Bid)	1. Price Bid	Applicable
iv	Issue of Tender Documents	1. This is an E-tender floated online through our E-Procurement Portal https://eprocurebhel.co.in 2. Download Start: 15.05.2026	Applicable
v	Due Date & Time of Offer Submission	**Date : 25.05.2026, Time : 11:00 Hrs** The bidder should submit their offer online in e-Procurement portal at https://eprocurebhel.co.in Offers are invited in two-parts only. Bidders are requested to upload their offer well	Applicable

		in advance in order to avoid last minute congestion at this website. Hard copy bid or bids through E-mail / fax shall not be accepted.	
vi	Opening of Tender	**Date: 25.05.2026, Time :15:00 Hrs** Notes: (1) In case the due date of opening of tender becomes a non-working day, then the due date & time of offer submission and opening of tenders get extended to the next working day. (2) Bidder may witness the opening of tender through e-Procurement portal only.	Applicable
vii	EMD Amount	Rs.2,00,000/- (Rupees Two Lakh only) Notes: (1) EMD Exemption for MSEs is not applicable for this tender. (2) One time EMD is applicable for this tender. Refer clause 2.0 of NIT for mode of deposit of EMD.	Applicable
viii	Last Date For Seeking Clarification	Bidders may submit their queries at least 3 days before the scheduled due date of offer submission along with soft version also, addressing to undersigned & to others as per contact address of Tender issuing department given below: For any clarification on the tender document, you may seek the same in writing or through e-procurement portal/platform as per specified format within the last date of seeking clarification as per tender. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay, and receipt of any query after due date shall not be entertained.	Applicable
ix	Reverse Auction	BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com on “supplier registration page”) for this tender. RA shall be conducted among all the techno-commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered as initial bids of bidders in RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.	Applicable
x	Latest	Latest updates on the important dates,	Applicable

	updates	Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be hosted on e-tender portal https://eprocurebhel.co.in and not in the newspapers. Bidders to keep themselves updated with all such information. This also form part of tender hence the same shall be enclosed with their offer.	
xi	Tender issuing department contact details	Routine correspondences regarding the clarifications, time extensions or any other administrative queries, etc. on the tender issued shall be posted in https://eprocurebhel.co.in. Any other queries may be addressed directly to the tender issuing department as mentioned below: 1. Shri. T Sravana Kumar Phone: 044 2458 9538 Mobile: 9866734976 E-mail: sravankt@bhel.in 2. Shri. M Sai Kiran Phone: 044 2458 9563 Mobile: 9490493201 E-mail: saikiranm@bhel.in	
xii	PRE QUALIFICATION CRITERIA (TECHNICAL)	A. Bidder should have EXECUTED at least one job of "Erection & Commissioning of BHEL make Steam Turbine or "Major Overhauling of BHEL make Steam Turbine" of an unit of Rating 110MW or above in any Utility Power Project against direct order from BHEL / PSUs / State Electricity Utilities/Equipment owner in last 7 (Seven) years, ending on latest due date of submission of offer. Note: 1) Relevant Supporting Documents of WORK ORDER COPY AND WORK COMPLETION CERTIFICATES shall be submitted. Work completion certificates are not required if works are executed under BHEL. 2) The word EXECUTED means: The work shall have been completed upto SYNCHRONISATION (Synchronization date shall be considered for evaluation) even if the contract has not been completed or Closed B. Bidder should have valid PAN NUMBER.	Applicable

		Relevant Supporting Documents shall be submitted. C. NO CONSORTIUM / JV bidding is allowed for this tender D. Bidder must NOT BE UNDER BANKRUPTCY CODE PROCEEDINGS (IBC) by NCLT OR UNDER LIQUIDATION / BIFR, which will render him INELIGIBLE for participation in this tender, and SHALL SUBMIT UNDERTAKING to this effect. After satisfactory fulfillment of all the above criteria & PRE QUALIFICATION CRITERIA (Financial), offer shall be CONSIDERED for further evaluation as per NIT and all other terms of the tender.	
xiii	PRE QUALIFICATION CRITERIA (Financial)	(a) Bidder should have average annual turnover of minimum Rs. 40 Lakhs during last 3 (three) consecutive Financial Years FYs i.e. FY to be considered shall be 2022-23, 2023-24, 2024-25. Audited Balance Sheet and Profit & Loss Account for the three Financial Years (FY) as indicated above, need to be submitted in support of above. In case audited Financial statements have not been submitted for all the three years as indicated above, then the applicable audited statements submitted by the bidders against the requisite three years, will be averaged for three years. If financial statements are not required to be audited statutorily, then instead of audited financial statements, financial statements are required to be certified by Chartered Accountant. CA certified documents should contain UDIN number. (b) Net worth (only in case of companies) of the bidder should be positive. Note: Net worth shall be calculated based on the latest Audited Accounts as furnished above. Net worth = Paid up share capital + Reserves. (c) Bidders must have earned Profit in any one of the five financial years as applicable in the last five financial years	Applicable

		preceding the present (i.e. 2020-21, 2021-22, 2022-23, 2023-24 & 2024-25). Note: PROFIT shall be "PBT" earned during any one of the five financial years as applicable in para (c) above.	
xiv	INTEGRITY PACT and Details of Independent External Monitor (IEM)		Not Applicable
xv	ORDER OF PRECEDENCE	In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below: 1. Amendments/Clarifications/Corrigenda /Errata/Tender change notice (TCN) etc. issued in respect of the tender documents by BHEL 2. Notice Inviting Tender (NIT) 3. Price Schedule 4. Scope of work & technical conditions of contract, HSE PLAN FOR SITE OPRATIONS BY BHEL'S SUBCONTRACTORS and Annexures. 5. SPECIFIC TERMS AND CONDITIONS FOR SERVICES JOBS 6. GENERAL & SPECIAL CONDITIONS OF CONTRACT FOR SERVICES JOB	Applicable
xiv	Evaluation currency	INDIAN RUPEES (INR)	Applicable
xv	Cost of Tender	Free	--
xvi	Customer approval	All technically qualified bidders list will be forwarded to Customer NALCO- Angul for further approval. Bidders approved by Customer NALCO- Angul shall be considered for further processing of tender and Reverse Auction. BHELs decision in this regard is final and is binding on contractor.	Applicable

2.0 MODE OF DEPOSIT OF EMD (MSMED and NSIC are not acceptable towards EMD)

EMD for this tender shall be **Rs.2,00,000/- (Rupees Two Lakh only)**

Offers submitted without EMD will be liable for rejection.

- Modes of Deposit: The EMD may be accepted only in the following forms
  - 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).

For Electronic Fund Transfer the details are as below-:

I) Name of the Beneficiary -: Bharat Heavy Electricals Limited

II) Bank Particulars

a) Bank Name -: State Bank of India
b) Bank Telephone No. (with STD code)-: 044 – 2433 0583 / 2433 0407
c) Branch Address-: SBI Commercial Branch, Guindy (04327)
d) Branch Code -: 004327
e) 9 Digit MICR Code of the Bank Branch -: 600002114
f) Bank Account Number -: 00000010610819499
g) Bank Account Type -: Cash Credit Account
h) 11 Digit IFSC Code of Beneficiary Branch-: SBIN0004327
i) Details for SFMS (Structured Financial Messaging System) transmission of BG

Bank and Branch	SBI TFCPC Branch
Branch Code	5056
IFSC Code	SBIN0005056

On transfer of amount through EFT, receipt of the same to be submitted as mentioned in clause no. 4.0.

iii) Banker's cheque/Pay order/Demand draft, in favor of BHEL payable at Chennai (along with offer).

iv) Fixed Deposit Receipt (FDR) issued by Scheduled Banks/Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL)

v) Insurance Surety Bonds

vi) In case EMD amount is more than Rs. Two Lakhs, Tenderer has the option to submit Rs. Two lakhs in the forms described above in clause no. 2.0 (i) to (iv) and the remaining amount over and above Rs. Two Lakhs in the form of Bank Guarantee from Scheduled Bank (along with the Offer).

Note:

a) Proforma for Bank Guarantee for EMD- Form is enclosed with this Tender.

b) The Bank Guarantee shall be valid for at least six months from the due date of tender submission mentioned in the Notice Inviting Tender.

c) Date of Expiry of Claim shall be as given in Proforma of Bank Guarantee (in lieu of Earnest Money).

If EMD is submitted in the mode of (iii) Bankers cheque/pay order/DD or (iv) FDR or (v) BG, the same should be forwarded along with covering letter mentioning the tender reference, description &

due date for tender submission (mention the same details on envelope also) to the following address so as to reach us on/before due date.

Manager - Sub Contracts,
Bharat Heavy Electricals Ltd.,
Power Sector - Southern Region - Services After Sales,
BHEL Integrated Office Complex (3rd Floor),
TNEB Road, Pallikaranai,
Chennai - 600100.
Phone: 044 2458 9538.

EMD will be forfeited as per NIT Conditions, if:

i) After opening the tender and within the offer validity period, the tenderer revokes his tender or makes a 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.

- EMD given by all unsuccessful tenderers will be refunded normally within 15 days of award of work.
- EMD shall not carry any interest.
- EMD of successful tenderer will be retained as part of Security Deposit.
- EMD by the tenderer shall be withheld in case any action on the tenderer is envisaged under the provisions of extant" Guidelines on Suspension of Business dealings with suppliers/contactors" and forfeited / released based on the action determined under these guidelines.

(Note -: In case of E-Tenders, proof of remittance of EMD should be uploaded in the E-Procurement Portal and originals, as applicable, shall be sent to the officer inviting tender within a reasonable time, failing which the offer is liable to be rejected).

3.0 **Procedure for Submission of Tenders:** This is an E-tender floated online through our E-Procurement portal https://eprocurebhel.co.in. The bidder should respond by submitting their offer online only in our e-Procurement portal at https://eprocurebhel.co.in. Hard copy bid or bids through email/ fax shall not be accepted.

Documents Comprising the e-Tender

The tender shall be submitted online ONLY EXCEPT EMD (in physical form) as mentioned below:

a. Technical Tender (UN priced Tender)

All Technical details (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):

i. Earnest Money Deposit (EMD) furnished in accordance with NIT Clause 2.0.
ii. Technical Bid (without indicating any prices).

b. Price Bid:

i. Prices are to be quoted in the attached Price Bid format online on e-tender portal.
ii. The price should be quoted for the accounting unit indicated in the e-tender document.
iii. 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.
iv. 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.

DO NOT'S
Bidders are requested NOT to submit the hard copy of the Bid. In case offer is sent through hard copy/fax/telex/cable/electronically in place of e-tender, the same shall not be considered. Also, uploading of the price bid in prequalification bid or technical bid may RESULT IN REJECTION of the tender.

Digital Signing of e-Tender
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).

The Requirement:
1. A PC with Internet connectivity &
2. DSC (Digital Signature Certificate) (Class 3- SHA2- 2048 BIT- SIGNING & ENCRYPTION)
BHEL has finalized the e-procurement service Provider-:

NIC PORTAL (https://eprocurebhel.co.in)

For E-PROCUREMENT ASSISTANCE & TRAINING, NIC PORTAL HELPDESK CONTACTS AS PER FOLLOWING: -

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

0120-4001 002
0120-4200 462
0120-4001 005
0120-6277 787
1. Peter Raj, NIC, Ph: 9942069052
Email Support: support-eproc@nic.in

The process of utilizing e-procurement necessitates usage of DSC (Digital Signature Certificate) (Class 3- SHA2- 2048 BIT- SIGNING & ENCRYPTION) and you are requested to procure the same immediately, if not presently available with you. Please note that only with DSC, you will be able to login the eprocurement secured site and take part in the tendering process.

The contact details of the DSC Certifying Authority as given below:

Sl. No.	Name	Website Link
1	(n) Code solutions	https://www.ncodesolutions.com/
2	e-Mudhra	https://www.e-mudhra.com/
3	Safescrypt	www.safescrypt.com

Vendors are also requested to go through seller manual available on https://eprocurebhel.co.in

4.0 **DOCUMENTS TO BE UPLOADED & MODALITY OF UPLOADING in E-PROCUREMENT PORTAL https://eprocurebhel.co.in SHALL BE AS DETAILED BELOW:**

Sl.No	**Description**	**Remarks**
	Techno-Commercial Bid CONTAINING THE FOLLOWING:-	
i	Covering letter / Offer forwarding letter of Tenderer.	Refer "Bidders Manual Kit" available at https://eprocurebhel.co.in.
ii	Duly filled-in `No Deviation Certificate' as per prescribed format to be placed after document under Sl No (i) above. Note: 1. In case of any deviation, the same should be submitted separately for technical & commercial parts, indicating respective clauses of tender against which deviation is taken by bidder. The list of such deviation shall be attached along with document under sl no (i) above. It shall be specifically noted that deviation recorded elsewhere shall not be entertained.	

	2. BHEL reserves the right to accept / reject the deviations without assigning any reasons, and BHEL decision is final and binding. (i) In case of acceptance of the deviations, appropriate loading shall be done by BHEL (ii) In case of unacceptable deviations, BHEL reserves the right to reject the tender.	
iii	All Amendments / Correspondences / Corrigenda / Clarifications / Changes / Errata etc. pertinent to this NIT.	
iv	NIT document along with Scope of works, specific conditions, HSE PLAN FOR SITE OPRATIONS BY BHEL'S SUBCONTRACTORS and GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB] and Un-priced price bid (price bid without disclosing rates/price, but mentioning only 'QUOTED' or 'UNQUOTED' against each item)	
v	EMD Remittance Proof	
vi	Declaration by bidder for price opening through Reverse Auction.	
vii	Declaration by bidder regarding NIL Insolvency proceedings.	
viii	Declaration regarding related firms	
ix	Declaration regarding minimum local content in line with revised public procurement (preference to Make In India), order 2017	
x	Declaration regarding compliance to restrictions under rule 144 (xi) of GFR 2017.	
xi	Analysis of Unit rates	
xii	Work order copies & work completion certificates as mentioned in pre-qualification criteria	
xiii	Financial documents as mentioned in pre-qualification criteria (Document should contain UDIN).	
xiv	PAN NO & Photo Copy of PAN CARD.	
xv	Photo Copy of GSTN Registration Certificate.	
xvi	Photo Copy of PF Registration certificate	
xvii	Photo Copy of ESI Registration certificate	
xviii	Bank Account Details for E-Payment	

xix	Attested copies of partnership deed, power of attorney.	
xx	Any other details preferred by bidder with proper indexing.	

Caution to Bidders: -

The duly signed & stamped copies of NIT document along with Scope of works, specific conditions, HSE PLAN FOR SITE OPRATIONS BY BHEL'S SUBCONTRACTORS and GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB] and Un-priced price bid are to be attached under the form Techno-commercial Bid. For any further queries, Refer "Bidders Manual Kit" available at https://eprocurebhel.co.in.

Sl.No	Description	Remarks
i	Price/ Total Amount corresponding to the total works as specified shall be quoted in the format named 'PRICE BID. Format to quote Total Amount' available in e-Procurement portal under 'Packet details -> Tender covers -> Finance '(Cover Type Description – Price Bid). Bidders to note that total amount quoted by the bidder in this format shall be considered for evaluation of offer.	Refer "Bidders Manual Kit" available at https://eprocurebhel.co.in.

SPECIAL NOTE:

i) All documents / annexures submitted with the offer shall be properly attached / entered / uploaded in the respective sections. BHEL shall not be responsible for any missing documents.

ii) Your offer & documents submitted along with offer shall be signed & stamped in each page/digitally signed on cover page by your authorized representative. No overwriting / correction in tender documents by bidders shall be allowed. However, if correction is unavoidable, the same may be signed by authorized signatory.

5.0 No deviation with respect to tender clauses and no additional clauses/ suggestions/clarification in Techno-commercial bid/Price bid shall normally be considered by BHEL. Bidders are requested to positively comply with the same. Offers with deviation are liable for rejection.

6.0 Since the job shall be executed at site, the bidders are advised to visit site/ work area and study the job content, facilities available, availability of materials, prevailing site conditions including Law and Order situation, applicable Wage structure, Wage rules, present condition of machines etc. before quoting for this tender. They may also consult this office before submitting their offers, for any clarifications regarding scope of work, facilities available at sites or on terms and conditions. No additional claim shall be entertained by BHEL in future, on account of non-acquaintance of site/machine conditions at the time of bidding.

7.0 BHEL may decide holding Pre-bid Discussion [PBD] with all intending bidders. On such communication from BHEL, the bidder shall ensure participation for the same at the appointed time, date and place as may be decided by BHEL. Outcome of PBD (if any) shall also form part of tender.

8.0 In the event of any conflict between requirement of any clause of this specification/ documents /drawings /data sheets etc. or requirements of different codes/ standards specified/ contradictions between any two clauses of tender document, the same to be brought to the knowledge of BHEL by bidders in writing for clarification before due date of seeking clarification, otherwise, more stringent requirement as may be interpreted by BHEL shall prevail and shall be binding on you. Any typing error/missing pages/ other clerical errors in the tender documents, noticed by bidder must be pointed out before submission of offer, or else, BHEL's interpretation shall prevail & binding on you.

9.0 Unless specifically mentioned otherwise, bidder's quoted price shall deemed to be in compliance with tender including PBD.

10.0 Bidders are requested to note that the accepted / agreed tender terms (technical, commercial or on Reverse Auction) in their original offer cannot be altered / withdrawn by their own during the processing of tender.

11.0 Bid should be free from correction, over writings using any interlineation, cutting or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection.

12.0 After opening of Technical Bids, if found suitable, there is a possibility of opening the price bid on the same day and to the need of urgency, **Bidder should be in a position to mobilize the work force immediately.**

13.0 **Total price:**

- Price to be quoted in the enclosed Price Schedule Format–Annexure-3.
- **Total price to be quoted for all activities as per the scope mentioned in the Annexure-2.**
- GST REGISTRATION NUMBER TO BE QUOTED SEPARATELY BELOW THE TOTAL PRICE.
- Prices quoted will be taken as the TOTAL PRICE FOR CARRYING OUT THE ENTIRE WORK AS PER THE SCOPE OF WORK SPECIFIED AND ALL THE RELEVANT DETAILS FURNISHED IN THIS TENDER.

13.1 The rates offered shall be firm inclusive of everything and no variation will be allowed whether in cost of labour or any other factor affecting the price of the contract.

13.2 In case offered price is mentioned in multiple documents by the bidder and in case of variation between offered price, the offered price advantageous to BHEL shall be taken as final for all purposes. BHEL decision in this regard shall be final and binding on contractor.

13.3 BHEL does not bind itself to accept the lowest tender. BHEL reserves the right to accept or reject the lowest or any other tender without assigning any reason and the work may be allotted to one or more than one contractors.

13.4 Incomplete price bid is liable to be rejected.

14.0 **Validity:**

14.1 Validity of the offer shall be for six months from the latest due date of offer submission (including extension, if any) unless specified otherwise for awarding works.

14.2 The period of contract shall be for One year from the date of start of the contract i.e. One year from LOI date.

14.3 PVC shall be applicable as per clause 2.15 of GSCC. PVC shall be applicable for each unit separately.

14.4 ORC is not applicable for this tender.

15.0 **Security Deposit:**

15.1 The total amount of Security Deposit should not be less than five percent (5%) of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.

Modes of deposit:

15.2 The balance amount to make up the required Security Deposit of the contract value may be accepted in the following forms:

(i) Cash (as permissible under the extant Income Tax Act)

(ii) Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand 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 should have the approval of BHEL

(iv) Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL)

(v) Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL)

(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)

15.3 **Collection of Security:**

At least 50% of the required Security Deposit, including the EMD, should be collected before start of the work. Balance of the Security Deposit can be collected by deducting 10% of the gross amount progressively from each of the running bills of the Contractor till the total amount of the required Security Deposit is collected.

If the value of work done 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 recovered from payment/s due to the Contractor.

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, with the approval of the authority competent to award the work.

(Note: In case of (a) small value contracts not exceeding Rs. 20 lakhs or
(b) SAS jobs, work can be started before the required Security Deposit is collected. However, payment can be released only after collection/ recovery of initial 50% Security Deposit).

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

15.5 Security deposit shall be collected for each unit separately.

15.6 Security deposit shall be released after completion of DLP for each unit separately.

16.0 **Defect liability/Workmanship guarantee:**

Even though the work will be carried out under supervision of BHEL Engineers. The contractor shall guarantee against defects attributable to faulty workmanship or procedure adopted in the overhaul for items covered in the contract for a period of six months for each unit from the date of recommissioning of the set after the capital overhaul. The guarantee should cover all defects notified during this period and shall have to be attended to free of cost immediately or at the time our clients are able to give shut down of the set for the required period. when necessary. In case of failure of contractor to attend to such defects as and when required in time, BHEL shall arrange to attend the defects and the charges shall be levied to contractor's account and shall be recoverable from the security deposit / progressive payments.

17.0 **To effect recovery from any amounts due to the contractor under this or any other contract or in any other form, the moneys BHEL is statutorily forced to pay to anybody, due to contractor's failure to fulfill any of his obligations. BHEL shall levy overheads of 5% on all such payments along with interest as defined elsewhere in the GCC.**

18.0 **Commencement of work-expected:**

Tentative start date of execution period shall be 1st Unit is from 05.06.2026 and 2nd Unit in Sep-2026 (tentatively). Successful bidder has to mobilize the site immediately for 1st Unit from intimation of communication from BHEL and for 2nd Unit within 07 days from intimation of communication from BHEL for each unit separately for fulfilling all statutory requirements like Police verification, Medical fitness, Gate/Entry pass formalities etc. However, in case of urgency, bidder may be asked to mobilise the site immediately on getting intimation from BHEL. We shall inform to the successful bidder through any available mode of communication. The successful bidder has to specifically confirm that all required resources and manpower will be mobilized immediately after intimation.

For making gate pass for overhauling works, mobilization is to be done immediately for fulfilling all statutory requirements.

19.0 The entire work shall be carried out by the successful bidder as decided by Resident Manager / BHEL / SAS with the best skills and know how available. The scope of work is only an indicated and not exhaustive. However, successful bidder should abide by the decision of the Resident Manager for any variations of the work.

20.0 **Completion Period for this Contract:**

20.1 The entire work covered under the scope of this contract is to be completed **within 45 days for each unit (Start to oil flushing).** However, for any additional work the completion period shall be proportionately increased.

20.2 For any other additional works as mutually agreed between BHEL & Successful bidder, completion period will be suitably increased.

21.0 **LIQUIDATED DAMAGES/PENALTY:**

In the event of failure to complete the work in given time, an amount equal to ½% [half percent] of the contract value per day **for each unit** subject to a maximum of 10% [ten percent] of the contract value will be levied as penalty, in case the balance work is allowed to be completed by the contractor beyond the scheduled time of completion, which is at the discretion of BHEL. In case of delays on contractor's part, at any stage during the scheduled period or after, BHEL shall have the option of ensuring completion of the job by any other means at its disposal and the charges on this account shall be levied on the contractor. These shall be adjusted against contractor's bills or Security Deposit. Contract Value for this purpose, shall be the final executed value **for each unit** exclusive Extra Works executed on Manday rate basis, Supplementary / Additional Items and PVC.

22.0 **Compulsory Three shift operation** to be taken up as decided by BHEL/Site In-charge: All the works are to be taken up round the clock (i.e. 24 hours) in three shift operation. Hence all the works are to be planned round the clock without any break. No extra claim will be entertained for three shift operation, idling of manpower due to delay in arrangement of inputs etc. The entire work is to be taken up on war footing with maximum effort. Successful bidder has to engage sufficient manpower to ensure work with equal pace in all the three shifts.

23.0 **Terms of payment:**

23.1 **Activity- wise percentage breakup has been indicated against each activity in the scope of work in Annexure-2. In case of reduction in quantum of work at site, payment shall be released only for the activities actually carried out as per the percentage allotted. Contract value shall be revised accordingly.**

23.2 GST compliant tax invoice **as per Cl. No. 24.2 (Taxes and Duties)** is mandatory for releasing of payment and **GST remittance proof as per Cl. No. 24.2 (Taxes and Duties)** has to be enclosed for reimbursement of GST. E-invoice as applicable is mandatory for releasing of payment.

23.3 A minimum time of one week will be required for the processing of bills (received with all required documents) presented and for their payment.

23.4 Check list (**CHECK LIST TO BE SUBMITTED WITH EACH RUNNING BILL**) attached with this tender shall be submitted with each running bill.

23.5 TERMS OF PAYMENT:

23.5.1 Payment terms are as follows (for each unit separately)

a. Up to 90% of the contract value shall be payable against submission of up to three progressive running bills. Each of the billed amount shall correspond to the quantum of job actually completed and to that effect the claim can be preferred based on percentage allotments (given in the work order) made. This, however, has to be certified by the resident manager / engineer of the site.

i) The Following documents are to be submitted with 1st RAB provided the value of such bill should not exceed 40% of CV.

1. Workmen compensation Insurance (should be taken for the full period of the contract. In case any defects attended during defect liability period Insurance should be taken during such period.) or Copy of e-Pehchan cards .
2. Joint protocol / letter of commencement of work.
3. Labour License application copy (Labour license shall be applied online as per customer requirement)
4. Submission of billing breakup for RAB.

However, if the value of 1st RA Bill exceeds 40% of CV, all the documents specified for 2nd & 3rd RA Bill (as mentioned below) shall be required in addition to Joint Protocol/Letter of commencement of work.

ii) The Following documents are to be submitted with 2nd and 3rd RAB

1. Workmen compensation Insurance/ESI, PF, Third party liability policy (as per customer requirement) & Wage register/Bank statement of workmen payment verified by EIC for the completed months of execution period.
2. Labour license (Labour license shall be applied online as per customer requirement)
3. Duly filled pro-forma of Form 36B.
4. HR Pro-forma to be submitted along with bill.
5. Test reports (like NDT, Electrical etc., as applicable) (03 hard copies each)
6. Submission of billing breakup for each RAB.

b. Final bill shall be payable after successful synchronization / commissioning Value of such final bill shall be total executed contract value less previous RAB(s) values.

The following documents are to submitted with final bill.

1. Workmen compensation Insurance/ ESI, PF, Third party liability policy (as per customer requirement) & Wage register/Bank statement of workmen payment verified by EIC for the balance period of execution, if applicable.

2. HR Pro-forma to be submitted along with bill.
3. Applicable time extension copy shall also be submitted
4. Submission of billing breakup for final bill.

Note: The above mentioned are only the major compliances required, however EIC shall inform submission of any other documents from time to time.

23.6 RETENTION AMOUNT (for each unit separately):
Retention amount shall be 10% of executed contract value including extra works if any, and the vendor may submit the same in the form of (a) or (b) below.

(a) CASH (DD/Online payment), 10% of the full contract Value towards Retention amount, before commencing the contract. (Retention amount for extra works if any, shall be deposited by the vendor separately)

(or)

(b) Recover 10% from Each Running/Final/Extra works bill towards Retention amount.

23.7 Refund of Retention amount (for each unit separately):

Retention amount shall be refunded on submission of duly signed (for certification of contractor portion only) REFUND OF RETENTION AMOUNT (format attached –Format No. PS:SR:SAS:SCT:Retention:REFUND:001) along with covering letter with the following documents.

a. Certification to the effect that "No further claim" will be made against this contract.
b. Submission of a "NO DUES" certificate from our principal customer regarding returning of materials, T&P, tackles, fixtures etc. if any supplied to the successful bidder by the principal customer through BHEL during the execution of work to the effect that all the items have been received intact or as part or after fabrication.
c. Retention amount shall be refunded only after internal clearances from different departments like Commercial, HR, Subcontracting & Services.
d. Submission of GST Reconciliation statement.(format attached)

24.0 **TAXES AND DUTIES**

24.1 ***All* taxes and duty other than GST & Cess and BOCW Cess**

The contractor shall pay all (except GST, which is dealt separately) taxes, fees, license charges, deposits, duties, tools, royalty, commissions, Stamp Duties, or other charges / levies, which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract and the same shall not be reimbursed by BHEL. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.

24.2 ***Goods and service Tax (GST) & Cess***

For GST Registered bidder:

The successful bidder shall furnish proof of GST registration under GST Law, covering the supply and services under this contract. Registration should also bear endorsement for the premises from where the billing shall

be done by the successful bidder on BHEL for this project/ work. The bidder to specify in their offer the category of registration under GST i.e. Regular dealer or composite dealer.

Bidder's price/rates shall be exclusive of GST & GST Compensation Cess (herein after termed as GST).

Vendor / Contractor require to ensure that all benefits as per existing laws have been considered.

Price quoted by the composite dealer shall be considered as inclusive of GST. In the event of any change in the status of vendor / Contractor from composite to regular dealer after the submission of the bid but before completion of supply of services or goods, Contract value shall be amended to remove the embedded GST and any ITC benefit arising due to change of status, which shall be passed on to BHEL. GST paid on the amended contract value shall be reimbursed at actuals against the Tax invoice if BHEL is able to take input tax credit. However, no reimbursement of GST shall be made if BHEL is not able to take input tax credit. The decision of BHEL in this regard will be final and binding on the vendor/contractor.

It is the responsibility of the vendor / contractor to adhere to all the provisions of E- Invoicing under GST Act (if applicable). As per the E-Invoicing provisions vendor / Contractor has to generate IRN and QR Code from the E-Invoicing system and the same need to be printed in the invoice submitted to their customer. Invoices that do not comply to the above requirements, will not be accepted by BHEL. If the successful Bidder is not falling under the preview of E-Invoicing, then he has to submit a declaration in that respect along with relevant financial statements. However, applicability of E-invoicing, shall be verified from the E-Invoicing portal on submission of vendor / Contractor GSTN. BHEL shall reimburse GST only if all the provisions of E-invoicing are complied with.

It is the responsibility of the vendor/ Contractor to issue the Tax Invoice strictly as per the format prescribed under the GST Act within the prescribed time period in order to enable BHEL to avail input tax credit within the due date. Invoices shall be submitted on time to the concerned BHEL Engineer In Charge. Tax invoice should also contain below details

a. Contractor Name and Contact details.
b. GST No of Contractor
c. PAN No of Contractor
d. Document Type: Tax Invoice/ Debit Note/ Credit Note
e. Category: B2B / B2C (B2B is only applicable w.r.t BHEL)
f. Customer Name and Contact details / Bill To Details (as mentioned below)
g. Unique Tax Invoice Number
h. Invoice Date
i. IRN No, QR Code, Acknowledgment No and Acknowledgment Date generated from E-Invoice Portal as per E-invoicing provisions under GST Act (If applicable)
j. Place of Supply (as mentioned below)
k. Description of service provided
l. 8 Digit SAC code

m. GST Rate
n. Gross value of Invoice
o. Taxable Value
p. Tax / GST Amount
q. Total Invoice value including GST.

Above are inclusive and not exhaustive list of requirements.

Bidder should mention the “Bill To “and “Place of supply” as below in the Tax Invoice

Bill To:

BHEL PSSR SITE OFFICE,
NALCO CPP, BANARPAL,
Angul, Odisha, 759145

BHEL GST Registration No: 21AAACB4146P1ZR

Place of Supply:

BHEL PSSR SITE OFFICE,
NALCO CPP, BANARPAL,
Angul, Odisha, 759145

BHEL GST Registration No: 21AAACB4146P1ZR

(Above details will be given later, contractors may contact BHEL, PSSR before billing)

The amount equivalent to the GST amount shall be withheld from the vendor / contractor payments towards non-compliance of GST/ Statutory provisions if below requirements are not satisfied:

Vendor / Contractor submitted original copy of Tax invoice /debit note as per the prescribed format under the GST act within the prescribed time period in order to enable BHEL to avail input tax credit within the due date.

The details of the invoice or debit note referred to in clause (a) has been furnished/filed by the Vendor/ Contractor in the statement of outward supplies (presently in GSTR1 or IFF) and such details get reflected in the BHEL GST login (Presently in GSTR 2B) in the manner specified under GST Act.

Details of vendor/contractor invoice reflected in BHEL GST login should match with the details in the tax invoice submitted by the vendor/contractor (Like Invoice no, Invoice date, GSTN, Place of supply).

The tax charged in the invoice /debit note referred to in clause (a) has been has been actually paid to the Government, either in cash or through utilization of input tax credit admissible by the Vendor/ Contractor.

In case, any GST credit is delayed/denied to BHEL or BHEL has to incur any liability (like interest / penalty) due to non/delayed receipt of goods or submission of tax invoice after the expiry of timeline prescribed in the relevant GST Act for availing ITC, or any other reasons not attributable to BHEL, Then the same shall be recovered from the vendor/contractor along with interest levied/ leviable on BHEL.

GST shall be levied on recoveries, wherever applicable and same shall be recovered from payments. BHEL shall issue / raise Tax invoice on contractor/vendors for such recoveries.

E-way bills / Transit passes / Road Permits, if required for materials / T&P etc., bought into the project site is to be arranged by the Vendor / Contractor themselves. BHEL shall not issue or raise any Road Permit/ E-Way Bill for this purpose. Any claim or demand raised by the GST department for non- generation / non submission of E-way bill shall be to the contractor/ vendor account

BHEL shall not reimburse any expenditure incurred by the contractor towards demand, additional liability or interest / penalty etc., raised by the GST department due to issues such as wrong rates / wrong classification of services or goods.

Where GST is payable by BHEL under reverse charge basis, any demand raised or any interest or penalty levied / leviable by the GST department due to non-submission or delayed submission of invoice by the contractor or for any other reason not attributable to BHEL, the same shall be recovered from the vendor/contractor.

Tax Deduction at Source (TDS) as per Sec 51 of the CGST Act shall be deducted (if applicable). GST TDS certificate in Form GSTR -7A shall be issued to be contractor. However, GST TDS certificate can be generated only if the contractor accepts the TDS details uploaded by BHEL and files his return. If any specific exemption from GST TDS is applicable to any contractor/vendor, then a declaration to that effect along with relevant documents as may be required by BHEL, substantiating such exemption in line with GST law provisions or notification, shall be submitted by the vendor/contractor.

For GST Unregistered bidder:

In case, bidder is not required to register under Goods and service Tax (GST) & Cess, the same is to be specified in the offer.

Successful bidder to furnish a Self-declaration that registration under GST is not required or not applicable as per the provisions of GST Law along with relevant document and provisions in the GST law.

In case BHEL has to incur any liability (like interest / penalty etc.) due to non-compliance of GST law in respect of the invoice submitted by the contractor, for the reasons attributable to the contractor, the same shall be recovered from the contractor.

TDS under GST (as & when applicable) shall be deducted at prevailing rates on gross invoice value.

If RCM is made applicable at a later date, GST will be paid by BHEL to the department at applicable rate treating the quoted the price as inclusive of GST if BHEL is not able to take Input tax credit.

In the event of any change in the status of bidder from unregistered to registered under the GST law after the submission of bid but before the completion of supply of services or goods, the same need to be intimated and all the clauses applicable for Registered bidder need to be followed. The

vendor/ contractor is required to pass on the ITC benefit arising due to change of status, to BHEL. Contract value shall be amended accordingly. GST paid on the amended contract value shall be reimbursed at actuals against the Tax invoice only if BHEL is able to take input tax credit.

24.3 **Statutory Variations**

In general, Statutory variation for GST is payable to the Vendor/Contractor during the contract period including extension thereof. Further, for period beyond the contract period, BHEL will reimburse the actual applicable tax even if the same is higher than the amount applicable within the contractual period in case BHEL is able to take the input tax credit. However, the decision of BHEL in this regard will be final and binding on the vendor/contractor otherwise vendor/contractor has to bear the differential upward increase in tax and quoted price is to be adjusted accordingly

No other variations except GST shall be payable by BHEL.

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24.4 **New Taxes/Levies**

In case Government imposes any new levy / tax after submission of bid during the tenure of the contract, BHEL shall reimburse the same at actual on submission of documentary proof of payment subject to the satisfaction of BHEL that such new levy / tax is applicable to this contract. However, Contractor/ Vendor shall obtain prior approval from BHEL before depositing new taxes and duties.

Any benefits arise out of new tax levies and/or abolition of existing taxes must be passed on to BHEL.

The decision of BHEL in this regard will be final and binding on the vendor/contractor.

24.5 **Modalities of Tax Incidence on BHEL:**

Where GST law permits more than one option or methodology for discharging liability of tax/ levy/ duty; the contractor shall approach BHEL before choosing any option to discharge his tax liability. BHEL shall have the right to direct the contractor to adopt the appropriate option considering the amount of tax liability on BHEL as well as procedural simplicity with regard to assessment of the liability.

The option chosen by BHEL shall be binding on the contractor for discharging the obligation of BHEL in respect of the tax liability to the contractor.

24.6 **BUILDING & OTHER CONSTRUCTION WORKERS (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1996 (BOCW Act) AND RULES OF 1998 READ WITH BUILDING & OTHER CONSTRUCTION WORKERS CESS Act, 1996 & CESS RULES, 1998**

In case any portion of work involves execution through building or construction workers, then compliance to the above titled Acts shall be ensured by the contractor and contractor shall obtain license and deposit the cess under the Act. In the circumstances it may be ensured as under:-

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.

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.

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

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

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.

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.

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.

24.7 **Direct Tax**

Vendor/ Contractor is required to update himself on its own and comply with provisions of Indian Income Tax Act as notified from time to time. Purchaser shall not be liable towards liability of income tax accruing to the vendor/contractor of whatever nature including variations thereof, arising out of this Order/ Contract, as well as tax liability of the vendor/ Contractor and his personnel

Deductions of Tax at source as per Income Tax Act, at the prevailing rates shall be effected by the Purchaser before release of payment, as a statutory obligation, if applicable. TDS certificate will be issued by the Purchaser as per the statutory provisions. The Vendor/Contractor has to mention their Permanent Account Number (PAN) and GSTIN in all invoices.

25.0 **Demobilization and remobilization**

As per clause 2.7.7 of GSCC

26.0 **Invoice submission:**

26.1 The bills are to be submitted through BHEL/Resident Manager addressed to

BHEL PSSR SITE OFFICE,
NALCO CPP, BANARPAL,
Angul, Odisha, 759145

BHEL GST Registration No: 21AAACB4146P1ZR

27.0 **Suvidha portal:**

For goods / works / services on Indian Suppliers / Contractors: Irrespective of the value of the invoice amount, the supplier/ contractor should necessarily upload the invoice details on BHEL SUVIDHA portal at https://suvidha.bhel.in/suvidha/, prior to despatch/raising invoice. All documents as per contract checklist, along with additional documents (if any), must be uploaded on the portal. It is mandatory that tax invoices with a net amount (including taxes) exceeding Rs five lakhs uploaded on the portal are digitally signed using a Class 3 Digital Signature Certificate (DSC) issued by a licensed Certifying Authority. Submission of invoice document in hard copy is allowed for invoices with a net amount (including taxes) equal to and upto Rs five lakhs in case the requirement for digitally signed invoice is not explicitly mentioned in the contract checklist.

The Invoice will not be accepted in absence of the above**.**

28.0 **Safety / Penalty:**

28.1 The bidder will be fully responsible for the safety of his workmen and shall provide necessary safety appliances like safety Helmets, Safety Shoes, Safety belts, Safety goggles and Safety apron, etc., to all workmen as per Safety Rules as enforced by BHEL / **Customer** at site without any additional cost.

28.2 Penalty will be imposed for not wearing the safety appliances as per HEALTH, SAFETY AND ENVIRONMENT PLAN FOR SITE OPERATION by SUBCONTRACTORS (Doc. No.HSEP:14 (Rev.01) Dtd.20.01.2020) attached with this tender.
In case of penalty imposed by customer is higher compared to penalty specified in above mentioned HSE Plan, customer penalty will be imposed.

28.3 Luminous safety jackets should be provided to all the Engineers, Supervisors and Workers deployed by contractor at site. All the contractor manpower should use the luminous safety jackets inside the plant premises.

28.4 In view of COVID-19, sufficient number of PPEs like face masks, disposable gloves, facility for frequent sanitization etc., for the contractor manpower shall be arranged by the contractor at work location.

28.5 Contractor shall strictly follow the guidelines/standard operating procedures regarding COVID-19 issued by State Government, Central Government, Local authorities and Customer.

28.6 Separate experienced supervisors are needed to be provided round the clock for supervising the safety practices.

29.0 For office and stores open site will be given. Any other facilities required have to be arranged at the bidder's cost.

30.0 The bidder should obtain statutory permission if any required for carrying out the contract at his own cost.

31.0 The bidder's personnel should follow all the rules in vogue at site.

32.0 In case of doubt, clarification or ambiguity, decision of BHEL will be final.

33.0 The bidder should execute the work to the satisfaction of concerned BHEL officials as per the job requirement as decided by BHEL. In case the work carried out is not satisfactory, BHEL reserves the right to terminate the

contract with 3 days advance notice and get the balance works carried out by any other agency and recover the entire extra cost if any from any of the amounts of the bidder available with BHEL.

34.0 No part of the contract shall be sublet without written permission of BHEL/SAS nor shall transfer be made by power of attorney authorizing others to receive the payment on behalf of the bidder.

35.0 **Calibration of IMTE:**

All measuring instruments including temperature and pressure measuring devices used at site are to be duly calibrated and certified by recognized agency with traceability to NPL or equivalent standards which should be valid during the entire period of execution of work at site. The calibration certificate having validity shall be produced at the time of establishment of site, and as and when required by BHEL.

36.0 **Hire charges for T&P, instruments etc., provided from BHEL or through BHEL:**

36.1 If the bidder fails to supply the required fit for use T&Ps, measuring instruments etc., during the execution of work, and if the same are provided by BHEL or through BHEL, the hire charges as decided by BHEL, will be levied on the basis of certification from BHEL/Resident Manager at site. Further on return of the items after usage, if BHEL is to incur any expenditure due to any damage/loss/repair/rectification on the above items, charges incurred and as decided by BHEL on this account will be levied in addition to the hire charges.

37.0 **Additional Information to be noted by the Bidder:**

37.1 **Completion on emergency:**

In case if the work has to be completed by compressing the completion schedule if so decided by BHEL on emergency, the bidder has to arrange immediately on intimation all required necessary inputs and additional efforts at no extra cost. In the event of any failure on the part of the bidder to meet such requirements on emergency, BHEL reserves the right to arrange all the inputs at its discretion and deduct the entire cost from the bidder as per BHEL procedures.

37.2 **Safe custody of Components:**

All the dismantled components should be stored safely in polythene covering with proper identification tags for easy traceability required polythene covers and identification tags to be arranged by the bidder. Bidder has to take care of all the components including the dismantled items under his custody and ensure the immediate safe availability of all those items as and when required by BHEL, till commissioning of the equipment or for handing over to the concerned before vacation of the site as decided by BHEL. In case of any loss, damage or theft of these materials/components, BHEL will have the right to impose total recovery along with all charges including penalty in arranging the materials.

37.3 The entire work is time bound, and most of the activities are precision jobs. Hence, bidder has to deploy highly qualified skilled Engineers/ Supervisors/Fitters/ technicians as per site requirement as advised by BHEL. Any delay or failure by the bidder to meet such manpower requirements at site will be viewed seriously. Any suitable remedial action from BHEL side including manpower deployment will be at the cost of the

bidder to the extent of charging entire cost including BHEL Daily Service Rates for manpower deployed.

37.4 List of tools, jigs & fixtures, testing kits available with the bidder in fit for use condition and which can be provided by the bidder during the execution of work. If some special fixtures are required, bidder has to fabricate the same and hand over to customer. Material for the same will be provided but welding rods and machining is in bidder's scope.

37.5 Bidder has to make payment to his workmen/employees as per the provisions of state/central laws.

37.6 Any testing such as UT/DPT/Radiography required at site for completion of the work as stipulated in the scope of work will be under the purview of the bidder. In this regard the bidder has to arrange the testing agency having required experience as acceptable to BHEL along with kit, and testing consumables and keep them ready as and when required from the starting date itself.

37.7 Transport and accommodation at site for the bidder's personnel to be arranged by the bidder at his own cost.

37.8 Transportation of materials from **Customer** stores to location at site and returning of the unused materials back to **Customer** stores will be under bidder's scope including all required arrangements (manpower & handling equipment).

37.9 **HSE requirements to be fulfilled by the sub-contractor (Integration of ISO 15001 environmental management system and OHSAS 18001 for Occupational Health and Safety Management System).**

38.0 **Statutory Requirement:**

38.1 *Bidder should obtain the labour license from labour inspector of respective state. Labour insurance coverage for all the workmen before start of the work. Insurance coverage should be obtained for all the workmen and not for a few workmen. It is the responsibility of contractor to provide medical insurance for all the workmen engaged for COVID-19 ailments.*

38.2 Statutory requirements like PF, ESI etc., as applicable should be fully complied with.

38.3 *Any deductions made by customer from BHEL towards non-compliance of statutory requirement, safety requirement, etc. by the contractor engaged by BHEL, will be recovered from any of the dues payable to contractor.*

39.0 **Extra work:**

39.1 The works which are of minor in nature and beyond the scope of work shall be considered as extra work on manday rate basis and this will be considered at the discretion of Resident Manager / BHEL-SAS.

39.2 Single composite average labour man-hour rate, including overtime if any, supervision, use of tools and tackles and other site expenses and incidentals, consumables for carrying out any major rework / repairs / rectification / modification / fabrication as certified by site as may arise during the course of erection, testing, commissioning or extra works arising out of transit, storage and erection damages, payment, if found due will be at Rs.139/- per man hour.

Above man day rates are inclusive of charges towards consumables (except Special Alloy Steel Welding Electrodes) and T&P. Contractor has to submit

log sheets consisting of details of manpower engaged (showing start hour and end hour) for execution of extra works duly certified by Resident engineer.

39.3 The works which are of major in nature and beyond the scope of work shall be considered as extra work on lumpsum negotiable basis and this will be considered at the discretion of Resident Manager / BHEL-SAS.

40.0 The offers of the bidders who are on the banned/hold list as also the offer of the bidders, who engage the services of the banned/hold firms, shall be rejected. The list of banned/hold firms is available on BHEL web site "www.bhel.com → tender notification".

41.0 **Integrity commitment, performance of the contract and punitive action thereof:**

a) 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.

b) Commitment by Bidder/ Supplier/ Contractor:
i) The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.

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

42.0 The bidder shall submit documents in support of possession of 'Qualifying Requirements' duly self-certified and stamped/ digitally signed (as applicable) by the authorized signatory, indexed and properly linked in the format for PQR. In case BHEL requires any other documents/proofs, these shall be submitted immediately.

43.0 The bidder may have to produce original document for verification if so decided by BHEL.

44.0 "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."

45.0 **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 provided in the Notice Inviting Tender (NIT)/Contract.

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.

46.0 **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 displayed on BHEL website http://www.bhel.com".

47.0 The Bidder declares that they 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.

Bidder shall submit duly filled & signed DECLARATION REGARDING RELATED FIRMS along with their techno-commercial offer.

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

a) they have controlling partner (s) in common; or
b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
c) they have the same legal representative/agent for purposes of this bid; or

d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or

e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/Assemblies from one bidding manufacturer in more than one bid; or

f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:
   1. The principal manufacturer directly or through one Indian agent on his behalf; and
   2. Indian/foreign agent on behalf of only one principal;

g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or

h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.

48.0 ***The Bidder has to satisfy the Pre-Qualifying Requirements stipulated for this Tender in order to be qualified. The Price Bids of only those bidders will be opened, who will qualify for the subject job on the basis of pre-qualification evaluation & Techno- Commercial bids etc. BHEL reserves the right to reject the bidders with unsatisfactory past performance in the execution of a contract. BHEL's decision in this regard shall be final & binding.***

49.0 "For this procurement, the local content to categorize a supplier as a Class-I local supplier/ Class-II local supplier/ Non-Local supplier and purchase preference to Class-I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04-06-2020 issued by DPIIT. In case of subsequent orders issued by the Nodal Ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT".

Duly filled & signed Form (Declaration regarding minimum local content in line with revised public procurement (preference to Make In India), order 2017), as applicable, to be submitted by bidders along with their techno-commercial offer.

50.0 **Compliance to Restrictions under Rule 144 (xi) of GFR 2017**

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

this Clause shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for the purpose of this order means: -
   a. An entity incorporated, established or registered in such a country; or
   b. A subsidiary of an entity incorporated, established or registered in such a country; or
   c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
   d. An entity whose beneficial owner is situated in such a country; or
   e. An Indian (or other) agent of such an entity; or
   f. A natural person who is a citizen of such a country; or
   g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

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

any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

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

VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. However, in this regard, relevant provisions of GSCC shall also be applicable.

Note: The bidder shall provide undertaking for their compliance to this Clause, in the Format (DECLARATION REGARDING COMPLIANCE TO RESTRICTIONS UNDER RULE 144 (xi) OF GFR 2017). Registration of the bidder with Competent Authority should be valid at the time of submission as well as acceptance of the bids.

51.0 *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 a 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.*

52.0 ***Guidelines/rules in respect of Suspension of Business dealings, Vendor evaluation format, Quality, Safety & HSE guidelines, Experience Certificate, etc. may undergo change from time to time and the latest one shall be followed. The abridged version of extant 'Guidelines for suspension of business dealings with suppliers/ contractors' is available on www.bhel.com on "supplier registration page".***

53.0 ***BHEL reserves the right to accept or reject any or all Offers without assigning any reasons thereof. BHEL also reserves the right to cancel the Tender wholly or partly without assigning any reason thereof. Also BHEL shall not entertain any correspondence from bidders in this matter (except for the refund of EMD).***

For and on behalf of BHEL,

Sd/-

(T Sravana Kumar)
Manager/SCT

ANNEXURE – 1

TECHNICAL CONDITIONS for Capital Overhauling of HIP & LP Turbines for 2 nos. Units (both KN Series Turbines) as per SOW at NALCO CPP (120MW) Angul

1. Statutory requirements like labour license from labour Inspector (form-III from customer is to be collected well before the start works to avoid delay in obtaining gate passes), workmen compensation insurance, third party liability insurance, PF registration and ESI registration certificates from statutory authority are to be submitted. **Power of attorney for** Successful Bidder **'s representative to be submitted to BHEL Resident Manager.**
2. Successful Bidder has to get safety clearance and work permit from customer before start of work.
3. The Successful Bidder shall start the work only after instruction by EIC.
4. Major consumables like Argon, Acetylene, Oxygen gases, Nitrogen required welding electrodes etc., shall be arranged by the Successful Bidder.
5. All consumables like petrol, kerosene, grease etc., cleaning agents such as CRC electraclean, etc, adhesive like anabond loctite etc., and consumables for DP test such as cleaner, penetrant and developer etc. including silicon sealant RTV732 / RTV 736, hylomer are to be supplier by Successful Bidder.
6. Arrangement of consumables like Kluber paste HEL 46-450 or Tiodize T8E_H, Stag –B, Hylomar blue and molykote (grade as per requirement) has to be arranged by Successful Bidder.
7. Successful Bidder shall mobilize consumables mentioned in the scope of work in mentioned quantity and hand over to customer.
8. Supply of material which do not go into the equipment being overhauled permanently is in Successful Bidder's scope.
9. Varnishing materials for Generator stator and rotor is to be arranged by Successful Bidder. All painting materials for painting of TG & Auxiliaries is to be arranged by Successful Bidder.
10. Consumables like welding rods, DP-Test kits, Rustolene spray, Kerosene, Gada cloth, emery sheets, 24V bulbs, oil stones, blue tube, Emery grinding wheels & stones, burr cutters, wire brush etc; required for the overhaul work shall be brought by the Successful Bidder in sufficient quantities.
11. Oxygen & DA gas or induction heating machine for the Strainer work shall be brought by the Successful Bidder in sufficient quantities.
12. Compressed air, water and power for the jobs as per requirement at specified locations shall be provided. Arrangements for further distribution shall be in the scope of the Successful Bidder.
13. General consumables like petrol, diesel etc., marking cloth, cloths etc. for MOT basket filter required during oil flushing shall be in the scope of the Successful Bidder.
14. Arrangement and removal of all platforms at all locations which are required for dismantling and re-assembly activities is in the scope of Successful Bidder. Required Platform materials/scaffolding shall be arranged by the Successful Bidder.
15. All scaffolding shall be securely supported or suspended and whenever necessary be properly braced to ensure stability.

16. Necessary scaffolding materials, wooden planks, sleepers, packers, tarpaulins etc., required for the work shall be brought by the Successful Bidder.
17. Successful Bidder has to mobilise all scaffolding materials, wooden planks, sleepers, packers, tarpaulins etc.
18. The Successful Bidder shall erect approach platform as per requirement and dismantle the same after completion of works.
19. Transportation of the new materials from stores and returning of the removed materials to the notified area of the customer shall be arranged by the Successful Bidder. The Successful Bidder shall arrange necessary manpower, lifting, transportation arrangements required for drawing and returning spares/tools/other equipment required for execution of job.
20. Successful Bidder has to arrange necessary Truck / Hydra / Crane/ trailer/tractor etc., for shifting of materials & T&Ps from customer store & back. Man power required for shifting of materials shall be provided by the Successful Bidder.
21. Successful Bidder has to give necessary assistance for drawl of spares from stores & returning the damaged / surplus spares to store and scrap to the identified location as per instructions of EIC.
22. The Successful Bidder shall have to take utmost care of spares parts/materials during dismantling, assembly, storage and handling of equipments etc as applicable.
23. Successful Bidder shall arrange a temporary shed/closed area in TG floor with locking facility to safely store all important parts removed from Turbine/Generator etc., and also to keep the required tools & tackles for easy/quick access. Power supply shall be provided by customer on free of cost.
24. All tools & tackles are to be arranged by Successful Bidder except for special fixtures which are supplied along with original equipment.
25. Calibrated instruments are to be arranged by Successful Bidder for carrying out the tests in your scope.
26. Any special fixtures required for successful rotor thread-out and thread-in activities are to be fabricated at site by Successful Bidder. Any fixtures required during execution of scope of works not available at site shall be fabricated by the Successful Bidder as per site requirement. Such fixtures fabricated at site shall be handed over to BHEL. Sufficient number of tarpaulins shall be arranged by the Successful Bidder for covering, stator, rotor and other major components.
27. Any testing equipment required during overhauling shall be arranged by the Successful Bidder.
28. Successful Bidder has to arrange necessary T&Ps required for the overhauling jobs (like all standard sizes of spanners, Chain blocks, water jars for catenary if required, Dial gauges, bore gauges, slip gauges, Magnetic stand, Micrometers, Straight edges, Filler gauge, Spirit level, Hack saw frame, Tarpaulins, Grinding machines, Welding machines, Gas cutting machine, induction heating machine for bolts tightening, Measuring tape, SS Scale, lifting & pulling tools, hydraulic jacks & pumps, slings, portable tool/bench grinders, vice etc). Successful Bidder shall also submit calibration certificate for all measuring instruments & load test certificate for slings / chain pulley blocks / D-shackles / eye bolts etc., before use. The above have to be recalibrated / load tested as per instruction of BHEL/customer EIC/safety department. If required, lifting tools & tackles

to be load tested & certified by competent authority within the customer premises.

29. Special T&Ps, if any, supplied by the respective equipment manufacturer shall be provided by customer on returnable basis (LPT Roller support, Generator Roller support, cast iron plate for coupling face correction, catenary block, jacks for TG deck springs, jacks for Generator alignment etc.,).
30. Successful Bidder has to arrange necessary water jars etc for measurement of catenary. T&Ps required for the overhauling jobs (like all standard sizes of spanners, Chain blocks, Dial gauges, bore gauges, slip gauges, Magnetic stand, Micrometers, Straight edges, Filler gauge, Spirit level, Hack saw frame, Tarpaulins, Grinding machines, Welding machines, Gas cutting machine, Measuring tape, SS Scale, lifting & pulling tools, hydraulic jacks & pumps, slings, portable tool/bench grinders, vice etc). Successful Bidder shall also submit calibration certificate for all measuring instruments & load test certificate for slings / chain pulley blocks before start of work. The above have to be recalibrated / load tested as per instruction of BHEL/customer EIC/safety department. If required, lifting tools & tackles to be load tested & certified by competent authority within the customer premises.
31. If any T&P not mobilised then deduction shall be made as per terms and conditions of the contract or as per the recommendation of BHEL resident manager.
32. Portable cabin for safe custody of T&P near the work place to be arranged by the Successful Bidder.
33. Removal of acoustic enclosure, exciter enclosure as per requirement and Re-installation of the same is in the scope of the Successful Bidder.
34. Any Attachments that are required for the purpose of removal or assembly of components etc. are to be fabricated by the Successful Bidder and it shall be handed over to customer after overhaul.
35. Machining of small components shall be done by the Successful Bidder without any additional cost.
36. Any repair /modification work and minor works required for the successful commissioning shall be done by the Successful Bidder without any additional cost.
37. All NDT inspection including all accessories, consumables and manpower. (eg. DPT / MPI / NFT & ultrasonic testing) is in the scope of the Successful Bidder. Water washable type chlorine free fluorescent type DP kit for DP testing (Magnaflux/Orion make). Suitable color paint to repaint the weld joint after DPT along with required accessories and consumables.
38. For carrying out UT, DPT, MPI, NFT, electrical testing etc, Successful Bidder should engage competent certified personnel / vendors along with calibrated instruments / equipments /test pieces/ test certificates etc.
39. Painting of turbine, turbine pedestals, turbine acoustic enclosure, LP hood cover, valve servomotors etc., shall be in scope of the Successful Bidder including supply of paint.
40. For NDT purpose, Level-II supervisor, with valid credentials, shall be arranged by the Successful Bidder for the evaluation of DPT, UT of bearings, retaining rings etc., and radiography of weld joints if required.

Qualified NDT agency to be arranged by Successful Bidder for conducting DP & UT as per scope of work.

41. Successful Bidder has to deploy IBR qualified welder for any pipelines welding as per requirement.
42. **Arranging three Nos. of EOT crane operators** for round the clock operation is in Successful Bidder's scope. Since the job involves handling of heavy components by special arrangement by EOT crane. **Experienced EOT crane operators and riggers must be deployed in all the three shifts.**
43. T&Ps required for reaming & honing of coupling holes shall be in the scope of the Successful Bidder. Successful Bidder has to carry out reaming & honing of coupling holes at site
44. Reaming & honing of coupling holes, if required, shall be carried out by the Successful Bidder. Successful Bidder has to mobilize necessary agency for the reaming & honing work as per requirement.
45. Bearing replacement, if any required to be carried out by Successful Bidder without any additional cost as it is already included in the general overhauling works.
46. Removal of exciter enclosure and re-installation if required shall be in the scope of the Successful Bidder
47. After completion of work, the area shall be cleared up to the satisfaction of EIC without any extra charge on daily basis. Scrap materials have to be disposed to the scrap yard before completion of work as per instruction of EIC.
48. Designated group for housekeeping manpower on daily basis for maintaining clean working area.
49. Successful Bidder shall provide all necessary assistance while commissioning back the unit including governing checking and setting and shall rectify any defects attributable to Successful Bidder's workmanship.
50. Successful Bidder shall carry out all the work in line with BHEL protocols regarding clearance, dimensional checks, blue matching, Alignment etc. All the reading/values/critical works to be witnessed by BHEL & customer executive.
51. The Successful Bidder has to carry out the work as per the details given in "Scope of work" in general. However, the Manufacturer's maintenance catalogue and standard Engineering practices also need to be adhered to.
52. Progress review and next day plan/targets to be discussed on daily basis in meeting Successful Bidder with BHEL & customer. Successful Bidder has to meet daily and has to submit the works under progress and the works planned for the next day. This is mandatory. Successful Bidder has to maintain the daily register for works being executed, plan & review and has to be shown to EIC on daily basis.
53. As a safety regulation LPG should never be used in place of DA gas.
54. Only 24V hand lamps should be used. Transformers (230V to 24V single phase) to be arranged by Successful Bidder.
55. Rolling of all compressed gas cylinders are not permitted. All cylinders are to be transported in upright position through hand trolley and must be stored away from open flames and other sources of heat.
56. Gas cutting torches must be lighted by means of friction flames or similar other methods and not with matches. Flash back arrestor to be used while gas cutting.

57. Use of jute or cotton waste at site is not permitted. Successful Bidder shall strictly comply with the same.
58. The Successful Bidder is responsible for taking all precautionary measures, for ensuring safety, health and welfare of the workmen engaged on the specified work
59. Successful Bidder has to arrange for medical check-up as per the procedures of Customer prior to applying for gate passes.
60. PF, ESI, Insurance, medical check-up documents, labour identity cards, Adhaar cards etc., should be submitted for availing gate pass.
61. Successful Bidder shall follow all the relevant practices implemented by Customer in respect of Safety, 5-S, ISO-14000, OHSAS etc. to the extent possible from proper cleanliness of site and records point of view.
62. Successful Bidder shall comply all statutory requirements such as PF, ESI etc., as applicable.
63. The Successful Bidder shall be fully responsible for maintenance of records of his employees including statutory requirements.
64. If any person found not fit or not having suitable experience for the job, our Resident Manager has the discretion to remove or Successful Bidder has to replace the person immediately with suitable experienced person.
65. The Successful Bidder shall owe complete responsibility for all the accidents to their workers taken place within and outside the premises and the consequences there from. BHEL and Customer will not pay any compensation.
66. Successful bidder has to mobilize the site immediately and make necessary arrangements for getting gate passes and completion of Police Verification of workers.
67. The Successful Bidder and all persons engaged by him on the work shall conform in all respects with the preventions of all acts, orders, and regulations etc., made by the competent authority with regard to safety, health and welfare of the persons engaged.
68. In case, BHEL/Customer becomes liable to pay any wages / dues/ penalties to any statutory authority/ Govt. Agency under any of the provisions of the factories act, Minimum wages act, workmen compensation act, employment of children act or any other loss, due to omission of the Successful Bidder, BHEL/Customer may make such payment and shall recover the same from the Successful Bidder's bills.
69. The Successful Bidder shall provide necessary first aid facilities for all his employees, representatives, workers, etc engaged at site. Enough number of his personnel shall be trained in administering first aid.
70. The Successful Bidder shall ensure that all persons deployed are thoroughly conversant with the Statutory requirements and safety rules governing the work and they have to undertake which may include, erection of barriers with identified danger marks around holes or openings, display of warning notices during day time and red lamps in the darkness, etc.
71. Sufficient service personnel may be engaged day & night by the Successful Bidder for exercising proper supervision of the above works in time.
72. The Successful Bidder shall be fully responsible for the safety of his personnel during the work at site, and shall ensure the use of safety appliances by his workmen.
73. Successful Bidder has to engage his manpower for 24-hour work in all working days/ holidays during overhaul as per site requirement. The teams are to be headed by responsible and experienced Engineers/Supervisors.

The Successful Bidder has to submit detailed manpower deployment program for round the clock work before commencing overhauling works.

74. The Successful Bidder has to engage competent / skilled manpower as per the requirement of the respective jobs. BHEL/customer reserve the right to disallow any worker to continue the work, if found unsuitable for the specific job. The Successful Bidder shall submit list of proposed foreman / skilled / semi-skilled man power (Equal strength of work group in each shifts) for each schedule of jobs to be deployed indicating field experience and grade in the organization within two days of intimation of the date of commencement of overhauling. This list shall be approved by EIC before commencement of overhaul.
75. Equal strength of work group shall be deployed in 12 hrs shifts.
76. Independent group (Foreman / Supervisors / Mill-write fitters/skilled manpower etc) for schedule of work front for Generator, exciter & generator auxiliaries / Bearing revision, alignment, oil catcher shall be deployed separately in shift duty not extending beyond 12 hours round the clock for execution of the work.
77. Following personnel shall be deployed round the clock basis by the successful bidder:
    a. Qualified safety officer
    b. Certified NDT person for NDT inspections (DPT, MPI, NFT & ultrasonic testing, radiography, stress relieving etc.) based on requirement.
    c. Certified IBR welders certified by FQA
    d. Qualified and certified electrician on round the clock basis
    e. General welder and gas-cutter on round the clock basis
    f. Designated group for housekeeping manpower on daily basis for maintaining clean working area.
78. Bidders are advised to visit site for studying scope works and familiarize themselves thoroughly with the site conditions.
79. Successful Bidder *are advised to cover all contract labours engaged by them under Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY) and Pradhan Mantri Surakshya Bima Yojna (PMSBY).*
80. Successful bidder shall fully indemnify BHEL against all claims of whatsoever nature arising during the course of erection / overhauling / performing work under the contract. Indemnity bond as per customer requirement has to be submitted by the successful bidder.
81. CONTRACTORS' RESPONSIBILITIES:
    It must be made clear to contractors when a contract is placed that they will be expected to provide clean conditions overalls, shoes, tread mats, bins etc. suitably marked with the name of their firm.
    Foreign Bodies: To minimize the risk of a foreign body entering any system, the following should be ensured
    81.1 The station staff shall attempt to instill into all men of supervisors and workmen the importance of keeping systems internally clean. The methods used should include lectures, written information and personal discussion.
    81.2 Station staff and Successful Bidder's employees should be encouraged to inform their superiors of any tool or item that may have been dropped into the Generator, mislaid or not accounted for in the clean conditions area. It is better to identify, locate and remove the item even at the cost of extended outage.

81.3 Special attention should be given to any magnetic material / powder taken inside the clean condition area to avoid its ingress into the Generator.

81.4 Use of Covers, and blanks: Temporary end covers should be fitted to the Generator and only removed whilst work is being carried out.

81.5 All disconnected pipe work should be fitted with purpose-made blanks or plugs which do not allow re-assembly whilst in position.

81.6 All temporary covers, blanks and shrouds should be clearly labelled or distinctively identified, e.g., these items may be brightly painted so that they cannot be easily left in position during re-assembly.

81.7 Precautions to be taken during work in the Clean Conditions Area

81.8 No mechanical jobs like cutting, welding, chipping and filing etc. should be carried out in the clean conditions area unless most unavoidable for any major modifications jobs under close supervision of senior staff. In that case the following precautions must be undertaken: -

81.9 Cutting: When a pipe is cut care should be exercised to prevent swarf etc. entering the pipe. No pipe should be left open ended, all loose material should be removed and the end inspected before it is covered with the appropriate cover or blanking plug.

81.10 Welding: The number of welding rods allowed into the clean conditions area should be counted, and the rod stubs retained to check they are all accounted for.

81.11 Work Supervision: All welding, burning and machining operations in the clean conditions area will be continuously supervised by BHEL staff. Availability of firefighting equipment's near the place of work to be ensured before any welding or burning work is under taken.

82. DO'S AND DON'TS:

Do's:

Do wear required PPE's while on job. Use proper gloves during work.

Do wear canvas shoes during winding assembly.

Do ensure that tools & instruments used are in good working condition & properly calibrated.

Do ensure that all tools used are back in tools box and no tools is forgotten inside the stator.

Do use protective creams before working with putties and wash hands with soap.

Do use vacuum cleaner for cleaning stator.

Do ensure covering of openings in stator body when not working to avoid accidental falling of foreign objects into the stator.

Don'ts:

Don'ts use any knives without handles for cutting braiding.

Don't enter the stator with loose objects like, coins, key bunch, metallic ball pen, pencils etc. in pockets.

Don't use items, the self life of which has already expired.

83. SPECIAL WARNING:

Workers/technicians/ engineers entering inside the generator for inspection/repair/rehabilitation work use shoes with rubber soles as recommended. The synthetic rubber sole shoes should be worn only just before entering into the generator. In case these shoes are worn during their walking outside the generator clean area, these are likely to pick-up metallic chips or other small nails which will get embedded and unless discovered before entry can later get dislodged during walking inside the

generator core. Hence, the shoes should be changed and fully inspected before entering into the generator and should not be worn other than for entry into the generator.

84. STORAGE REQUIREMENTS:

a. Components:

Components removed from the Generator should be stored in bins within the clean conditions area. All bins should be labelled stating their contents and purpose. Where larger components cannot be put in bins they should be held in a temporary secure storage area.

Components like rotors which need protection against entry of dust, moisture, debris etc. in the ventilation ducts / clearances shall be properly wrapped with waterproof covers. (Wrapping Material is in Successful Bidder Scope).

85. WASTE MATERIAL:

All waste material and refused material should be put in bins with correctly fitting lids or covers and labelled clearly 'WASTE'. They should not be located in the vicinity of the components.

86. NEW COMPONENTS:

All new replacement components should be cleaned before they enter the clean conditions area and shall be inspected before fitting.

87. RECORDS:

All materials, tools and special equipment's taken inside or outside of the personnel barrier of Generator shall be recorded in a Register, ensure that all tools/materials taken inside are brought back by checking the entries made in the Register.

88. If applicable, successful Bidder is required to take following insurance schemes (as per customer requirement) for the technicians or Engineers and submit the policy copies to BHEL before start of the work:

a. Pradhan Mantri Suraksha Bima Yojana(PMSBY)
b. Pradhan Mantri Jeevan Jyoti Bima Yojana(PMJJBY)
c. Any accident policy

Note: Successful Bidder has to take any state government issued policies if any prevailing at the time of start of the work (if applicable as per customer requirement).

89. Clauses of Deduction

a. Any job if carried out leads to safety regulation violation then the Successful Bidder will be penalized appropriately by the management.
b. Failure to comply with EHS guidelines.
c. Any activity that leads to the disruption in the production activities that are being carried out without any written approval will be penalized.
d. Damage to property will be recovered from the Successful Bidder.
e. Non-compliance of statutory requirements.

90. **LABOUR LAWS:**

The Governing Acts as applicable and as amended shall be strictly followed. Some of such acts are given below. List of Labour legislation under which compliance, maintenance of registers and sending of returns shall be ensured by Successful Bidder. While complying with the Act complying with relevant rules issued under the said Acts and administrative circulars there on shall also be ensured by the Successful Bidder.

f. The Factories Act, 1948

g. The Contract Labour (R&A) Act, 1970
h. The Employees Provident Fund and Misc. Provision Act, 1952
i. The Employees' Compensation Act, 1923
j. The Minimum Wages Act, 1948
k. The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996
l. The Building and Other Construction Workers Welfare Cess Act, 1996
m. The Inter State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979
n. The Payment of Wages Act, 1936
o. The Payment of Bonus Act, 1965
p. Maternity Benefit Act, 1971
q. The Child Labour (Prohibition And Regulation) Act, 1986
r. The Employees' State Insurance Act, 1948
s. Equal Remuneration Act, 1976
t. The Industrial Disputes Act, 1947
u. The Payment of Gratuity Act, 1972
v. The Trade Union Act, 1926
w. The Apprentices Act, 1961
x. Industrial Employment (Standing Orders) Act, 1946
y. The Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959.
z. Any other acts/rules as may be applicable from time to time

91. MAN POWER REQUIREMENT

91.1 Customer has insisted to provide experienced diploma holders, engineers, highly skilled and skilled manpower etc., This should be strictly adhered. It may strictly be noted that if experienced engineers, diploma holders, highly skilled and skilled manpower etc., are not deployed as per site requirement, accordingly recovery shall be made from your bill based on recommendation by Resident Manager.

91.2 Resident Engineer – 1 – 10 to 15 years' experience must be an Engineering Graduate. Supervisors must be diploma holders with sufficient experience in Turbine & Generator area.

91.3 Exclusively two qualified safety supervisors (for day and night shifts) having diploma in safety, should be arranged by the Successful Bidder mandatorily for supervising the safety activities. If not deployed, accordingly recovery shall be made from your bill based on recommendation by Resident Manager.

91.4 The Successful Bidders man power deployed shall hand over the gate passes to the security through the Resident Manager / BHEL.

91.5 Laptop in latest configuration, printer with scanner and operator must be provided at BHEL site office. In case this facility is not provided, BHEL will recover reasonable amount as per RM's recommendation.

91.6 Recovery towards non-provision of personal computer, printer along with operator shall be Rs.25,000/- per month.

91.7 Tenderer has to deploy Ex-BHEL person for supervision of work as per requirement in the interest of work quality.

91.8 Office boy must be provided for RM/BHEL at site office.

91.9 Office furniture such as table, chairs, almirahs etc., shall be provided by Successful Bidder in case if the customer is not in position to provide such facility.

91.10 Safety of the equipment to be given utmost attention.

91.11 Successful bidder should make sufficient man power available for taking up this work with accent on quality.

92. Successful bidder shall follow HEALTH, SAFETY AND ENVIRONMENT PLAN FOR SITE OPERATION by SUBCONTRACTORS (Doc. No.HSEP:14 (Rev.01) Dtd.20.01.2020) attached with tender.

93. **Facilities to be provided to contractors as described below: -**

93.1 All T&P required / recommended for the work against this tender shall have to be mobilized by the Successful Bidder fully at their expense within the quoted price.

93.2 Any special T&P i.e. T&P made available by the manufacture of the equipment to the customer can be made available to the Successful Bidder free of charges subject to availability at site.

93.3 Any consumables required / recommended for the work against this tender shall have to be mobilized by the Successful Bidder fully at their expenses within the quoted price.

93.4 Regarding other facilities for the Successful Bidders the following table clarifies adequately. Bidders are expected to quote considering these without any deviations from the provisions of "Notice Inviting Tender".

93.5 Deviated offers are liable for rejection of price bid opening

Sl.No.	Facility	Remarks
a)	Water	Free of charges
b)	Power	Free of charges
c)	Storage space	Free of charges
d)	Covered Space	Free of charges
e)	Uncovered Space	Free of charges
f)	E.O.T.	Free of charges
g)	Operators for the above	Cannot be provided
h)	Residential accommodation	Cannot be provided
i)	Compressed air	Free of charges
j)	Work shop facilities	Cannot be provided
k)	(i) Mobile Crane/Hydra for heavy materials, if available	Cannot be provided
	(ii) Operator for K (i)	Cannot be provided
	(iii) Fuel charges for K (i)	Cannot be provided
l)	Other material handling equipment	Cannot be provided
m)	Trailor	Cannot be provided
n)	Sleepers	Cannot be provided
o)	Tarpaulins	Cannot be provided
p)	Scaffolding materials	Cannot be provided

93.6 No advance is payable to the Successful Bidders for mobilizing the site. Any payment can be made only against running bills as per payment terms.

94. **TENTATIVE LIST OF T & P**

Tentative List of T&Ps for the job is mentioned below. Successful Bidder has to arrange T&Ps as may be required for successful completion of the job. T&Ps are to be mobilized by Successful Bidder as and when required to match the work schedule & complete the job on time. BHEL has the authority to penalize the Successful Bidder suitably including termination of contract if the required/necessary T&P's are not mobilized in time for

successful completion of job. Successful Bidder has to arrange new dial indicators as per the list mentioned below.

S.No	Description	Quantity
	MEASURING TOOLS	
1.01	Dial Indicator with Magnetic Base	10 sets
1.02	Dial indicator – button type and LASTWARD (3 mm travel, 25 mm dia dial with links for coupling alignment)	2 set each
1.03	Slip gauge upto 10 mm	1 set
1.04	Micro-head level, accuracy 0.1 mm per metre, 150 mm long	1 no.
1.05	Square level for leveling major parts for installation (accuracy 0.1 mm, 150 mmX150 mm)	1 no.
1.06	Vernier Caliper 150 mm and 300 mm	1 no. each
1.07	Set of spring caliper and divider(150 mm)	1 set
1.08	Zenith caliper for marking (150 mm)	1 no.
1.09	Steel Scale 150 mm, 300 mm, 1000 mm	2 nos each
1.10	Telescopic gauge up to 150 mm	1 set
1.11	Bore dial gauge up to 75 mm	1 set
1.12	Inside micrometer up to 1500 mm	1 set
1.13	Outside micrometer 0-25 mm	2 nos
	Outside micrometer 0-50 mm	1 no
	Outside micrometer 50-200 mm	1 no
	Outside micrometer 200-300 mm	1 no
	Outside micrometer 300-400 mm	1 no
	Outside micrometer 400-500 mm	1 no
	Outside micrometer 0-25 mm	1 no
1.14	Taper Gauge up to 20 mm	1 no
1.15	Taper gauge 0.1 – 10 mm	1 no
1.16	Feeler gauge 100 mm, 200 mm, 300 mm long (from 0.03 to 1.0 mm thick)	1 set each
1.17	Feeler strip 0.03 mm, 0.04 mm, 0.05 mm, 0.10 mm X 300 mm long	5 each
1.18	Thread Gauge M4 to M56	1 set
1.19	Depth micrometer	1 no
1.20	Surface plate 300 mm X 300 mm	1 no
1.21	Combination set	1 no
1.22	Ball pen gauge for 3 to 10 mm bore	1 set
1.23	Measuring steel tape 3 M, 15 M	2 each
1.24	24 500 V hand / motorized megger	1 no
1.25	1000 V hand / motorized megger	1 no
1.26	250 V megger	1 no
1.27	3 1/2 Digit digital multimeter	1 no
1.28	Lever type dial gauge for centering	1 no
	CUTTING TOOLS	
2.01	Tap set M 5 to M42 (including M27 & m 33)	1 set each
2.02	Die set M 14 to M 65	1 set each
2.03	Pistol Drill 6 mm	2 nos
	Pistol Drill 15 mm	1 no
	Pistol Drill with magnetic stand 19 mm	1 no
2.04	Straight grinder GQ 4	3 nos

2.05	Angle grinder AG 7 and AG 5	2 nos. each
2.06	Pistol grinder	1 no
2.07	Flexible grinder with necessary accessories	2 nos
2.08	Bench grinder 150 mm	1 no.
2.09	Hole punch up to 32 mm	1 set
2.10	Easy out up to M 24	1 set
2.11	Taper reamer up to 18 mm	1 set
2.12	Hand ratchet	2 nos
	LIFTING TOOL	
3.01	Sling- 8 mm, 2.5 metre long tip to tip along with 150 mm eye at both end	1 pair
3.02	Sling 12 mm, eye at both end of 300 mm, 1.5 metre long	1 pair
	Sling 12 mm, eye at both end of 300 mm, 2.5 metre long	1 pair
	Sling 12 mm, eye at both end of 300 mm, 3.5 metre long	1 pair
3.03	Sling 19 mm, eye at both end of 450 mm, 2.0 metre long	1 pair
	Sling 19 mm, eye at both end of 450 mm, 3.0 metre long	1 pair
3.04	Sling 25 mm, eye at both end of 450 mm, 3.0 metre long	1 pair
	Sling 25 mm, eye at both end of 450 mm, 6.0 metre long	1 pair
3.05	Eye bolt 10, 12, 14 & 16	4 nos. each
3.06	Eye bolt 20, 24, 27, 36 & 42	2 nos. each
3.06	D-shackles pin dia. 10 mm, 12 mm	5 pairs each
3.07	D-shackles pin dia. 20 mm, 25 mm, 32 mm, 36 mm & 44 mm	1 pair each
3.08.	Ratchet hoist 0.5 T	1 no
3.09	Chain block 2 T, 5 T	1 no. each
3.10	Manila rope 25 mm, 30 metre long	1 pair
3.11	Cotton rope 25 mm, 10 metre long	1 no
	OTHER T & P	
4.01	Gas welding machine	1 set
4.02	Hand lamp with 30 metre cable	6 nos
4.03	Switch board with 50 metre cord	2 nos
4.04	Scissors-300 mm	1 set
4.05	Shim cutter – 350 mm	1 set
4.06	Magnifying glass – 75 mm dia	1 no
4.07	Mirror with handle	1 no
4.08	Vacuum cleaner	1 no
4.09	Carpenter's saw	1 no
4.10	Carpenter's chisel	3 nos.
4.11	Open "D" D.E. spanner 36X41, 41X46	2 nos. each
4.12	S.E. span "D" spanner 46, 50, 55, 65, 70, 75, 80, 85, 90, 95, 100, 105	1 no each
4.13	Slogging spanners 36, 41, 55, 65	2 nos. each
4.14	Slogging spanner 46 mm	4 nos
4.15	Slogging spanners 50, 60, 70, 75, 80, 85, 90, 95, 100, 105	1 each
4.16	Box spanner set with straight handle, ratchet handle, universal extension piece – all heavy duty, up to 46 mm	1 set
4.17	Tubular spanner 20 to 46 mm	1 set
4.18	Allen key set 4 to 27	2 sets

4.19	Pipe wrench 150, 350 & 450 mm	1 no. each
4.20	Slide wrench 200 mm, 300 mm	2 nos. each
4.21	Spray gun for generator varnishing / painting with necessary high pressure hose	1 no.
4.22	High pressure air hose at least 30 metre long	1 no.
4.23	Tubular spanner	1 set
4.24	Gland packing remover	1 set
	HAND TOOLS	
5.01	Chisels (Chrome-Vanadium) 1 mm	6 nos
5.02	Center punch (Chrome-Vanadium) small & big	1 each
5.03	Letter punch – 4 mm size	1 set
5.04	Number punch – 6 mm size	1 set
5.05	Bearing scrapper – half round and triangular	2 nos. each
5.06	Flat scrapper (made out of 1.5 inch power saw blades and pipes	8 nos.
5.07	Hammer 250 gms., 500 gms.	1 no. each
5.08	Hammer 1 kg., 2 kg.	3 nos. each
5.09	Hammer 5 kg.	2 nos
5.10	Hammer 8 kg.	1 no.
5.11	Copper Hammer 2 kg.	1 no.
5.12	Lead Hammer 2 kg.	1 no.
5.13	Nylon mallet	3 nos.
5.14	Needle file	2 sets
5.15	Assorted file	4 dozens
5.16	Screw driver 150 mm, 300 mm, 450 mm (Taparia make)	2 nos. each
5.17	Tommy bar 32 mm X 1 metre	1 no.
5.18	Crow bar – big and small	2 nos. each
5.19	Hole bar (Assorted size)	4 nos.
5.20	Hacksaw frame (good quality)	2 nos
5.21	Pliers, cutting nose, grip, O/S circlip, I/S circlip	2 nos. each
5.22	Magnetic needle for dust in small holes	1 no
5.23	Oil stone (rough and smooth)	6 nos. each
5.24	H.S.S. 12 mm square section X 100 mm parallel bits (accurate with 0.01 mm in section)	2 nos
5.25	Copper rod 12 mm dia., 25 mm dia., 50 mm dia., 300 mm length	1 pc. each
5.26	Bench vice 150 mm	2 nos
5.27	Channel lock 150 mm	2 nos.
5.28	Vice grip 150 mm	1 no
5.29	Cutogen gas cutting set with hose, jubilee clamps and regulators	1 set
5.30	Hydraulic jacks (50 tons capacity)	4 nos
5.31	Welding generators (with lead holder)	1 no
5.32	Brazing torch set	2 no
5.33	Cutting nozzle no 19, 20	2 no each
5.34	Hydraulic jacks (25 tons and 100 tons capacity)	4 nos. each

The above list of T&P's is not exhaustive but indicative only Any shortage may be made up by the Successful Bidder as may be required for overall job completion.

95. **LIST OF CONSUMABLES TO BE ARRANGED BY THE CONTRACTOR IN ADDITION TO THE NORMAL CONSUMABLES.**

1) Dye penetration test kit As may be required.
2) Emery paper (fine and coarse) As may be required.
3) Emery clothes sheets. As may be required.
4) Eutectic electrode L & T – 670/680 As may be required.
5) All consumables as may be required for welding, brazing, gas cutting etc.
6) Petrol, Diesel As may be required.
7) Rustolene. As may be required.
8) 25 mm thick planks X 200mm wideX 3000 mm long for keeping dismantled parts
9) Asbestos cloth and asbestos powder . As may be required.
10) ACETONE. As may be required
11) Stag B, Molykote, Holdtite, M seals, Hylomar, Selastic etc. As may be required.

96. Any other consumables, supplementary requirement has to be provided by the Successful Bidder for successful completion of the job.

IMPORTANT NB : STATUTORY REQUIREMENTS LIKE PF, ESI ETC., AS PER ODISHA GOVT. AND AS PER NALCO Angul CPP–HRD TO BE FULLY COMPLIED WITH. ANY SPECIAL RULES OR ALLOWANCES APPLICABLAE AS PER NALCO Angul CPP–HRD TO BE FULLY COMPLIED WITH.

ANNEXURE-2

BILLING BREAK UP SCHEDULE
(For each Unit)

DESCRITPION OF WORKS: Capital Overhauling of HIP & LP Turbines for 2 nos. Units (both KN Series Turbines) as per SOW at NALCO CPP (120MW) Angul

JOB DURATION**: 45 DAYS per Unit (Date of start of job to Date of completion of Oil flushing)**
Mobilisation Time: **For 1st Unit -Immediately from date of intimation by BHEL**
For 2nd Unit -7 Days from date of intimation by BHEL

The scope under this specification is only indicative and not exhaustive. However, any activity covered under the normal course of overhauling job, but not mentioned in the scope, shall be deemed to be within the scope. Based on the condition and requirement at site, any of the activities or part thereof mentioned in the scope are to be repeated without any extra cost to BHEL.
Time is the essence of this contract. Hence, contractor must mobilize site with adequate manpower for round the clock work, during the entire duration.
Also adequate T&P, consumables and inspection/measuring and monitoring devices are to be mobilized at site for at least 2-shift/24 Hrs operations to avoid any hold up during execution of the work. **Load test / calibration certificates of lifting tools/measuring instruments to be submitted to RE/RM** available at site for verification and in case of any deficiencies, BHEL reserves the right to reject the usage of the particular tools/instruments. In such case vendor needs to replace the defective tools/instruments immediately to avoid any delay in execution of works.
Post overhaul and synchronization of the unit, observation for 72 hrs at stable load and attending all defects, if any, is included within the scope of work.
Necessary scaffolding material to be arranged by the vendor.
Alumina (size 80 grit), blasting nozzles/ other arrangements, enclosure including covering by tarpaulins and proper illumination of enclosure to be arranged by the vendor.
Experienced agency to be arranged for reaming & honing of couplings and the party should be available at site until completion of assembly of all couplings or as directed by BHEL RE/RM.
Experienced agency to be mobilised by the vendor for conducting MPI & NFT with Level-II certified engineers.
Prior to mobilization, shift wise list of workmen along with the concerned work area supervisor shall be submitted to BHEL-PSSR-SAS.
In case any part of the job is not required to be carried out, deduction will be effected as per percentage shown against the corresponding items.

Sl No	Description	% break-up
A.	**GENERAL ACTIVITIES - BEARING INSPECTION AND ASSOCIATED WORKS**	
1	Removal of Enclosure while dismantling and re-assembly after completion of Overhaul works.	2.00%
2	Removal of all pedestal covers and bearing 1 to 3 top halves and their yokes.	0.50%
3	Removal of all oil guards after checking of clearances. Correction/refinning as required.	0.50%

4	Recording catenary of TG rotor train at all the bearing pedestals.	0.50%
5	Recording pedestal seal bore and turbine axial reference readings.	0.25%
6	Recording coupled run-out of HIP-LP & LP-Gen couplings.	0.50%
7	LP-Gen decoupling. Swing check of HIP rotor front. HIP-LP decoupling.	1.00%
8	Removal of bottom halves of all bearings. DP/UT check on all bearings & thrust pads, replacement if any defects noticed.	1.50%
9	Correction of coupling faces of HIP, LP & Gen rotors by matching with surface plate / cast iron plate. Cast iron plate to be arranged by the vendor.	1.00%
10	Bedding check of bearings and matching of spherical / cylindrical supports with pedestal base. Matching of radial pads and axial keys with bearings and pedestals, as applicable. Matching of thrust pads. Inspection & tightness checking of bearing supports.	1.00%
11	Record bore of all Bearings. Rectification of bearing oil clearances by scraping or replacement of Bearings including thrust pads, if necessary.	2.00%
12	Resetting of all bearing oil seals and pedestal oil guard rings including repair/replacement as required.	1.50%
13	Final Alignment of HIP-LP and LP-GEN couplings. This includes re-centering of Generator & Exciter covers as per requirement.	1.50%
14	Dismantling of Turning gear (Barring Gear- Hydro motor assembly). DP check of hydromotor bearings and replacement, if required. Replacement of overrun clutch, if required.	1.00%
15	Overhauling of hydro motor flow adjustment block, hydro motor lubricating oil adjustment block & NRV cum solenoid valve block.	0.50%
16	Cleaning of main oil tank, control oil tank and reserve oil tanks.	2.00%
17	Replacement of jacking oil hoses of all bearings along with the associated pipe fittings, if required and proper clamping of the hoses.	0.25%
18	Temporary assembly of HIP-LP coupling with loose bolts and record CRO & swing check at HIP front.	1.50%
19	Final Coupling of HIP-LP & LP-GEN rotors. CRO check after coupling and corrections, if required.	2.00%
20	Swing check at HIP front. Adjustment, if required, including correction in coupling faces.	1.50%
21	Rotor float check during dismantling & assembly and corrections as required.	0.50%
22	Assembly of hydromotor and alignment with HIP rotor. Connecting all the associated pipelines.	1.00%
23	Final assembly of all bearings and their yokes.	1.00%
24	Final assembly of all bearing pedestals, after thorough cleaning. Assembly of oil guards.	1.00%
25	Assistance for oil flushing. Periodic cleaning of line filters and basket strainers during oil flushing as per requirement. Normalization of throttles after completion of oil flushing.	1.00%
26	Cleaning & painting of servomotors of HP, IP, OLCV & LPBP valves, TG enclosure, bearing pedestal covers and LP outer casing.	1.50%
27	Setting of JOP header pressure and lift at individual bearings.	0.50%

	Putting the TG on barring gear.	
28	Assistance for commissioning activities and Trim balancing as per site requirement	1.00%
	Sub-Total	**30.00%**
B.	**HIP TURBINE OVERHAUL**	
1	Removal of insulation on HIP turbine.	1.00%
2	Disconnecting HP overload valve inlet lines and HIP casing front & rear gland pipelines, as required. Lifting HP overload control valve from position.	0.50%
3	Record centering of HIP turbine. Carry out Roll check & bump check of HIP turbine.	0.50%
4	Removal of outer casing top half after loosening of parting plane studs by induction heating.	1.00%
5	Carry out roll check & bump check of HP-IP inner casing.	0.50%
6	Loosening of inner casing parting plane studs by induction heating & lifting of top half.	1.00%
7	Record steam flow path, radial free runout of rotor and lift HIP rotor from position.	0.50%
8	Loosening of HP & IP valve casings to HIP outer casing flange studs by induction heating.	1.00%
9	Pulling back HP & IP valve casings such that HP & IP inlet inserts are pulled out of the HIP inner casing.	1.00%
10	Removal of inner casing bottom half from position and manual cleaning of outer casing lower half.	0.50%
11	Alumina blasting of HIP rotor, inner casing top & bottom halves and all gland seal segments.	1.50%
12	Revisioning of angle rings of HP & IP inlet, IP extraction, HP drain, HP exhaust and HP OLCV lines and NDT tests and replacement of Angle rings as per requirement if any found defective. Revisioning of HIP top and Bottom inner casing BP leak off lines and its sliding bushes. Replacement of pipes, bushes if any found defective including welding, NDT as per WPS.	1.50%
13	DP check of parting plane studs and replacement, if required.	0.50%
14	HIP Front , Rear, IG and BP gland sealig fins revisioning and replacement as per requirement, including machining to designed fin heights	1.00%
15	Metallographic tests to be carried out at different locations of Rotor, casing and valve parts.	2.50%
16	Ovality check of HIP Inner casings and corrections in parting plane gap, if required.	1.50%
17	Placement of inner casing bottom half in position. Insertion of HP & IP inlet inserts into the inner casing bottom half. Checking and rectification of casing Thermocouples.	1.00%
18	Heat tightening of HP & IP valve casings to HIP outer casing flange studs by induction heating.	1.00%
19	Placement of HIP rotor in position and recording steam flow path including corrections/adjustments, if required.	1.00%
20	Placement of inner casing top half in position and heat tightening of parting plane studs by induction heating.	1.00%

21	Centering, roll & bump checks of inner casing. Finalisation of dimensions of loading packers & axial keys and positions of radial locking pins. Final assembly of holding down bolts.	1.00%
22	Temporary assembly of outer casing top half with heat tightening of parting plane studs for finalising the dimensions of thermal washers of inner casing.	1.00%
23	Final assembly of outer casing top half with heat tightening of parting plane studs.	0.50%
24	HIP Turbine Gland Steam Line inlet & outlet flange gasket replacement & gland header cleaning, as required including cutting & re-welding of gland pipelines, if required, including preheating and radiography of the joints as per procedure.	1.50%
25	Placement of HP overload valve casing in position and heat tightening of parting plane flange studs. Assembly of HP overload valve inlet lines to position.	1.00%
26	Welding of drain lines of all the valve casings after ensuring throughness of all the lines and radiography testing of the weld joints.	1.00%
27	Final Centering, Roll & bump checks and Horn drop check of HIP turbine, corrections as required.	1.50%
28	Finalising HIP turbine casing clamps and their clearances.	0.50%
	Sub-Total	**28.00%**
C.	**LP TURBINE OVERHAUL:**	
1	Removal of LP outer cover from position.	0.50%
2	Roll check of LP turbine and lifting of LP inner-outer & inner-inner casing top halves from position.	1.50%
3	Dismantling of LP front & rear glands and removal of gland segments from position.	0.50%
4	Record steam flow path, radial free runout of rotor and lift LP rotor from position.	1.00%
5	Alumina blasting of LP rotor, top halves of casings and all gland seal segments.	2.00%
6	Ovality check of LP inner-inner, inner-outer casing and corrections in parting plane gap, if required.	1.50%
7	LP cross around pipe inspection through manholes.	0.50%
8	DP check of LP inlet line compensators, LP extraction line compensators and LP casing front & rear compensators. Necessary platform/scaffolding to be made.	2.00%
9	LP Blades removal, cleaning. MPI on last stage blades and the corresponding grooves of LP rotor. Replacement of blades, if required.	3.00%
10	NFT on last stage blades of LP rotor. Replacement of blades, if required. Reassembly of baldes and loacking.	3.00%
11	LP rotor placement in position and recording steam flow path including corrections, if any.	1.00%
12	Final assembly of LP inner-inner and inner-outer casings.	2.00%
13	Final Roll check of LP turbine and corrections, as required. Finalisation of holding down bolts, thermal washers, loading packers and radial keys including minor machining, if required.	1.00%

14	LP Turbine Gland Box Steam Line inlet & outlet bellow welding. Cutting & welding of gland header, as required for cleaning., Rewedling of all joints and NDT as per WPS.	1.00%
15	Inspection & replacement of all LPT atmospheric relief diaphragms, as per requirement.	1.00%
16	Final assembly of LPT outer cover.	1.00%
17	Centering of LPT front & rear gland boxes, and adjustment in Gland box keys as per requirement.	0.50%
	Sub-Total	**23.00%**
D.	**OVERHAUL OF TURBINE VALVES AND ACTUATORS**	
	A. HP Stop & Control Valves (Hydraulic & Steam side)	**2.50%**
	B. IP Stop & Control Valves (Hydraulic & Steam side)	**2.50%**
	C. HP Overload Control Valve (Hydraulic & Steam side)	**1.00%**
	D. LP Bypass stop & control valves (Hydraulic & Steam side)	**2.00%**
	E. CRH & Extraction NRVs (Hydraulic & Steam side)	**2.00%**
	F. Water Injection Valves (Water side)	**1.00%**
1	Decoupling and removal of servomotor/actuators.	
2	Complete dismantling of valves and their servomotors.	
3	Cleaning, checking and DP test as required. Repair and replacement of components, if required.	
4	Complete lapping of seats and discs as per requirement.	
5	Assembly of valves.	
6	Assembly of servomotor, placement in position and coupling with valves.	
	Sub-Total	**11.00%**
E.	**OVERHAUL OF MS & HRH STRAINERS**	
1	Removal of steam strainers from the strainer housing after removing insulation and cutting of pipelines, as required. Required gas and other heating arrangement shall be in vendor scope. Necessary platform/scaffolding to be arranged by the vendor.	1.50%
2	Inspection of inner space of the strainer housing, DPT of the steam strainer elements and other components. Repair / re-welding between strainer element and disc, if required.	1.50%
3	Re-assembling of steam strainers into the strainer housing as per the standard procedure and re-welding of all pipelines as per the drawing. New strainer element to be welded to the blanking plate, if required.	1.50%
4	Welding of strainer housing drain lines and radiography testing of the weld joints.	1.50%
	Sub-Total	**6.00%**
F.	**INSPECTION OF HANGER SUPPORTS**	
1	Inspection of hanger supports on MS, CRH, HRH and extraction piping including repair/replacement as required.	2.00%
	Sub-Total	**2.00%**

	SUMMARY	**% break-up**
A.	GENERAL ACTIVITIES - BEARING INSPECTION AND ASSOCIATED WORKS	30.00%
B.	HIP TURBINE OVERHAUL	28.00%
C.	LP TURBINE OVERHAUL	23.00%
D.	OVERHAUL OF TURBINE VALVES AND ACTUATORS	11.00%
E.	OVERHAUL OF MS & HRH STRAINERS	6.00%
F.	INSPECTION OF HANGER SUPPORTS	2.00%
	Grand Total	**100.00%**

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ANNEXURE-3

PRICE SCHEDULE FORMAT

Tender Specification No: T-05/2026-27 Dt: 15.05.2026

Time & Date of submission Before 11:00 Hrs. on 25.05.2026

DESCRIPTION		TOTAL AMOUNT excl. GST (in Rs.[Figs. And words])
Total amount for Capital Overhauling of HIP & LP Turbines for 2 nos. Units (both KN Series Turbines) as per SOW at NALCO CPP (120MW) Angul	100%	QUOTED/~~UNQUOTED~~ *

** Price to be quoted in PRICE SCHEDULE (Excel file) provided along with the tender.*

Allocation for each unit works is as follows

BOQ Details	Qty	% Allocation for each Unit	Total
Capital Overhauling of HIP & LP Turbines (KN Series Turbines) as per scope of works at NALCO CPP (120MW) Angul	2 nos.	50%	100%

COMPLETION PERIOD: The entire work covered under the scope of this tender is to be completed **within 45 days for each unit (Start to oil flushing).**

GST SHALL BE TREATED AS EXTRA

Note:

1. Work to be taken up as advised by BHEL/SAS in line with customer schedule.
2. Payment shall be on completion of works as per terms of payment envisaged in the Tender.
3. The price quoted will be FIRM for a period of 06 months from latest due date of offer submission (including extension, if any) unless specified otherwise.
4. The rates should be quoted **both in figures and in words**.

We have quoted in line with the tender specification and we confirm our acceptance to the above mentioned conditions.

Signature of Bidder with Seal

NO DEVIATION CERTIFICATE

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

To,

The General Manager/SAS,
Bharat Heavy Electricals Limited,
Power Sector - Southern Region - Services After Sales,
BHEL Integrated Office Complex (3rd Floor),
TNEB Road, Pallikaranai,
Chennai - 600100.

Dear Sir,

Sub: No Deviation Certificate

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

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

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

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

This is to confirm that, we have noted the job content and we are fully aware of the site condition etc., before submission of our offer.

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

Thanking you,

Yours faithfully,

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

BIDDER FOR PRICE OPENING THROUGH REVERSE AUCTION

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

To,

The General Manager/SAS,
Bharat Heavy Electricals Limited,
Power Sector - Southern Region - Services After Sales,
BHEL Integrated Office Complex (3rd Floor),
TNEB Road, Pallikaranai, Chennai - 600100.

Dear Sir,

Sub: Declaration by Bidder for Price opening through Reverse Auction

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

I have studied and understood the clauses of Reverse Auction Guidelines published at http://www.bhel.com. I, hereby declare that we shall be participating in the Reverse Auction in case BHEL opts for opening the price bid through Reverse auction.

Below are the contact person details for participating in reverse auction:

Name :_____.

Mobile/Phone No. :_____.

E-Mail ID :_____.

Yours faithfully,

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

UNDERTAKING

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

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

Dear Sir/Madam,

Sub: DECLARATION REGARDING INSOLVENCY/ LIQUIDATION/ BANKRUPTCY PROCEEDINGS

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

I/We, _____ declare that, I/We am/are not under insolvency resolution process or liquidation or Bankruptcy Code Proceedings (IBC) as on date, by NCLT or any adjudicating authority/ authorities, which will render us ineligible for participation in this tender.

Sign. of the AUTHORISED SIGNATORY

(With Name, Designation and Company seal)

Place:
Date:

DECLARATION

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

Date: _____

To: _____
Address: BHEL ,_____
_____
_____
email: _____

Sub: Details of related firms and their area of activities

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

Dear Sir/ Madam,

Please find below details of firms owned by our family members ("Family" shall mean: (a). parent, (b). husband/wife (c). sons/daughters (including adopted children) and their spouse, (d). full blood siblings (brothers & sisters from common parents) and their spouse) that are doing business/ registered for same item with BHEL, _____ (NA, if not applicable)

01	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
02	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	

Note:I certify that the above information is true and I agree for penal action from BHEL in case any of the above information furnished is found to be false.

Regards,
(_____)
From: M/s _____
Supplier Code: _____
Address: _____
_____

Note: Please mention NIL or Not Applicable in the above table if no related firms is available.

DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017

DATED 04TH JUNE, 2020) AND SUBSEQUENT ORDER(S)

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

To,

The General Manager/SAS,
Bharat Heavy Electricals Limited,
Power Sector - Southern Region - Services After Sales,
BHEL Integrated Office Complex (3rd Floor),
TNEB Road, Pallikaranai, Chennai - 600100.

Dear Sir,
Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 04th June, 2020 and subsequent Orders)
Ref : 1) NIT/Tender Specification No: ……,
2) All other pertinent issues till date

We hereby certify that the items/works/services offered by _____ (SPECIFY ORGANIZATION NAME HERE) has a local content of _____ % and this meets the local content requirement for 'Class-I local supplier' / 'Class II local supplier' ** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 04.06.2020 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:
1. _____ 2. _____
3. _____ 4. _____

Thanking you,
Yours faithfully,

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

** - Strike out whichever is not applicable.

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

DECLARATION REGARDING COMPLIANCE TO RESTRICTIONS UNDER RULE 144 (xi) OF GFR 2017

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

To,

The General Manager/SAS,
Bharat Heavy Electricals Limited,
Power Sector - Southern Region - Services After Sales,
BHEL Integrated Office Complex (3rd Floor),
TNEB Road, Pallikaranai, Chennai - 600100.

Dear Sir,
Sub: Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017

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

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries. I certify that _____ (specify the name of the organization here), is not from such a country / has been registered with the Competent Authority (attach valid registration by the Competent Authority, i.e., the Registration Committee constituted by the Dept. for Promotion of Industry and Internal Trade (DPIIT)); and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. (attach relevant valid registration, if applicable) I hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Thanking you,

Yours faithfully,

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

Note:
Bidders to note that in case above certification given by a bidder, whose bid is accepted, is found to be false, then this would be a ground for immediate termination and for taking further action in accordance with law and as per BHEL guidelines.

ANALYSIS OF UNIT RATES QUOTED

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

Offer Reference No: …….
Date: ……

To,

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

Dear Sir,

Sub: Analysis of Unit Rates Quoted
Ref: Tender Specification No: ……

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

Sl. No.	DESCRIPTION	% OF QUOTED RATE	REMARKS
01	SITE FACILITIES VIZ., ELECTRICITY, WATER OTHER INFRASTRUCTURE.		
02	SALARY AND WAGES + RETRENCHMENT BENEFITS		
03	CONSUMABLES		
04	T&P DEPRECIATION & MAINTENANCE		
05	ESTABLISHMENT & ADMINISTRATIVE EXPENSES		
06	OVERHEADS		
07	PROFIT		
	TOTAL	100%	

Yours faithfully,

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

BANK ACCOUNT DETAILS FOR E-PAYMENT

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

---

1. Beneficiary Name and Address:

2. Beneficiary Account No.:

3. Type of A/C (CC/Current)

4. Bank Name & Branch:

5. City/Place:

6. 9 digit MICR Code of Bank Branch:

7. IFSC Code of Bank Branch:

8. PAN Number of Beneficiary:

9. Beneficiary E-mail ID:
(for payment confirmation)

Note: In case Bank endorsed certificate regarding above has already been submitted earlier, kindly submit photocopy of the same.

Form WAM 10

BHARAT HEAVY ELECTRICALS LIMITED

DIVISION .....

Claim for Refund of Security Deposit

(Para 4.7.4 of Works Accounts Manual)

Ref No.: Date:

1 Name and address of the contractor

2 Contract Agreement/Work Order No.

3 Date of contract agreement/work order

4 Name of the work undertaken

5 Date of commencement of the work

6 Date of completion of the work

7 Period of Maintenance

8 Date on which the final bill was paid

9 Last date of making good the defect, if any, during maintenance period

10 Expenditure incurred by BHEL during maintenance period, if any, recoverable

11 Date on which security deposit refund falls due as per contract

12 Amount deposited/recovered

Details	Mode	Amount

13 LESS amounts recoverable (with details)

(i) Amount spent by BHEL on maintenance:

(ii) Payments made on behalf of contractor :

(iii) Court dues / penalties / compensation :

(iv) Other recoveries for services etc. :

(v) Security deposit released with final bill (%):

14 Net amount recommended for release (12-13):

Details	Mode	Amount

Date: **Signature of Engineer in Charge**

Form WAM 10 (Contd.)

(Contd.) Form WAM 10

CERTIFICATE TO BE FURNISHED BY THE CONTRACTOR

I/We have no claim or demand outstanding against BHEL .....for the work done or for labor or material supplied or any other account arising out of or connected with the contract agreement/work order (No.....dated .....) and the payment of this bill shall be in full and final

Date: **Signature of Contractor**

CERTIFICATE TO BE FURNISHED BY SENIOR ENGINEER

Certified that

- The payment recommended for release is in order and there are no demands other than those included in the claim outstanding from the contractor;
- The maintenance period as per the contract agreement is over and the contractor has carried out the works required to be carried out by him during the period of maintenance to our satisfaction, and all expenses incurred by the company on carrying out such works have been included for adjustment;
- All the objections raised so far have been settled;
- A note of refund of security deposit has been made in the measurement book and contract agreement/work order.

Date: **Signature of Senior Engineer**

FOR USE IN FINANCE DEPARTMENT

Passed for

Rs.....(Rupees.....

.....only)

Accountant **Accounts Officer**

SUB AGENCY LETTER HEAD

……

Ref. No: BHEL/PS/SR/SAS/No Due/SITE: ……DATE:……..

To,

The engineer Incharge,

Dept: ……..

Project:……..

Unit:……..

(Through BHEL Site In-charge)

Sub : Request for issuance of "NO DUES CERTIFICATE "

Ref : 1) Customer P.O/LOI : …… …… …… …… ……

……

2) BHEL P.O/LOI : …… …… …… …… ……

… ……

Dear Sir,

With reference to the above we request for issuance of "NO DUES CERTIFICATE" for the works …… …… …… …… for the Project: ……

…… ……, Unit: ……

Kindly do the needful at your end please.

Thanking you

Yours faithfully,

(Name: ……)

Site In-charge

Company: M/s……

Project:…… …….. ,Unit No: ……..

……

Kindly issue "No Due certificate" for the above subject works after due verification of your stores.

With thanks and regards

Site In-charge

BHEL/PSSR/SAS

PROJECT: …… …… …… Unit: ……

NO DUES CERTIFICATE

Date: ……

Ref:1) P.O No: …… …… …… …… …… ……

2) Your Lr .No: BHEL/PS/SR/SAS/No Due/Site: …… …….. …… Dtd: ……

This is to certify that, with the above references, M/s …… …… ……., Sub contractor of M/s BHEL/PSSR/SAS returned all the T&P and materials in healthy condition which were received during execution of the works : ……

…… …… ……..… …… …. at project : ……

…… …….. of unit No : …….. in the period of ……

This "No dues certificate" issued after due verification of our stores.

Signature of principal customer

Dept :

Seal :

BHARAT HEAVY ELECTRICALS LIMITED

POWER SECTOR, SOUTHERN REGION

REFUND OF RETENTION AMOUNT

Format No.PS:SR:SAS:SCT:Retention:REFUND:001

Ref No: Date:

1. Name and Address of Contractor :
2. Contract Agreement/LOI No :
3. Date of Contract Agreement/LOI :
4. Name of the Work undertaken :
5. Date of commencement of the Work :
6. Date of Completion of the Work :
7. Retention Amount to be refunded :
8. Less Amounts recoverable (with details)
   a. Amount spent by BHEL on maintenance :
   b. Payments made by BHEL on behalf of Contractor:
   c. Court dues/penalties/compensation :
   d. Safety/quality/Material recoveries
   e. Other recoveries for Services, etc :
   F. Total of 'a' to 'e' :
9. Net Amount recommended for release (12-13) :
10. Remarks.

Signature of BHEL Engineer

CERTIFICATE TO BE FURNISHED BY CONCERNED DEPARTMENT

HR DEPT:

HR related documents submitted w.r.t. the mentioned contract are/are not to the satisfaction of BHEL. Hence it is recommended for:

1. Payment of Retention Amount (OR)
2. Recovery of Rs _____ towards the following reason.

Reasons:

A.

B.

C.

Date: Head/HR/SAS

CONTRACTS DEPT:

All contractual requirements w.r.t the mentioned contract are/are not complied to the satisfaction of BHEL. Hence it is recommended to:

1. Payment of Retention Amount (OR)
2. Recovery of Rs _____ towards the following reason.

Reasons:

A.

B.

C.

Date: Head/Contracts/SAS

COMMERCIAL DEPT:

All documents and compliances as desired are/are not fullfilled to the satisfaction of BHEL. Hence it is recommended to:

1. Payment of Retention Amount (OR)
2. Recovery of Rs _____ towards the following reason.

Reasons:

A.

B.

C.

Date: Head/Commercial/SAS

CERTIFICATE TO BE FURNISHED BY THE CONTRACTOR

I / We have no claim or demand outstanding against BHEL _____, for the work done or for labour or material supplied or any other account arising out of or connected with the Contract Agreement / LOI (No_____ dated _____) and the payment of this bill shall be in full and final settlement of all my/our claims and demands of the Contract Agreement / LOI referred to. Further, I/We agree for a recovery of Rs _____(Rupees. _____) as per breakup mentioned above.

Date: Signature of Contractor

CERTIFICATE TO BE FURNISHED BY HEAD - SERVICES

A. All objections raised so far have been settled

B. The payment recommended for release is in order

Total Retention Amount:

(-) Recovery: _____

Payable: _____

Date: Head/Services/SAS

BHEL-PSSR, SAS Secunderabad

CHECK LIST TO BE SUBMITTED WITH EACH RUNNING BILL

Brief Description of Work :	**Name of The Agency :**
Work Order Ref.	**RA Bill No. & date :**

Sl.No.	DESCRIPTION	Check list for 40% invoice (Tick in the box)	Check list for 50% invoice (Tick in the box)	Check list for final 10% invoice (Tick in the box)	Remarks
1) Documents to be submitted by the Contractor with Invoices					
1.1	GST number and billing address should be as per work order. BHEL GST and vendor GST should be present in invoice. HSN Code to be specified in the invoice.				
1.2	Bill/Execution period to be mentioned in Invoice				
1.3	GST remittance Proof to be submitted				
1.4	Contractor signed in M-Book with "Measurement accepted" with stamp.				
1.5	Submitted Supporting Doc-Labour License Note: Labour License Application with 30% bill & Labour License with 60% bill to be submitted.			Not Applicable	
1.6	Submitted Supporting Doc-Wage Sheets	Not Applicable			
1.7	Submitted Supporting Doc-PF	Not Applicable			
1.8	Submitted Supporting Doc-ESI/Insurance	Not Applicable			
1.9	Submitted Supporting Doc-HR Format	Not Applicable			
1.10	Submitted 36B Format (Statement for Wages and PF for the month) enclosed	Not Applicable			
1.11	Submitted Work commencement letter		Not Applicable	Not Applicable	
1.12	Submitted No dues certificate	Not Applicable	Not Applicable		
1.13	Submitted No further claims	Not Applicable	Not Applicable		
1.14	Any additional works claims pending	Not Applicable	Not Applicable		

Note :

1) Above details are to be filled by the contractor with each running bill, checklist to be signed and to be submitted in indexed form alongwith invoice.

2) If the contract period has expired during execution period, vendor to take up with resident engineer for initiating Time extension proposal. As far as possible, M Book entry / Invoice should be made only after extension of contract to avoid delay in further processing of the bills.

3) With out the completed check list, invoices are liable to be returned to the contractor.

4) Almost all our work orders for SAS Jobs are having Payment split of 40%, 50% and 10% (Final Bill) to facilitate regular cash flow to vendors. All the vendors and resident engineers to ensure that Invoices are raised accordingly to reduce the cycle time for processing of the Bills. Final 10% Bill must be submitted separately unless otherwise specified in Work order.

Signature of contractor

Sl.No.	DESCRIPTION	Check list (Tick in the box)	Remarks
2) To be filled by BHEL Resident Engineer/Resident Manager			
2.1	To ensure the compliance of all the points listed at Sl. No. 1 above		
2.2	Ensure Invoice is as per the WO payment terms. Recoveries/amount to be withheld if any, with reasons to be specified in M-book and claim to be generated accordingly with supporting documents. In case of recommendations for recoveries/amount to be withheld, Vendor's acceptance should also be taken in M-Book to avoid dispute at later stage.		
2.3	If there is any delay in completion of works w.r.t work order completion peroid, Time extension proposal should be initiated. Proactive action should be taken in this regard to avoid delay in processing of bills.		
2.4	RAB No. & WO Ref. to be certified in M-book.		
2.5	Certification on back side of original invoice.		
2.6	Claim generated and signed by Resident Engineer & Site In-charge.		
2.7	Entry to be made in Payables Management System (PMS) & acknoweldgment number generated in PMS to be mentioned in the claim generated.		
			BHEL Resident Engineer/Resident Manager

BHEL: Site, State

HR Clearance for releasing of First and subsequent Monthly Bill (Details check list)

(To be enclosed along with First and subsequent Monthly Running Bills)

1.	LABOUR LICENCE	AVL/NOT AVL/NA
	LABOUR LICENCE – VALIDITY	CURRENT/OLD/NA
	DISPLAY OF LICENCE	DONE/ NOT DONE/NA
	NOTICE OF COMMENCEMENT (FORM VI A)	SENT/ NOT SESENT/NA
2.	NOTICE BOARD	AVL/NOT AVL/NA
3.	ABSTRA OF CL (R & A) ACT /MINIMUM	DISPLAYED /
	WAGES ACT/CHILD LABOUR ACT	NOT DISPLAYED/NA
4.	REGISTERS TO BE MAINTAINED	
	WAGES REGISTER	YES / NO/NA
	MUSTER ROLL	YES / NO/NA
	FINES REGISTER	YES / NO/NA
	DEDUCTIONS REGISTER	YES / NO/NA
	OVER TIME REGISTER	YES / NO/NA
	LIST OF PERSONS EMPLOYED	YES / NO/NA
5.	EMPLOYMENT CARD	ISSUED/ NOT ISSUED/NA
6.	WAGE SLIPS	ISSUED/ NOT ISSUED/NA
7.	FIRST AID FACILITY	AVL/NOT AVL/NA
8.	LATRINES/ URINALS	AVL/NOT AVL/NA
9.	DRINKING WATER PROVISION	AVL/NOT AVL/NA
10.	WASHING FACILITIES	AVL/NOT AVL/NA
11.	NOTICE OF COMMENCEMENT OF WORK	SENT/ NOT SENT/NA
12.	HALF YEARLY RETURN – CL (R & A) ACT	SENT/ NOT SENT/NA
13.	ANNUAL RETURN – MIN. WAGES ACT	SENT/ NOT SENT/NA
14.	REGISTRATION UNDER BOCW(RE & CS) Act	AVAIALBLE/NOT AVAILABLE
15.	BOCW CESS PAID IN THE MONTH	YES/NO/NA
16.	PF RECOVERY / REMITTANCES (*)	DONE / NOT DONE/NA
17.	ESI RECOVERY / REMITTANCE (*)- IF APPLICABLE	DONE / NOT DONE/NA
18.	WC INSURANCE AVAILABILITY / VALIDITY	AVL/NOT AVL/ VALIDITY EXPIRED/NA

Certified that the details furnished above are true and correct. Further wages / other payments due to the workmen deployed by us are paid full and in time.

Sing. Of Contractor
Seal

The above details have been verified and found to be correct. In addition, payment of wages to the workmen witnessed and certified that correct wages are paid.

(Sign. Of Resident Engineer) (Sign. Of HR In-charge) (Sign. Of Head/Services)

Form WAM 22

PROFORMA OF BANK GUARANTEE (in lieu of SECURITY DEPOSIT)
(On non-Judicial paper of appropriate value)
(Para 4.7.6 of Works Accounts Manual)

Bank Guarantee No……
Date……

To,
Bharat Heavy Electricals Limited,
Power Sector - Southern Region - Services After Sales,
BHEL Integrated Office Complex (3rd Floor),
TNEB Road, Pallikaranai, Chennai - 600100.

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, Asiad, New Delhi – 110049* through its unit at *Bharat Heavy Electricals Limited, Power Sector - Southern Region, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai – 600100* having agreed to exempt _____[1] (Name of the Vendor /

Contractor / Supplier) with its registered office at_____[2] (hereinafter called the said "Contractor" which term includes supplier), from demand under the terms and conditions of the Contract arising vide Letter of Intent (LOI) reference No._____ dated _____ [3] valued at Rs. _____ [4] (Rupees _____ only)[4] (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. _____ [5]
(Rupees _____ only),

We, the _____ (Name & address of the Bank) _____ having our Head Office at _____ (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. _____ [5].

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 upto and including _____[6] 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 _____[7], 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…… [5]
b) This Guarantee shall be valid up to ……[6]
c) Unless the Bank is served a written claim or demand on or before _____[7] 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)

[1] NAME OF VENDOR /CONTRACTOR / SUPPLIER
[2] REGISTERED OFFICE ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.
[3] LETTER OF INTENT(LOI) REFERENCE NO. WITH DATE
[4] CONTRACT VALUE (AS MENTIONED IN LOI)
[5] BG AMOUNT IN FIGURES AND WORDS
[6] VALIDITY DATE
[7] DATE OF EXPIRY OF CLAIM PERIOD (CLAIM PERIOD SHALL BE MINIMUM OF 3 MONTHS AFTER VALIDITY DATE)

Note:

1. 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.

2. 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).

Form WAM 23

PROFORMA OF BANK GUARANTEE (in lieu of EARNEST MONEY if permissible under Works Policy)

(On non-Judicial paper of appropriate value)
(Para 4.7.6 of Works Accounts Manual)

Bank Guarantee No……
Date……

To
Bharat Heavy Electricals Limited,
Power Sector - Southern Region - Services After Sales,
BHEL Integrated Office Complex (3rd Floor),
TNEB Road, Pallikaranai, Chennai - 600100.

Dear Sirs,

In accordance with the terms and conditions of Invitation for Bids/Notice Inviting Tender No……[1] (Tender Conditions), M/s. ……[2] having its registered office at ……[3] (hereinafter referred to as the 'Tenderer'), is submitting its bid for the work of……[4] invited by 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, Asiad, New Delhi – 110049* through its unit at *Bharat Heavy Electricals Limited, Power Sector - Southern Region, BHEL Integrated Office Complex, TNEB Road, Pallikaranai, Chennai – 600100.*

The Tender Conditions provide that the Tenderer shall pay a sum of Rs ……[5] 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 .....[6] 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 Head 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.....[6] (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. _____.[6]

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Tenderer 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…….[7] 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 ……[8] 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……[6]

b) This Guarantee shall be valid up to ……[7]

c) Unless the Bank is served a written claim or demand on or before _____[8] all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank

We, _____ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

For and on behalf of
(Name of the Bank)

(Signature of Authorised signatory)

Date…….
Place of Issue…….

[1] Details of the Invitation to Bid/Notice Inviting Tender (Tender Ref. No. Eg. – BHEL/PSSR/SAS/SCT/XXX)
[2] Name of Tenderer
[3] REGISTERED Office Address of the Tenderer
[4] Details of the Work i.e Tender Description
[5] EMD Amount as mentioned in Notice Inviting Tender
[6] BG Amount in words and Figures (BG Amount shall be Minimum of EMD amount less Rs. 2 Lakhs)
[7] Validity Date
[8] Date of Expiry of Claim Period (Claim Period shall be minimum of 3 Months after the validity date of Bank Guarantee)

Note:

1. 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.

2. 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).

PROFORMA STATEMENT TO BE OBTAINED FROM THE CONTRACTOR (36B)

NAME & ADDRESS OF THE PRINCIPAL EMPLOYER **TN/7835** **MONTH**
NAME & ADDRESS OF THE CONTRACTOR **TN/**

SL NO	Name of the Employee	Father's name	Date of joining (DD/MM/YY)	PF A/c no	No.of days	Total wages paid	Wages for PF (in Rupees)	Contribution

I/We certify that all the above employees who were actually deployed in your establishment during_____2021, have all been covered under EPF & MP Act 2852 and the contributions in respect of them for the month of _____2021 have been remitted by me/us under Code No.TN/_____maintained at _____RO/SRO on _____

DATE: SIGNATURE OF THE CONTRACTOR

Contd./-

to be filled by Contractor on Quarterly basis & during final bill on cummulative basis and the same to be verified by site finance

Name of Contractor:
SCT No & Date:
Name of Site
Initial Contract Value
Last Approved Contract Value
Total Executed Contract Value

GST Reconciliation Statement by Contractor

Sl.No	Invoice Type PVC/ORC/Regular	Work Done Month	RAB /PVC / ORC No	Invoice No	Invoice Date	Gross Value - Regular	PVC Value	ORC Value	GST on Regular /PVC/ ORC	GST Received till date	Balance GST Receivable	GST Received Vide Cheque No and Date	Filing of GSTR-1 Date	Filing of GSTR-3B Date	Screen shot of GSTR 1 for the Balance GST Receivable attached - Yes/No	
						(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)					
						A	B	C	D=GST on A+B+C	E	F= D-E	G	H	I	J	
1			RAB 01													
2			RAB 02													
3			RAB 03													
						0	0	0	0							

Signature of Contractor with Seal

A- To be matched with Total Executed Contract Value

D- To be matched with (Executed Contract value+ PVC +ORC) * GST Rate

Verified by Site Finance

H and I- GSTR 1 and GSTR 3B filing date to be mentioned for each line item - Screen shot of Return filing status

J- Screenshot of Invoice in GSTR 1 to be attached for the Balance GST payable

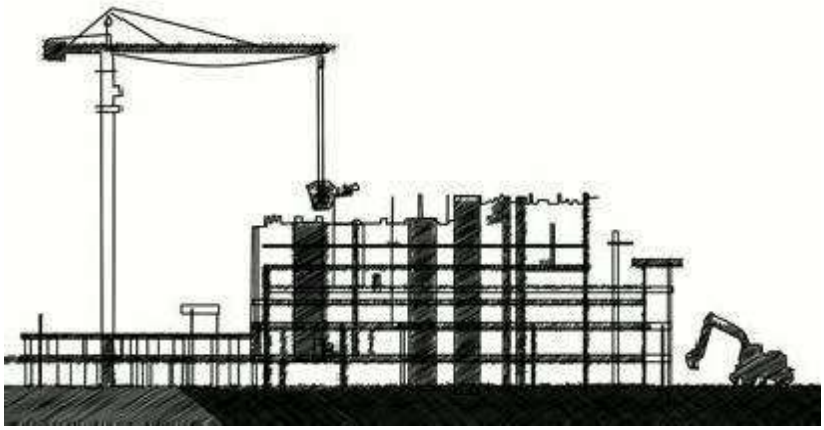
HEALTH, SAFETY and ENVIRONMENT PLAN

for

SITE OPERATIONS

by

SUB-CONTRACTORS



POWER SECTOR

HSE PLAN FOR SITE OPRATIONS BY BHEL'S SUBCONTRACTORS

AT A GLANCE

BEFORE START

SIGNING OF MOU
Agree to comply to HSE requirement- Statutory and BHEL's

PLAN

HSE ORGANISATION	
Manpower • 1 (one) safety officer for every 500 workers or part thereof • 1(one) safety-steward/ supervisor for every 100 workers **Qualification** As per Cl. 7.1	**HSE Roles and responsibilities** • Site In-charge- As per clause 7.2.1 • Safety officer- As per clause 7.2.2

HSE Planning for Man, Machinery/Equipment/Tools & Tackles

PROVIDE

HSE INFRASTUCTURE	
• PPEs • Drinking Water • Washing Facilities • Latrines and Urinals • Provision of shelter for rest • Medical facilities	• Canteen facilities • Labour Colony • Emergency Vehicle • Pest Control • Scrapyard • Illumination

TRAIN

HSE TRAINING , AWARENESS & PROMOTION	
Training • Induction training • Height work and other critical areas • Tool Box talk & Pep Talk	**Awareness & Promotion** • Signage • Poster • Banner • Competition • Awards

COMMUNICATE

HSE COMMUNICATION	
Incident Reporting • Accident- Fatal & Major • Property damage • Near Miss	**Event Reporting** • Celebrations • Training • Medical camp

EXECUTE SAFELY

OPERATIONAL CONTROL PROCEDURES

PERMIT TO WORK

Height work (above 2 metres), Hot Work, Heavy Lifting, Confined Space, Radiography, excavation (More than 4 metres)

SAFETY DURING WORK EXECUTION	
• Welding • Rigging • Cylinder- storage & Movement • Demolition work • T&Ps • Chemical Handling • Electrical works	• Fire • Scaffolding • Height work • Working Platform • Excavation • Ladder • Lifting • Hoisting appliance
HOUSE KEEPING	
WASTE MANGEMENT	
TRAFFIC MANAGEMENT	
ENVIRONMENTAL CONTROL	
EMERGENCY PREPAREDNESS AND RESPONSE PLAN	

CHECKS

HSE AUDITS & INSPECTION	
• Daily Checks • Inspection of PPEs • Inspection of T& Ps • Inspection of Cranes & Winches	• Inspection of Height work • Inspection of Welding and Gas cutting • Inspection of elevators etc.

HSE PERFORMANCE EVALUATION PARAMETERS

NON CONFORMANCE

PENALTY for NON CONFORMANCE

Refer Clause 16

Incremental penalty

For repeated violation by the same person, the penalty would be double of the previous penalty

For repeated fatal incident in the same Unit incremental penalty to be imposed. The subcontractor will pay 2 times the penalty compared to previously paid in case there are repeated cases of fatal incidents under the same subcontractor for the same package in the same unit.

REVISION HISTORY SHEET

Date	Revision No.	Details of Changes	Reason	Prepared	Reviewed	Approved
12.08.2014	00	First Issue	First Issue	S. B. Jayant, Dy Manager-FQA & Safety	A. K. Sinha, GM-FQA & Safety	Anuj Bhatnagar, ED-FQA & Safety
20.01.2020	01	Formats added: **HSEP:14-F30 – Monthly HSE Planning & Review** (Page 11, Clause 8.0 - updated) HSEP:14-F13E-Excavation Inspection Format (part of F30)) HSEP:14-F32B – Job Safety Analysis Format (part of F30) **HSEP:14-F31A – Daily HSE Reporting** (Page 18, Clause 10.3 – added) **HSEP:14-F33 – HSE Performance Evaluation** (Page 31, Clause 13 – revised)	IOM No. **PSHQHSE/MONREP/02** Dated 08-Jan-2020	Rohit Kumar	Santosh Nair, GM (MSX & HSE)	

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1.0 PURPOSE

1.1 The purpose of this HSE Plan is to provide for the systematic identification, evaluation, prevention and control of general workplace hazards, specific job hazards, potential hazards and environmental impacts that may arise from foreseeable conditions during installation and servicing of industrial projects and power plants.

1.2 This document shall be followed by BHEL's subcontractors at all installation and servicing sites. In case customer specific documents are to be implemented, this document will be followed in conjunction with customer specific documents.

1.3 Although every effort has been made to make the procedures and guidelines in line with statutory requirements, in case of any discrepancy relevant statutory guidelines must be followed.

1.4 In case the customer has any specific requirement, the same is to be fulfilled.

2.0 SCOPE

The document is applicable for BHEL's Subcontractors at all installation / servicing activities of BHEL Power Sector as per the relevant contractual obligations.

3.0 OBJECTIVES AND TARGETS

The HSE Plan reflects that BHEL places high priority upon the Occupational Health, Safety and Environment at workplaces.

- Ensure the Health and Safety of all persons at work site is not adversely affected by the work.
- Ensure protection of environment of the work site.
- Comply at all times with the relevant statutory and contractual HSE requirements.
- Provide trained, experienced and competent personnel. Ensure medically fit personnel only are engaged at work.
- Provide and maintain plant, places and systems of work that are safe and without risk to health and the environment.
- Provide all personnel with adequate information, instruction, training and supervision on the safety aspect of their work.
- Effectively control, co-ordinate and monitor the activities of all personnel on the Project sites including subcontractors in respects of HSE.
- Establish effective communication on HSE matters with all relevant parties involved in the Project works.
- Ensure that all work planning takes into account all persons that may be affected by the work.
- Ensure fitness testing of all T&Ps/Lifting appliances like cranes, chain pulley blocks etc. are to be certified by competent person.
- Ensure timely provision of resources to facilitate effective implementation of HSE requirements.
- Ensure continual improvements in HSE performance
- Ensure conservation of resources and reduction of wastage.
- Capture the data of all incidents including near misses, process deviation etc. Investigate and analyze the same to find out the root cause.
- Ensure timely implementation of correction, corrective action and preventive action.

HSE TARGETS

EXPLOSION	**ZERO**
FATALITY	**ZERO**
LOST TIME INJURY	**ZERO**
FIRE	**ZERO**
VEHICLE INCIDENTS	**ZERO**
ENVIRONMENTAL INCIDENTS	**ZERO**

4.0 BHEL POWER SECTOR HEALTH, SAFETY & ENVIRONMENT POLICY

Health, Safety & Environment Policy of BHEL

In BHEL, Health, Safety and Environment (HSE) responsibilities are driven by our commitment to protect our employees and people we work with, community and environment. BHEL believes in zero tolerance for unsafe work/non-conformance to safety and in minimizing environmental footprint associated with all its business activities. We commit to continually improve our HSE performance by:

- Developing safety and sustainability culture through active leadership and by ensuring availability of required resources.
- Ensuring compliance with applicable legislation, regulations and BHEL systems.
- Taking up activities for conservation of resources and adopting sound waste management by following Reduce/Recycle/Reuse approach.
- Continually identifying, assessing and managing environmental impacts and Occupational Health & Safety risks of all activities, products and services adopting approach based on elimination/ substitution/reduction/control.
- Incorporating appropriate Occupational Health, Safety and Environment criteria into business decisions, design of products & systems and for selection of plants, technologies and services.
- Imparting appropriate structured training to all persons at workplace and promoting awareness amongst customers, contractors and suppliers on HSE issues.
- Reviewing periodically this policy and HSE Management Systems to ensure its relevance, appropriateness and effectiveness.
- Communicating this policy within BHEL and making it available to interested parties.

` **sd/-**

CMD, BHEL

5.0 MEMORANDUM OF UNDERSTANDING:

After award of work, subcontractors are required to enter into a memorandum of understanding as given below:

Memorandum of Understanding

BHEL, Power Sector_____Region is committed to Health, Safety and Environment Policy (HSE Policy).

M/s_____do hereby also commit to comply with the same HSE Policy w h i l e executing the Contract Number _____

M/s_____shall ensure that safe work practices as per the HSE plan. Spirit and content therein shall be reached to all workers and supervisors for compliance.

In addition to this, M/S_____shall comply to all applicable statutory and regulatory requirements which are in force in the place of project and any special requirement specified in the contract document of the principal customer.

M/s_____shall co-operate in HSE audits/inspections conducted by BHEL /customer/ third party and ensure to close any non-conformity observed/reported within prescribed time limit.

Signed by authorized representative of M/s ----------

Name :

Place & Date:

6.0 TERMS AND DEFINITIONS

6.1 DEFINITIONS

6.1.1 INCIDENT

Work- related or natural event(s) in which an injury, or ill health (regardless of severity), damage to property or fatality occurred, or could have occurred.

6.1.2 NEAR MISS

An incident where no ill health, injury, damage or other loss occurs, but it had a potential to cause, is referred to as "Near-Miss".

6.1.3 MAN-HOURS WORKED

The total number of man hours worked by all employees including subcontractors working in the premises. It includes managerial, supervisory, professional, technical, clerical and other workers including contract labours. Man-hours worked shall be calculated from the payroll or time clock recorded including overtime. When this is not feasible, the same shall be estimated by multiplying the total man-days worked for the period covered by the number of hours worked per day. The total number of workdays for a period is the sum of the number of men at work on each day of period. If the daily hours vary from department to department separate estimate shall be made for each department and the result added together.

6.1.4 FIRST AID CASES

First aids are not essentially all reportable cases, where the injured person is given medical treatment and discharged immediately for reporting on duty, without counting any lost time.

6.1.5 LOST TIME INJURY

Any work injury which renders the injured person unable to perform his regular job or an alternative restricted work assignment on the next scheduled work day after the day on which the injury occurred.

6.1.6 MEDICAL CASES

Medical cases come under non-reportable cases, where owing to illness or other reason the employee was absent from work and seeks Medical treatment.

6.1.7 TYPE OF INCIDENTS & THEIR REPORTING:

The three categories of Incident are as follows:

Non-Reportable Cases:
An incident, where the injured person is given medical help and discharged for work without counting any lost time.

Reportable Cases:
In this case the injured person is disable for 48 hours or more and is not able to perform his duty.

Injury Cases:
These are covered under the heading of non-reportable cases. In these cases the incident caused injury to the person, but he still continues his duty.

6.1.8 TOTAL REPORTABLE FREQUENCY RATE

Frequency rate is the number of Reportable Lost Time Injury (LTI) per one Million Man hours worked. Mathematically, the formula read as:

$$\frac{\text{Number of Reportable LTI}}{\text{Total Man Hours Worked}} \times 1{,}000{,}000$$

6.1.9 SEVERITY RATE

Severity rate is the Number of days lost due to Lost Time Injury (LTI) per one Million Man hours worked. Mathematically, the formula reads as:

$$\frac{\text{Days lost due to LTI}}{\text{Total Man Hours Worked}} \times 1{,}000{,}000$$

6.1.10 INCIDENCE RATE

Incidence Rate is the Number of LTI per one thousand manpower deployed. Mathematically, the formula reads as:

$$\frac{\text{Number of LTI}}{\text{Average number of manpower deployed}} \times 1000$$

7.0 HSE ORGANISATION

Number of safety officers:
The subcontractor must deploy one safety officer for every 500 workers or part thereof in each package. In addition, there must be one safety-steward/safety-supervisor for every 100 workers.

Deployment: The subcontractor should deploy sufficient safety officers and safety-steward/Safety-supervisor, as per requirement given above, since initial stage and add more in proportion to the added strength in work force. Any delay in deployment will attract a penalty of Rs.30,000/- per man month for the delayed period.

7.1 QUALIFICATION FOR HSE PERSONNEL

Sl.no	Designation	Qualification	Experience
1	Safety officer (Construction Agency)	Degree or Diploma in Engineering with full time diploma in Industrial Safety with construction safety as one of the subjects	Minimum two years for degree holder and five years for diploma holder in the field of Construction of power plant/ major industries

2	Safety-Steward/ Safety-Supervisor	Degree or diploma in any discipline with full time diploma in Industrial Safety with construction safety as one of the subjects	Minimum two years

7.2 RESPONSIBILITIES

7.2.1 SITE IN -CHARGE OF SUBCONTRACTOR

- Shall sign Memorandum of Understanding (MoU) for compliance to BHEL's HSE Plan for Site Operations as per clause 5.0
- Shall engage qualified safety officer(s) and steward (s) as per clause 7.0
- Shall adhere to the rules and regulations mentioned in this code, practice very strictly in his area of work in consultation with his concerned engineer and the safety coordinator.
- Shall screen all workmen for health and competence requirement before engaging for the job and periodically thereafter as required.
- Shall not engage any employee below 18 years.
- Shall arrange for all necessary PPEs like safety helmets, belts, full body harness, shoes, face shield, hand gloves etc. before starting the job. Shall ensure that no working men/women carry excessive weight more than stipulated in Factory Rule Regulation R57.
- Shall ensure that all T&Ps engaged are tested for fitness and have valid certificates from competent person.
- Shall ensure that provisions stipulated in contract Labour Regulation Act 1970, Chapter V C.9, canteen, rest rooms/washing facilities to contracted employees at site.
- Shall adhere to the instructions laid down in Operation Control Procedures (OCPs) available with the site management.
- Shall ensure that person working above 2.0 meter should use Safety Harness tied to a life line/stable structure.
- Shall ensure that materials are not thrown from height. Cautions to be exercised to prevent fall of material from height.
- Shall report all incidents (Fatal/Major/Minor/Near Miss) to the Site engineer /HSE officer of BHEL.
- Shall ensure that Horseplay is strictly forbidden.
- Shall ensure that adequate illumination is arranged during night work.
- Shall ensure that all personnel working under subcontractor are working safely and do not create any Hazard to self and to others.
- Shall ensure display of adequate signage/posters on HSE.
- Shall ensure that mobile phone is not used by workers while working.
- Shall ensure conductance of HSE audit, mockdrill, medical camps, induction training and training on HSE at site.
- Shall ensure full co-operation during HQ/External /Customer HSE audits.

- Shall ensure submission of look-ahead plan for procurement of HSE equipment's and PPEs as per work schedule.
- Shall ensure good housekeeping.
- Shall ensure adequate valid fire extinguishers are provided at the work site.
- Shall ensure availability of sufficient number of toilets /restrooms and adequate drinking water at work site and labour colony.
- Shall ensure adequate emergency preparedness.
- Shall be member of site HSE committee and attend all meetings of the committee
- Power source for hand lamps shall be maximum of 24 v.
- Temporary fencing should be done for open edges if Hand – railings and Toe-guards are not available.

7.2.2 HEALTH, SAFETY AND ENVIRONMENT OFFICER OF SUBCONTRACTOR

- Carry out safety inspection of Work Area, Work Method, Men, Machine & Material, P&M and other tools and tackles.
- Facilitate inclusion of safety elements into Work Method Statement.
- Highlight the requirements of safety through Tool-box / other meetings.
- Help concerned HOS to prepare Job Specific instructions for critical jobs.
- Conduct investigation of all incident/dangerous occurrences & recommend appropriate safety measures.
- Advice & co-ordinate for implementation of HSE permit systems, OCPs & MPs.
- Convene HSE meeting & minute the proceeding for circulation & follow-up action.
- Plan procurement of PPE & Safety devices and inspect their healthiness.
- Report to PS Region/HQ on all matters pertaining to status of safety and promotional program at site level.
- Facilitate administration of First Aid
- Facilitate screening of workmen and safety induction.
- Conduct fire Drill and facilitate emergency preparedness
- Design campaigns, competitions & other special emphasis programs to promote safety in the workplace.
- Apprise PS– Region on safety related problems.
- Notify site personnel non-conformance to safety norms observed during site visits / site inspections.
- Recommend to Site In charge, immediate discontinuance of work until rectification, of such situations warranting immediate action in view of imminent danger to life or property or environment.
- To decline acceptance of such PPE / safety equipment that do not conform to specified requirements.
- Encourage raising Near Miss Report on safety along with, improvement initiatives on safety.
- Shall work as interface between various agencies such customer, package-in-charges, subcontractors on HSE matters

8.0 PLANNING BY SUBCONTRACTOR

Monthly planning and review of HSE activities shall be carried out by subcontractor as per format No. HSEP:14-F30 jointly along with BHEL.

8.1 MOBILISATION OF MACHINERY/EQUIPMENT/TOOLS BY SUBCONTRACTOR

- As a measure to ensure that machinery, equipment and tools being mobilized to the construction site are fit for purpose and are maintained in safe operating condition and complies with legislative and owner requirement, inspection shall be arranged by in-house competent authority for acceptance as applicable.

- The machinery and equipment to be embraced for this purpose shall include but not limited to the following:

  - Mobile cranes.
  - Side Booms.
  - Forklifts.
  - Grinding machine.
  - Drilling machine.
  - Air compressors.
  - Welding machine.
  - Generator sets.
  - Dump Trucks.
  - Excavators.
  - Dozers
  - Grit Blasting Equipment.
  - Hand tools.

- Subcontractor shall notify the engineer, of his intention to bring on to site any equipment or any container, with liquid or gaseous fuel or other substance which may create a hazard. The Engineer shall have the right to prescribe the condition under which such equipment or container may be handled and used during the performance of the works and the subcontractor shall strictly adhere to such instructions. The Engineer shall have the right to inspect any construction tool and to forbid its use, if in his opinion it is unsafe. No claim due to such prohibition will be entertained.

8.2 MOBILISATION OF MANPOWER BY SUBCONTRACTOR

- The subcontractor shall arrange induction and regular health check of their employees as per schedule VII of BOCW rules by a registered medical practitioner.
- The subcontractor shall take special care of the employees affected with occupational diseases under rule 230 and schedule II of BOCW Rules. The employees not meeting the fitness requirement should not be engaged for such job.
- Ensure that the regulatory requirements of excessive weight limit (to carry/lift/ move weights beyond prescribed limits) for male and female workers are complied with.
- Appropriate accommodation to be arranged for all workmen in hygienic condition.

8.3 PROVISION OF PPEs

- Personnel Protective Equipment (PPEs), in adequate numbers, will be made available at site & their regular use by all concerned will be ensured
- The following matrix recommends usage of minimum PPEs against the respective job.

Sl. No	Type of work	PPEs
1	Concrete and asphalt mixing	Nose mask, hand glove, apron and gum boot
2	Welders/Grinders/ Gas cutters	Welding/face screen, apron, hand gloves, nose mask and ear muffs if noise level exceeds 90dB. Helmet fitted with welding shield is preferred for welders
3	Stone/ concrete breakers	Ear muffs, safety goggles, hand gloves
4	Electrical Work	Rubber hand glove, Electrical Resistance shoes
5	Insulation Work	Respiratory mask, Hand gloves, safety goggles
6	Work at height	Double lanyard full body harness, Fall arrestor (specific cases)
7	Grit/Sand blasting	Blast suit, blast helmet, respirator, leather gloves
8	Painting	Plastic gloves, Respirators (particularly for spray painting)
9	Radiography	As per BARC guidelines

- The PPEs shall conform to the relevant standards as below and bear ISI mark.

Relevant is-codes for personal protection

IS: 2925 – 1984	Industrial Safety Helmets.
IS: 4770 – 1968	Rubber gloves for electrical purposes.
IS: 6994 – 1973 (Part-I)	Industrial Safety Gloves (Leather &Cotton Gloves).
IS: 1989 – 1986 (Part-I-II)	Leather safety boots and shoes.
IS: 5557 – 1969	Industrial and Safety rubber knee boots.
IS: 6519 – 1971	Code of practice for selections care and repair of Safety footwear.
IS: 11226 – 1985	Leather Safety footwear having direct molding sole.
IS: 5983 – 1978	Eye protectors.
IS: 9167 – 1979	Ear protectors.
IS: 1179-1967	Eye & Face protection during welding
IS: 3521 – 1983	Industrial Safety Belts and Harness
IS:8519 -1977	Guide for selection of industrial Safety equipment for body protection
IS:9473-2002,14166-1994,14746-1999	Respiratory Protective Devices

The list is not exhaustive. The safety officer may demand additional PPEs based on specific requirement.

- Where workers are employed in sewers and manholes, which are in use, the subcontractor shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into manhole, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent incident to the public
- Besides the PPEs mentioned above, the persons shall use helmet and safety shoe. The visitors shall use Helmet and any other PPEs as deemed appropriate for the area of work.

Colour scheme for Helmets:

1. Workmen: Yellow
2. Safety staff: Green or white with green band
3. Electrician: Red
4. Others including visitors: White

- All the PPEs shall be checked for its quality before issue and the same shall be periodically checked. The users shall be advised to check the PPEs themselves for any defect before putting on. The defective ones shall be repaired/ replaced.
- The issuing agency shall maintain register for issue and receipt of PPEs.
- The Helmets shall have logo or name (abbreviation of agency name permitted) affixed or printed on the front.
- The body harnesses shall be serial numbered.

8.4 ARRANGEMENT OF INFRASTRUCTURE

8.4.1 DRINKING WATER

- Drinking water shall be provided and maintained at suitable places at different elevations.
- Container should be labeled as " Drinking Water"
- Cleaning of the storage tank shall be ensured atleast once in 3 months indicating date of cleaning and next due date.
- Potability of water should be tested as per IS10500 at least once in a year.

8.4.2 WASHING FACILITIES

- In every workplace, adequate and suitable facilities for washing shall be provided and maintained.
- Separate and adequate cleaning facilities shall be provided for the use of male and female workers. Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition and dully illuminated for night use.
- Overalls shall be supplied by the subcontractor to the workmen and adequate facilities shall be provided to enable the painters and other workers to wash during the cessation of work.

8.4.3 LATRINES AND URINALS

- Latrines and urinals shall be provided in every work place.
- Urinals shall also be provided at different elevations.
- They shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times, by appointing designated person.
- Separate facilities shall be provided for the use of male and female worker if any.

8.4.4 PROVISION OF SHELTER DURING REST

Proper Shed & Shelter shall be provided for rest during break

8.4.5 MEDICAL FACILITIES

8.4.5.1 MEDICAL CENTRE (As per Schedule V, X and XI of BOCW central Rules, 1998)

- A medical centre shall be ensured/identified at site with basic facilities for handling medical emergencies. The medical center can be jointly developed on proportionate sharing basis with permission from BHEL
- A qualified medical professional, not less than MBBS, shall be deployed at the medical centre
- The medical centre shall be equipped with one ambulance, with trained driver and oxygen cylinder.
- Medical waste shall be disposed as per prevailing legislation (Bio-Medical Waste –Management and Handling Rules, 1998)

8.4.5.2 FIRST AIDER

- Ensure availability of Qualified First-aider throughout the working hours.
- Every injury shall be treated, recorded and reported.
- Refresher course on first aid shall be conducted as necessary.
- List of Qualified first aiders and their contact numbers should be displayed at conspicuous places.

8.4.5.3 FIRST AID BOX (as per schedule III of BOCW)

- The subcontractor shall provide necessary first aid facilities as per schedule III of BOCW. At every work place first aid facilities shall be provided and maintained.
- The first aid box shall be kept by first aider who shall always be readily available during the working hours of the work place. His name and contact no to be displayed on the box.
- The first aid boxes should be placed at various elevations so as to make them available within the reach and at the quickest possible time.
- The first aid box shall be distinctly marked with a Green Cross on white background.
- Details of contents of first aid box is given in Annexure No. 01
- Monthly inspection of First Aid Box shall be carried out by the owner as per format no. HSEP:14-F01
- The subcontractor should conduct periodical first –aid classes to keep his supervisor and Engineers properly trained for attending to any emergency.

8.4.5.4 HEALTH CHECK UP (As per schedule VII and Form XI)

The persons engaged at the site shall undergo health checkup as per the format no. HSEP:14-F02 before induction. The persons engaged in the following works shall undergo health checkup at least once in a year:

a. Height workers
b. Drivers/crane operators/riggers

c. Confined space workers
d. Shot/sand blaster
e. Welding and NDE personnel

8.4.6 PROVISION OF CANTEEN FACILITY

- Canteen facilities shall be provided for the workmen of the project inside the project site.
- Proper cleaning and hygienic condition shall be maintained.
- Proper care should be taken to prevent biological contamination.
- Adequate drinking water should be available at canteen.
- Fire extinguisher shall be provided inside canteen.
- Regular health check-up and medication to the canteen workers shall be ensured.

8.4.7 PROVISION OF ACCOMODATION/LABOUR COLONY

- The subcontractor shall arrange for the accommodation of workmen at nearby localities or by making a labour colony.
- Regular housekeeping of the labour colony shall be ensured.
- Proper sanitation and hygienic conditions to be maintained.
- Drinking water and electricity to be provided at the labour colony.
- Bathing/ washing bay
- Room ventilation and electrification.

8.4.8 PROVISION OF EMERGENCY VEHICLE

- Dedicated emergency vehicle shall be made available at workplace by each subcontractor to handle any emergency

8.4.9 PEST CONTROL

Regular pest control should be carried out at all offices, mainly laboratories, canteen, labour colony and stores.

8.4.10 SCRAPYARD

- In consultation with customer, scrapyard shall be developed to store metal scrap, wooden scrap, waste, hazardous waste.
- Scrap/Waste shall be segregated as Bio-degradable and non-bio-degradable and stored separately.

8.4.11 ILLUMINATION

- The subcontractor shall arrange at his cost adequate lighting facilities e.g. flood lighting, hand lamps, area lighting etc. at various levels for safe and proper working operations at dark places and during night hours at the work spot as well as at the pre-assembly area.

- Adequate and suitable light shall be provided at all work places & their approaches including passage ways as per IS: 3646 (Part-II). Some recommended values are given below:

S. No.	Location	Illumination (Lux)
A.	**Construction Area**	
1.	Outdoor areas like store yards, entrance and exit roads	20
2.	Platforms	50
3.	Entrances, corridors and stairs	100
4.	General illumination of work area	150
5.	Rough work like fabrication, assembly of major items	150
6.	Medium work like assembly of small machined parts rough measurements etc.	300
7.	Fine work like precision assembly, precision measurements etc.	700
8.	Sheet metal works	200
9.	Electrical and instrument labs	450
B.	**Office**	
1.	Outdoor area like entrance and exit roads	20
2.	Entrance halls	150
3.	Corridors and lift cars	70
4.	Lift landing	150
5.	Stairs	100
6.	Office rooms, conference rooms, library reading tables	300
7.	Drawing table	450
8.	Manual telephone exchange	200

- Lamp (hand held) shall not be powered by mains supply but either by 24V or dry cells.
- Lamps shall be protected by suitable guards where necessary to prevent danger, in case of breakage of lamp.
- Emergency lighting provision for night work shall be made to minimise danger in case of main supply failure.

If the subcontractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions issued by the authorized BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the subcontractor

9.0 HSE TRAINING& AWARENESS

9.1 HSE INDUCTION TRAINING

All persons entering into project site shall be given HSE induction training by the HSE officer of BHEL /subcontractor before being assigned to work.

In-house induction training subjects shall include but not limited to:

- Briefing of the Project details.
- Safety objectives and targets.
- Site HSE rules.
- Site HSE hazards and aspects.
- First aid facility.
- Emergency Contact No.
- Incident reporting.
- Fire prevention and emergency response.
- Rules to be followed in the labour colony (if applicable)

- Proper safety wear & gear must be issued to all the workers being registered for the induction (i.e., Shoes/Helmets/Goggles/Leg guard/Apron etc.)
- They must arrive fully dressed in safety wear & gear to attend the induction.
- Any one failing to conform to this safety wear& gear requirement shall not qualify to attend.
- On completing attending subcontractor's in-house HSE induction, each employee shall sign an induction training form (format no. HSEP:14-F03) to declare that he had understood the content and shall abide to follow and comply with safe work practices. They may only then be qualified to be issued with a personal I.D. card, for access to the work site.

9.2 HSE TOOLBOX TALK

- HSE tool Box talk shall be conducted by frontline foreman/supervisor of subcontractor to specific work groups prior to the start of work. The agenda shall consist of the followings:
    - Details of the job being intended for immediate execution.
    - The relevant hazards and risks involved in executing the job and their control and mitigating measures.
    - Specific site condition to be considered while executing the job like high temperature, humidity, unfavorable weather etc.
    - Recent non-compliances observed.
    - Appreciation of good work done by any person.
    - Any doubt clearing session at the end.
- Record of Tool box talk shall be maintained as per format no. HSEP:14-F04
- Tool box talk to be conducted at least once a week for the specific work.

9.3 TRAINING ON HEIGHT WORK

Training on height work shall be imparted to all workers working at height by in-house/external faculty at least twice in a year. The training shall include following topics:

- Use of PPEs
- Use of fall arrester, retractable fall arrester, life line, safety nets etc.
- Safe climbing through monkey ladders.
- Inspection of PPEs.
- Medical fitness requirements.
- Mock drill on rescue at height.
- Dos & Don'ts during height work.

9.4 HSE TRAINING DURING PROJECT EXECUTION

- Other HSE training shall be arranged by BHEL/ subcontractor as per the need of the project execution and recommendation of HSE committee of site.
- The topics of the HSE training shall be as follows but not limited to:
    - Hazards identification and risk analysis (HIRA)
    - Work Permit System
    - Incident investigation and reporting
    - Fire fighting
    - First aid
    - Fire-warden training
    - EMS and OHSMS
    - T & Ps fitness and operation

- Electrical safety
- Welding, NDE & Radiological safety
- Storage, preservation & material handling.

- A matrix shall be maintained to keep an up-to-date record of attendance of training sessions carried out.

9.5 HSE PROMOTION-SIGNAGE, POSTERS, COMPETITION, AWARDS ETC

9.5.1 Display of HSE posters and banners

- Site shall arrange appropriate posters, banners, slogans in local/Hindi/English languages at work place

9.5.2 Display of HSE signage

- Appropriate HSE signage shall be displayed at the work area to aware workmen and passersby about the work going on and do's and don'ts to be followed

9.5.3 Competition on HSE and award

- Site will arrange different competition (slogan, poster, essay etc.) on HSE time to time (Safety day, BHEL day, World Environment Day etc.) and winners will be suitably awarded.

9.5.4 HSE awareness programme

- Subcontractor shall arrange HSE awareness programme periodically on different topics including medical awareness for all personnel working at site

10.0 HSE COMMUNICATION

10.1 INCIDENT REPORTING

- The subcontractor shall submit report of all incidents, fires and property damage etc to the Engineer immediately after such occurrence, but in any case not later than 24 hours of the occurrence. Such reports shall be furnished in the manner prescribed by BHEL. (Refer HSE procedure for incident investigation, analysis and reporting for details)
- In addition, periodic reports on safety shall also be submitted by the subcontractor to BHEL from time to time as prescribed by the Engineer. Compiled monthly reports of all kinds of incidents, fire and property damage to be submitted to BHEL safety officer as per prescribed formats.
- HSE incidents of site shall be reported to BHEL site Management as per Procedure for Incident Investigation and Reporting in format no. HSEP:14-F15. Corrective action shall be immediately implemented at the work place and compliance shall be verified by BHEL HSE officer and until then, work shall be put on hold by Construction Manager.

10.2 HSE EVENT REPORTING

- Important HSE events like HSE training, Medical camp etc. organized at site shall be reported to BHEL site management in detail with photographs for publication in different in-house magazines
- Celebration of important days like National Safety Day, World Environment Day etc. shall also be reported as mentioned above.

10.3 DAILY HSE ACTIVITY REPORTING

Daily HSE activities shall be reported by subcontractor to BHEL as per Format No. HSEP:14-F31A

11.0 OPERATIONAL CONTROL

All applicable OCPs (Operational control procedures) will be followed by subcontractor as per BHEL instructions. This will be done as part of normal scope of work. List of such OCPs is given below. In case any other OCP is found to be applicable during the execution of work at site, then subcontractor will follow this as well, within quoted rate. These OCPs (applicable ones) will be made available to subcontractor during work execution at site. However for reference purpose, these are kept with Safety Officer of BHEL at the Power Sector Regional HQ, or available in downloadable format in the website, which may be refereed by subcontractor, if they so desire.

LIST OF OCPs

Safe handling of chemicals	Safety in use of cranes	Hydraulic test
Electrical safety	Storage and handling of gas cylinders	Spray insulation
Energy conservation	Manual arc welding	Trial run of rotary equipment
Safe welding and gas cutting operation	Safe use of helmets	Stress relieving
Fire safety	Good house keeping	Material preservation
Safety in use of hand tools	Working at height	Cable laying/tray work
First aid	Safe excavation	Transformer charging
Food safety at canteen	Safe filling of hydrogen in cylinder	Electrical maintenance
Illumination	Vehicle maintenance	Safe handling of battery system
Handling and erection of heavy metals	Safe radiography	Computer operation
Safe acid cleaning	Waste disposal	Storage in open yard
Safe alkali boil out	Working at night	For sanitary maintenance
Safe oil flushing	Blasting	Batching
Steam blowing	DG set	Piling rig operation
Safe working in confined area	Handling & storage of mineral wool	Gas distribution test
Safe operation of passenger lift, material hoists & cages	Drilling, reaming and grinding(machining)	Cleaning of hotwell / deaerator
Electro-resistance heating	Compressor operation	O&M of control of AC plant & system
Air compressor	Passivation	Safe Loading of Unit
Safe EDTA Cleaning	Safe Chemical cleaning of Pre boiler system	Safe Boiler Light up
Safe Rolling and Synchronization		

11.1 HSE ACTIVITIES

HSE activities shall be conducted at site based on the HSEMSM developed by Power Sector and issued to site by Regions.
While planning for any activity the following documents shall be referred for infrastructural requirements to establish control measures:

1) HSE Procedure for Register of OHS Hazards and Risks
2) HSE Procedure for Register of Environmental Aspects and Impacts
3) HSE Procedure for Register of Regulations

4) Operational Control Procedures
5) HSE Procedure for Emergency Preparedness and Response Plan
6) Contract documents

11.2 WORK PERMIT SYSTEM

- The following activities shall come under Work Permit System
  a. Height working above 2 metres
  b. Hot working at height
  c. Confined space
  d. Radiography
  e. Excavation more than 4 meter depth
  f. Heavy lifting above 50 ton
  Refer Annexure 05 for Work permit formats.
- "HSE Procedure for Work Permit System" shall be followed while implementing permit system. Where customer is having separate Work Permit System the same shall be followed.
- Permit applicant shall apply for work permit of particular work activity at particular location before starting of the work with Job Hazard Analysis.
- Permit signatory shall check that all the control measures necessary for the activity are in place and issue the permit to the permit holder.
- Permit holder shall implement and maintain all control measures during the period of permit .He will close the permit after completion of the work. The closed permit shall be archived in HSE Department of site.

11.3 SAFETY DURING WORK EXECUTION

Respective OCPS are to be followed and adherence to the same would be contractually binding

11.3.1 WELDING SAFETY

All safety precautions shall be taken for welding and cutting operations as per IS-818. All safety precautions shall be taken for foundation and other excavation marks as per IS-3764.

11.3.2 RIGGING

Rigging equipment shall not be loaded in excess of its recommended safe working load. Rigging equipment, when not in use, shall be removed from the original work area so as not to present a hazard to employees.

11.3.3 CYLINDERS STORAGE AND MOVEMENT

All gas cylinders shall be stored in upright position. Suitable trolley shall be used. There shall be flash-back arrestors conforming to IS-11006 at both cylinder and burner ends. Damaged tube and regulators must be immediately replaced. No of cylinders shall not exceed the specified quantity as per OCP
Cylinders shall be moved by tilting and rolling them on their bottom edges. They shall not be intentionally dragged, struck or permitted to strike each other violently.

When cylinders are transported by powered vehicle they shall be secured in a vertical position.

11.3.4 DEMOLITION WORK

Before any demolition work is commenced and also during the process of the work the following shall be ensured:

- All roads and open areas adjacent to the work site shall either be closed or suitably protected.
- No electric cable or apparatus which is liable to be a source of danger nor a cable or an apparatus used by the operator shall remain electrically charged.
- All practical steps shall be taken to prevent danger to persons employed from the risks of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render them unsafe.

11.3.5 T&Ps

All T&Ps/ MMEs should be of reputed brand/appropriate quality & must have valid test/calibration certificates bearing endorsement from competent authority of BHEL..Subcontractor to also submit monthly reports of T&Ps deployed and validity test certificates to BHEL safety Officer as per the format/procedure of BHEL.

11.3.6 CHEMICAL HANDLING

Displaying safe handling procedures for all chemicals such as lube oil, acid, alkali, sealing compounds etc , at work place.Where it is necessary to provide and/or store petroleum products or petroleum mixture & explosives, the subcontractor shall be responsible for carrying out such provision / storage in accordance with the rules & regulations laid down in the relevant petroleum act, explosive act and petroleum and carbide of calcium manual, published by the chief inspector of explosives of India. All such storage shall have prior approval if necessary from the chief inspector of explosives or any other statutory authority. The subcontractor shall be responsible for obtaining the same.

11.3.7 ELECTRICAL SAFETY

- Providing adequate no. of 24 V sources and ensure that no hand lamps are operating at voltage level above 24 Volts.
- Fulfilling safety requirements at all power tapping points.
- High/ Low pressure welders to be identified with separate colour clothings. No welders will be deployed without passing appropriate tests and holding valid welding certificates. Approved welding procedure should be displayed at work place.
- The subcontractor shall not use any hand lamp energized by Electric power with supply voltage of more than 24 volts in confined spaces like inside water boxes, turbine casings, condensers etc.
- All portable electric tools used by the subcontractor shall have safe plugging system to source of power and be appropriately earthed. Only electricians licensed by appropriate statutory authority shall be employed by the subcontractor to carry out all types of electrical works. Details of earth resource ad their test date to be given to BHEL safety officer as per the prescribed formats of BHEL
- The subcontractor shall use only properly insulated and armored cables which conform to the requirement of Indian Electricity Act and Rules for all wiring, electrical applications at site.

- BHEL reserves the right to replace any unsafe electrical installations, wiring, cabling etc. at the cost of the subcontractor.
- All electrical appliances used in the work shall be in good working condition and shall be properly earthed.
- No maintenance work shall be carried out on live equipment.
- The subcontractor shall maintain adequate number of qualified electricians to maintain his temporary electrical installations.
- Area wise Electrical safety inspection is to be carried out on monthly basis as per "Electrical Safety Inspection checklist' and the report is to be submitted to BHEL safety officer
- Adequate precautions shall be taken to prevent danger for electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public
- The subcontractor shall carefully follow the safety requirement of BHEL/ the purchaser with the regard to voltages used in critical areas.

11.3.8 FIRE SAFETY

- Providing appropriate fire fighting equipment at designated work place and nominate a fire officer/warden adequately trained for his job.
- Subcontractor shall provide enough fire protecting equipment of the types and numbers at his office, stores, temporary structure in labor colony etc. Such fire protection equipment shall be easy and kept open at all times.
- The fire extinguishers shall be properly refilled and kept ready which should be certified at periodic intervals. The date of changing should be marked on the Cylinders.
- All other fire safety measures as laid down in the "codes for fire safety at construction site" issued by safety coordinator of BHEL shall be followed.
- Non-compliance of the above requirement under fire protection shall in no way relieve the subcontractor of any of his responsibility and liabilities to fire incident occurring either to his materials or equipment or those of others.
- Emergency contacts nos must be displayed at prominent locations
- Tarpaulin being inflammable should not be used (instead, only non-infusible covering materials shall be used) as protective cover while preheating, welding, stress relieving etc. at site.

11.3.9 SCAFFOLDING

- Suitable scaffolds shall be provided for workman for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration of work which can be done safely from ladders.
- When a ladder is used, it shall be of rigid construction made of steel. The steps shall have a minimum width of 45 cm and a maximum rise of 30 cm. Suitable handholds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper then ¼ horizontal and 1 vertical.
- Scaffolding or staging more than 3.6 m above the ground floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly bolted, braced or otherwise secured, at least 90 cm above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from saver, from swaying, from the building or structure.

11.3.10 **WORK AT HEIGHT**:

- Guardrails and toe-board/barricades and sound platform conforming to IS:4912-1978 should be provided.

- Wherever necessary, life-line (pp or metallic) and fall arrestor along with Polyamide rope or Retractable lifeline should be provided.
- Safety Net as per IS:11057:1984 should be used extensively for prevention/ arrest of men and materials falling from height. The safety nets shall be fire resistant, duly tested and shall be of ISI marked and the nets shall be located as per site requirements to arrest or to reduce the consequences of a possible fall of persons working at different heights.
- Reaching beyond barricaded area without lifeline support, moving with support of bracings, walking on beams without support, jumping from one level to another, throwing objects and taking shortcut must be discouraged.
- Use of Rebar steel for making Jhoola and monkey-ladder (Rods welded to vertical or inclined structural members), temporary platform etc. must be avoided.
- Monkey Ladder should be properly made and fitted with cages.
- Jhoola should be made with angles and flats and tested like any lifting tools before use.
- Lanyard must be anchored always and in case of double lanyard, each should be anchored separately.
- In case of pipe-rack, persons should not walk on pipes and walk on platforms only.
- In case of roof work, walking ladder/ platform should be provided along with lifeline and/ or fall arrestor.
- Empty drums must not be used.
- For chimney or structure painting, both hanging platform and men should be anchored separately to a firm structure along with separate fall arrestor. Rope ladder should be discouraged.

11.3.11 WORKING PLATFORM

Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform gangways provided is more than 3.6 m above ground level or floor level, they shall be closely boarded and shall have adequate width which shall not be less than 750 mm and be suitably fenced as described above. Every opening in the floor or a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 90 cm.

11.3.12 EXCAVATION

Wherever there are open excavation in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into the excavations.

11.3.13 LADDER SAFETY

Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m in the length while the width between side rails in rung ladder shall in no case be less than app. 29.2 cm for ladder upto and including 3 m in length. For longer ladders this width shall be increased at least ¼'' for each additional foot of length.

A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to Construction.

11.3.14 LIFTING SAFETY

- It will be the responsibility of the subcontractor to ensure safe lifting of the equipment, taking due precaution to avoid any incident and damage to other equipment and personnel.

- All requisite tests and inspection of handling equipment, tools & tackle shall be periodically done by the subcontractor by engaging only the Competent Persons as per law.
- Defective equipment or uncertified shall be removed from service.
- Any equipment shall not be loaded in excess of its recommended safe working load.

11.3.15 HOISTING APPLIANCE

- Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safe guards.
- Hoisting appliance should be provided with such means as will reduce to the minimum the risk of any part of a suspended load becoming incidentally displaced.
- When workers employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided.
- The worker should not wear any rings, watches and carry keys or other materials which are good conductor of electricity.

11.4 ENVIRONMENTAL CONTROL

Environment protection has always been given prime importance by BHEL. Environmental damage is a major concern of the principal subcontractor and every effort shall be made, to have effective control measures in place to avoid pollution of Air, Water and Land and associated life. Chlorofluorocarbons such as carbon tetrachloride and trichloroethylene shall not be used. Waste disposal shall be done in accordance with the guidelines laid down in the project specification.

Any chemical including solvents and paints, required for construction shall be stored in designated bonded areas around the site as per Material Safety Data Sheet (MSDS).

In the event of any spillage, the principle is to recover as much material as possible before it enters drainage system and to take all possible action to prevent spilled materials from running off the site. The subcontractor shall use appropriate MSDS for clean-up technique

All subcontractors shall be responsible for the cleanliness of their own areas.

The subcontractors shall ensure that noise levels generated by plant or machinery are as low as reasonably practicable. Where the subcontractor anticipates the generation of excessive noise levels from his operations the subcontractor shall inform to Construction Manager of BHEL accordingly so that reasonable &practicable precautions can be taken to protect other persons who may be affected.
It is imperative on the part of the subcontractor to join and effectively contribute in joint measures such as tree plantation, environment protection, contributing towards social upliftment, conversion of packing woods to school furniture, keeping good relation with local populace etc.
The subcontractor shall carry out periodic air and water quality check and illumination level checking in his area of work place and take suitable control measure.

11.5 HOUSEKEEPING

- Keeping the work area clean/ free from debris, removed scaffoldings, scraps, insulation/sheeting wastage /cut pieces, temporary structures, packing woods etc. will be in the scope of the subcontractor. Such cleanings has to be done by

subcontractor within quoted rate, on daily basis by an identified group. If such activity is not carried out by subcontractor / BHEL is not satisfied, then BHEL may get it done by other agency and actual cost along with BHEL overheads will be deducted from contractor's bill. Such decisions of BHEL shall be binding on the subcontractor

- Proper housekeeping to be maintained at work place and the following are to be taken care of on daily basis.
- All surplus earth and debris are removed/disposed off from the working areas to identified locations.
- Unused/Surplus cables, steel items and steel scrap lying scattered at different places/elevation within the working areas are removed to identified locations.
- All wooden scrap, empty wooden cable drums and other combustible packing materials, shall be removed from workplace to identified locations. Sufficient waste bins shall be provided at
- Different work places for easy collection of scrap/waste. Scrap chute shall be installed to remove scrap from high location.
- Access and egress (stair case, gangways, ladders etc.) path should be free from all scrap and other hindrances.
- Workmen shall be educated through tool box talk about the importance of housekeeping and encourage not to litter.
- Labour camp area shall be kept clear and materials like pipes, steel, sand, concrete, chips and bricks, etc. shall not be allowed in the camp to obstruct free movement of men and machineries.
- Fabricated steel structures, pipes & piping materials shall be stacked properly.
- No parking of trucks/trolleys, cranes and trailers etc. shall be allowed in the camp, which may obstruct the traffic movement as well as below LT/HT power line.
- Utmost care shall be taken to ensure over all cleanliness and proper upkeep of the working areas

11.6 WASTE MANAGEMENT

Take suitable measures for waste management and environment related laws/legislation as a part of normal construction activities. Compliance with the legal requirements on storage/ disposal of paint drums (including the empty ones), Lubricant containers, Chemical Containers, and transportation and storage of hazardous chemicals will be strictly maintained.

11.6.1 BINS AT WORK PLACE

- Sufficient rubbish bins shall be provided close to workplaces.
- Bins should be painted yellow and numbered.
- Sufficient nos. of drip trays shall be provided to collect oil and grease.
- Sufficient qty. of broomsticks with handle shall be provided.
- Adequate strength of employees should be deployed to ensure daily monitoring and service for waste management.

11.6.2 STORAGE AND COLLECTION

- Different types of rubbish/waste should be collected and stored separately.
- Paper, oily rags, smoking material, flammable, metal pieces should be collected in separate bins with close fitting lids.
- Rubbish should not be left or allowed to accumulate on construction and other work places.
- Do not burn construction rubbish near working site.

11.6.3 SEGREGATION

- Earmark the scrap area for different types of waste.
- Store wastes away from building.
- Oil spill absorbed by non-combustible absorbent should be kept in separate bin.
- Clinical and first aid waste stored and incinerated separately.

11.6.4 DISPOSAL

- Sufficient containers and scrap disposal area should be allocated.
- All scrap bin and containers should be conveniently located.
- Provide self-closing containers for flammable/spontaneously combustible material.
- Keep drainage channels free from choking.
- Make schedule for collection and disposal of waste.

11.6.5 WARNING AND SIGNS

- Appropriate sign to be displayed at scrap storage area
- No toxic, corrosive or flammable substance to be discarded into public sewage system.
- Waste disposal shall be in accordance with best practice.
- Comply with all the requirements of Pollution Control Board (PCB) for storage and disposal of hazardous waste.

11.7 TRAFFIC MANAGEMENT SYSTEM

11.7.1 SAFE WORKPLACE TRANSPORT SYSTEM

- Traffic routes in a work place shall be suitable for the persons or vehicles using them. This shall be sufficient in number and of sufficient size. This shall reflect the suitability of traffic routes for vehicles and pedestrians.
- Where vehicles and pedestrians use the same traffic routes there shall be sufficient space between them. Where necessary all traffic routes must be suitably indicated. Pedestrians or vehicles must be able to use traffic routes without endangering those at work. There must be sufficient separation of traffic routes from doors, gates and pedestrian traffic routes.
- For internal traffic, lines marked on roads / access routes and between buildings shall clearly indicate where vehicles are to pass.
- Temporary obstacles shall be brought to the attention of drivers by warning signs or hazard cones.
- Speed limits shall be clearly displayed. Speed ramps preceded by a warning signs or marker are necessary.
- The traffic route should be wide enough to allow vehicles to pass and re-pass oncoming or parked traffic and it may be advisable to introduce on-way system or parking restrictions.
- Safest route shall be provided between places where vehicles have to call or deliver.
- Avoid vulnerable areas/items such as fuel or chemicals tanks or pipes, open or unprotected edges and structures likely to collapse

- Safe areas shall be provided for loading and unloading.
- Avoid sharp or blind bends. If this is not possible hazards should be indicated e.g. blind corner.
- Ensure road crossings are minimum and clearly signed.
- Entrance and gateways shall be wide enough to accommodate a second vehicle without causing obstruction.
- Set sensible speed limits which are clearly sign posted.
- Where necessary ramps should be used to retard speed. This shall be preceded by a warning sign or mark on the road.
- Forklift trucks shall not pass over road hump unless of a type capable of doing so.
- Overhead electric cable, pipes containing flammable hazardous chemical shall be shielded by using goal posts height gauge posts or barriers.
- Road traffic signs shall be provided on prominent locations for prevention of incidents and hazards and for quick guidance and warning to employees and public. Safety signs shall be displayed as per the project working requirement and guideline of the state in which project is done. Vehicles hired or used shall not be parked within the 15m radius of any working area. Any vehicle, that is required to be at the immediate/near the vicinity, shall be approved by the person in-charge of the site.

11.7.2 TRAFFIC ROUTE FOR PEDESTRIANS

- Where traffic routes are used by both pedestrians and vehicles road shall be wide enough to allow vehicles and pedestrians safely.
- Separate routes shall be provided for pedestrians to keep them away from vehicles. Provide suitable barriers/guard at entrances/exit and the corners or buildings.
- Where pedestrian and vehicle routes cross, appropriate crossing shall be provided.
- Where crowd is likely to use roadway e.g. at the end of shift, stop vehicles from using them at such times.
- Provide high visibility clothing for people permitted in delivery area.

11.7.3 WORK VEHICLE

Work vehicle shall be as safe stable efficient and roadworthy as private vehicles on public roads. Site management shall ensure that drivers are suitably trained. All vehicle e.g. heavy motor vehicle forklift trucks dump trucks mobile cranes shall ensure that the work equipment conforms to the following:

- A high level of stability.
- A safe means of access/egress.
- Suitable and effective service and parking brakes.
- Windscreens with wipers and external mirrors giving optimum all round visibility.
- Provision of horn, vehicle lights, reflectors, reversing lights, reversing alarms.
- Provision of seat belts.
- Guards on dangerous parts.
- Driver protection - to prevent injury from overturning and from falling objects/materials.
- Driver protection from adverse weather.
- No vehicle shall be parked below HT/LT power lines.
- Valid Pollution Under Control certification for all vehicles

11.7.4 DAILY CHECK BY DRIVER

- There should also be daily safety checks containing below mentioned points by the driver before the vehicle is used.
  - Brakes.
  - Tires.
  - Steering.
  - Mirrors.
  - Windscreen waters.
  - Wipers.
  - Warning signals.
  - Specific safety system i.e. control interlocks
- Management should ensure that drivers carry out these checks.

11.7.5 TRANSPORTATION OF PERSONNEL AND MATERIALS BY VEHICLES

- All drivers shall hold a valid driving License for the class of vehicle to be driven and be registered as an authorized BHEL driver with the Administration Department.
- Securing of the load shall be by established and approved methods, i.e. chains with patented tightening equipment for steel/heavy loads. Sharp corners on loads shall be avoided when employing ropes for securing.
- All overhangs shall be made clearly visible and restricted to acceptable limits
- Load shall be checked before moving off and after traveling a suitable distance.
- On no account is construction site to be blocked by parked vehicles Drivers of vehicles shall only stop or park in the areas designate by the stringing foreman.
- Warning signs shall be displayed during transportation of material.
  All vehicles used by BHEL shall be in worthy condition and in conformance to the Land Transport requirement.

11.7.6 MAINTENANCE

All Vehicles used for transportation of man and material shall undergo scheduled inspections on frequent intervals to secure safe operation. Such inspections shall be conducted in particular for steering, brakes, lights, horn, doors etc. Site management shall ensure that work equipment is maintained in an efficient, working order and in good repair. Inspections and services carried out at regular intervals of time and or mileage. No maintenance shall be carried below HT/LT power lines.

11.8 EMERGENCY PREPAREDNESS AND RESPONSE

- Emergency preparedness and response capability of site shall be developed as per Emergency Preparedness and Response plan issued by Regional HQ
- Availability of adequate number of first aiders and fire warden shall be ensured with BHEL and its subcontractors
- All the subcontractor's supervisory personnel and sufficient number of workers shall be trained for fire protection systems. Enough number of such trained personnel must be available during the tenure of contract. Subcontractor should nominate his supervisor to coordinate and implement the safety measures.
- Assembly point shall be earmarked and access to the same from different location shall be shown
- Fire exit shall be identified and pathway shall be clear for emergency escape.

- Appropriate type and number of fire extinguisher shall be deployed as per Fire extinguisher deployment plan and validity shall be ensured periodically through inspection
- Adequate number of first aid boxes shall be strategically placed at different work places to cater emergency need. Holder of the first aid box shall be identified on the box itself who will have the responsibility to maintain the same.
- First aid center shall be developed at site with trained medical personnel and ambulance
- Emergency contact numbers (format given in EPRP) of the site shall be displayed at prominent locations.
- Tie up with fire brigade shall be done in case customer is not having fire station.
- Tie up with hospital shall be done in case customer is not having hospital.
- Disaster Management group shall be formed at site
- Mock drill shall be arranged at regular intervals. Monthly report of the above to be given to BHEL safety Officer as per prescribed BHEL formats
- Mock drill shall be conducted on different emergencies periodically to find out gaps in emergency preparedness and taking necessary corrective action

12.0 HSE INSPECTION

Inspection on HSE for different activities being carried out at site shall be done to ensure compliance to HSEMS requirements. The subcontractor shall maintain and ensure necessary safety measures as required for inspection and tests HV test, Pneumatic test, Hydraulic test, Spring test, Bend test etc. as applicable, to enable inspection agency for performing Inspection. If any test equipment is found not complying with proper safety requirements then the Inspection Agency may withhold inspection, till such time the desired safety requirements are met.

12.1 DAILY HSE CHECKS

Both the Site Supervisors and safety officer of Subcontractor are to conduct daily site Safety inspection around work activities and premises to ensure that work methods and the sites are maintained to an acceptable standard. The following are to form the common subjects of a daily safety inspection:

- Personal Safety wears & gear compliance.
- Complying with site safety rules and permit-to-work (PTW).
- Positions and postures of workers.
- Use of tools and equipment etc. by the workers.

The inspection should be carried out just when work starts in beginning of the day, during peak activities period of the day and just before the day's work ends.

12.2 INSPECTION OF PPE

- PPEs shall be inspected by HSE officer at random once in a week as per format no. HSEP:14-F06 for its compliance to standard and compliance to use and any adverse observation shall be recorded in the PPE register.
- The applicable PPEs for carrying out particular activities are listed below.

12.3 INSPECTION OF T&Ps

- A master list of T&Ps shall be maintained by each subcontractor.
- All T&Ps being used at site shall be inspected by HSE officer once in a month as per format no. HSEP:14-F07 for its healthiness and maintenance.
- The T&Ps which require third party inspection shall be checked for its validity during inspection. The third party test certificate should be accompanied with a copy of the concerned competent person's valid qualification record.
- The validity of T&P shall be monitored as per "Status of T&Ps" format no. HSEP:14-F08

12.4 INSPECTION OF CRANES AND WINCHES

- Cranes and winches shall be inspected by the operator through a daily checklist for its safe condition (as provided by the equipment manufacturer) before first use of the day.
- Cranes and Winches shall be inspected by HSE officer once in a month as per format no. HSEP:14-F09 for healthiness, maintenance and validity of third party inspection.
- The date of third party inspection and next due date shall be painted on cranes and winches.
- The operators/drivers shall be authorized by sub-contractor based on their competency and experience and shall carry the I-card.
- The operator should be above 18 years of age and should be in possession of driving license of HMV man & goods), vision test certificate and should have minimum qualification so that he can read the instructions and check list.

12.5 INSPECTION ON HEIGHT WORKING

- Inspection on height working shall be conducted daily by supervisors before start of work to ensure safe working condition including provision of
    - Fall arrestor
    - Lifelines
    - Safety nets
    - Fencing and barricading
    - Warning signage
    - Covering of opening
    - Proper scaffolding with access and egress.
    - Illumination
- Inspection on height working shall be conducted once in a week by HSE officer as per format no. HSEP:14-F10.
- Medical fitness of height worker shall be ensured.
- Height working shall not be allowed during adverse weather.

12.6 INSPECTION ON WELDING AND GAS CUTTING OPERATION

- Supervisor shall ensure that no flammable items are available in near vicinity during welding and gas cutting activity.
- Gas cylinders shall be kept upright.
- Use of Flash back arrestor shall be ensured at both ends.

- Inspection during welding and gas cutting operations shall be carried out by HSE officer once a month as per format no. HSEP:14-F11.
- Use of fire blanket to be ensured to avoid falling of splatters during welding or gas cutting operation at height.
- Availability of fire extinguisher at vicinity shall be ensured.

12.7 INSPECTION ON ELECTRICAL INSTALLATION / APPLIANCES

- Ensure proper earthing in electrical installation
- Use ELCB at electrical booth
- Electrical installation shall be properly covered at top where required
- Use appropriate PPEs while working
- Use portable electrical light < 24 V in confined space and potentially wet area.
- Monthly inspection shall be carried out as per format no. HSEP:14-F12.

12.8 INSPECTION OF ELEVATOR

- Elevators shall be inspected by concerned supervisors once in a week as per format no. HSEP:14-F13.
- All elevators shall be inspected by competent person and validity shall be ensured.
- The date of third party inspection and next due date shall be painted on elevator.

12.9 INSPECTION OF EXCAVATION

Excavation activities shall be inspected as per Format HSEP:14-F13A

13.0 HSE PERFORMANCE

- Contractor shall be assessed on monthly basis for HSE Compliance by BHEL Safety In-charge at site.
  The HSE compliance shall be based on Online HSE Evaluation System of BHEL as per Format No. HSEP:14-F33.
- BHEL shall reserve the right to use this assessment for evaluating bidder's capacity for future tenders
- Suitable HSE reward system shall be developed at site level to promote HSE compliance amongst workmen by the subcontractor.
  To decide HSE reward, performance towards HSE shall be evaluated for workmen and it shall be awarded regularly in public gathering.
- If safety record of the subcontractor in execution of the awarded job is to the satisfaction of safety department of BHEL, issue of an appropriate certificate to recognize the safety performance of the subcontractor may be considered by BHEL after completion of the job.

14.0 HSE PENALTIES

- As per contractual provision HSE penalties shall be imposed on subcontractors for non- compliance on HSE requirement as per format no. HSEP:14-F14. The list in the format is only indicative. For any other violation, not listed in the format, the minimum penalty amount is to be decided as per BOCW act.
- If principal customer/statutory and regulatory bodies impose some penalty on HSE due to the non-compliance of the subcontractor the same shall be passed on to them.
- The penalty amount shall be recovered by Site Finance department from subcontractors from the RA/Final bill.

15.0 OTHER REQUIREMENTS

- In case of any delay in completion of a job due to mishaps attributable to lapses by the subcontractor, BHEL shall have the right to recover cost of such delay from the payments due to the subcontractor, after notifying the subcontractor suitably.
- If the subcontractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given reasonable opportunity to do so and/or if the subcontractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instruction regarding safety issued by BHEL, BHEL shall have the right to take corrective steps at the risk and cost of the subcontractor after giving a notice of not less than 7 days indicating the steps that would be taken by BHEL.
- If the subcontractor succeeds in carrying out its job in time without any fatal or disabling injury incident and without any damage to property BHEL may, at its sole discretion, favorably consider to reward the subcontractor suitably for the performance.
- In case of any damage to property due to lapses by the subcontractor, BHEL shall have the right to recover the cost of such damages from the subcontractor after holding an appropriate enquiry.
- The subcontractor shall take all measures at the sites of the work to protect all persons from incidents and shall be bound to bear the expenses of defense of every suit, action or other proceeding of law that may be brought by any persons for injury sustained or death owing to neglect of the above precautions and to pay any such persons such compensation or which may with the consent of the subcontractor be paid to compromise any claim by any such person, should such claim proceeding be filed against BHEL, the subcontractor hereby agrees to indemnify BHEL against the same.
- The subcontractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, overalls shall be supplied by the subcontractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
- The subcontractor shall notify BHEL of his intention to bring to site any equipment or material which may create hazard.
- BHEL shall have the right to prescribe the conditions under which such equipment or materials may be handled and the subcontractor shall adhere to such instructions.

- BHEL may prohibit the use of any construction machinery, which according to the organization is unsafe. No claim for compensation due to such prohibition will be entertained by BHEL.

16. NON COMPLIANCE

NONCONFORMITY OF SAFETY RULES AND SAFETY APPLIANCES WILL BE VIEWED SERIOUSLY AND BHEL HAS RIGHT TO IMPOSE FINES ON THE SUBCONTRACTOR AS UNDER FOR EVERY INSTANCE OF VIOLATION NOTICED:

SN	Violation of Safety Norms	Fine (in Rs)
01	Not Wearing Safety Helmet	200/- *
02.	Not wearing Safety Belt or not anchoring life line	500/-*
03	Not wearing safety shoe	200/-*
04	Not keeping gas cylinders vertically	200/-
05	Not using flash back arrestors	100/-
06	Not wearing gloves	50/- *
07.	Grinding Without Goggles	50/- *
08.	Not using 24 V Supply For Internal Work	500/-
09.	Electrical Plugs Not used for hand Machine	100/-
10.	Not Slinging properly	200/-
11.	Using Damaged Sling	200/-
12.	Lifting Cylinders Without Cage	500/-
13.	Not Using Proper Welding Cable With Lot of Joints And Not Insulated Property.	200/-
14.	Not Removing Small Scrap From Platforms	500/-
15.	Gas Cutting Without Taking Proper Precaution or Not Using Sheet Below Gas Cutting	500/-
16.	Not Maintaining Electric Winches Which are Operated Dangerously	500/-
17.	Improper Earthing Of Electrical T&P	500/-
18	No or improper barricading	500/-
19.	Activity carried out without Safety work permit (Height work, Lifting activity, Hot work-each person/case)	1000/-
20.	Incident Resulting in Partial Loss in Earning Capacity	25,000/- per victim
21.	Fatal Incident Resulting in total loss in Earning Capacity	1,00,000/- per victim for first instance #

- Legend:-

  *: per head. For repeated violation by the same person, the penalty would be double of the previous penalty. Date of "Repeated violation" will be counted from subsequent days.

  #: or as deducted by customer, whichever is higher. For repeated fatal incident in the same Unit incremental penalty to be imposed. The subcontractor will pay 2 times the penalty compared to previously paid in case there are repeated cases of fatal incidents under the same subcontractor for the same package in the same unit.

Any other non-conformity noticed not listed above will also be fined as deemed fit by BHEL. The decision of BHEL engineer is final on the above. The amount will be deducted from running bills of the subcontractor. The amount collected above will be utilized for giving award to the employees who could avoid incident by following safety rules. Also the amount will be spent for purchasing the safety appliances and supporting the safety activity at site.

17.0 HSE AUDIT/INSPECTION

- Regular HSE Audit/inspection shall be carried out by Subcontractor as per Site HSE audit calendar.
- HSE checklist **(Annexure 02)** shall be used for carrying out audit/inspection and report shall be submitted to BHEL site management
- All non-conformities and observations on HSE identified during internal or external HSE audit shall be disposed off by site in a time bound manner and reported back the implementation status
- Corrective action and Preventive action on HSE issues raised by certification body issued by Regional HQs shall be implemented by site and reported to Site management.

18.0 MONTHLY HSE REVIEW MEETING

- Site shall hold HSE review meeting every month to discuss and resolve HSE issues of site and improve HSE performance. It will also discuss the incidents occurred since previous meeting,its root cause and Corrective action and Preventive action. The agenda is given below:
  - Implementation of earlier MOM
  - HSE performance
  - HSE inspection
  - HSE audit and CAPA
  - HSE training
  - Health check-up camp
  - HSE planning for the erection and commissioning and installation activities in the coming month
  - HSE reward and promotional activities
- The meeting shall be chaired by Construction Manager, convened by HSE coordinator and attended by all HOS, Site Incharge of Subcontractors and HSE officer of Subcontractors.
- MOM on the discussion will be circulated to the concerned for implementation.

19.0 FORMATS USED (Details available in Annexure-04)

SL. No.	Format Name	Format No.	Rev No.
01	Inspection of First Aid Box	HSEP:14-F01	00
02	Health Check Up	HSEP:14-F02	00
03	HSE Induction Training	HSEP:14-F03	00
04	Tool Box Talk	HSEP:14-F04	00
05	Monthly Site HSE Report	As specified by BHEL	00
06	Inspection of PPE	HSEP:14-F06	00

07	Inspection of T&Ps	HSEP:14-F07	00
08	Status of T&Ps	HSEP:14-F08	00
09	Inspection of Cranes and Winches	HSEP:14-F09	00
10	Inspection on Height Working	HSEP:14-F10	00
11	Inspection on Welding & Gas Cutting	HSEP:14-F11	00
12	Inspection on Electrical Installation	HSEP:14-F12	00
13	Inspection on Elevator	HSEP:14-F13	00
14	HSE Penalty	HSEP:14-F14	00
15	Accident /incident / property damage /fire incident report	HSEP:14-F15	00

20.0 ANNEXURES

ANNEXURE 01

As per Contract Labour (Regulation & Abolition Act), Central Rules, 1971,

(1) The first-aid box shall be distinctively marked with a Red Cross on a white background and shall contain the following items, namely:

(a) For establishments in which the number of contract labour employed does not exceed fifty, each first aid box shall contain the following equipment:

(i)	6 small sterilized dressings
(ii)	3 medium size sterilized dressings
(iii)	3 large size sterilized dressings
(iv)	6 pieces of sterilized eye pads in separate sealed packets.
(v)	6 roller bandages 10 cm wide.
(vi)	6 roller bandages 5 cm wide.
(vii)	One tourniquet
(viii)	A supply of suitable splints
(ix)	Three packets of safety pins.
(x)	Kidney tray.
(xi)	3 large sterilized burn dressings.
(xii)	1 (30ml) bottle containing a two percent alcoholic solution of iodine
(xiii)	1 (30 ml) bottle containing Sal volatile having the dose and mode of administration indicated on the label
(xiv)	1 snake bite lancet
(xv)	1 (30gms) bottle of potassium permanganate crystals.
(xvi)	1 pair scissors
(xvii)	1 copy of the First-Aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
(xviii)	A bottle containing 100 tablets (each of 5 grains) of aspirin
(xix)	Ointment for burns
(xx)	A bottle of suitable surgical anti-septic solution

(b) For establishment in which the number of contract labour exceeds fifty each first-aid box shall contain the following equipment:

(i)	12 small sterilized dressings
(ii)	6 medium size sterilized dressings
(iii)	6 large size sterilized dressings.
(iv)	6 large size sterilized burn dressings
(v)	6 (15 grams) packets sterilized cotton wool
(vi)	12 pieces of sterilized eye pads in separate sealed packets.

(vii)	12 roller bandages 10 cm wide.
(viii)	12 roller bandages 5 cm wide.
(ix)	One tourniquet.
(x)	A supply of suitable splints.
(xi)	Three packets of safety pins.
(xii)	Kidney tray.
(xiii)	Sufficient number of eye washes bottles filled with distilled water or suitable liquid clearly indicated by a distinctive sign which shall be visible at all times.
(xiv)	4 per cent Xylocaine eye drops, and boric acid eye drops and soda by carbonate eye drops.
(xv)	1 (60ml) bottle containing a two percent alcoholic solution of iodine
(xvi)	One (two hundred ml) bottle of mercurochrome (2 per cent) solution in water.
(xvii)	1 (120ml) bottle containing Sal volatile having the dose and mode of administration indicated on the label.
(xviii)	1 roll of adhesive plaster (6 cmX1 meter)
(xix)	2 rolls of adhesive plaster (2 cmX1 meter)
(xx)	A snake bite lancet.
(xxi)	1 (30 grams) bottle of potassium permanganate crystals.
(xxii)	1 pair scissors
(xxiii)	1 copy of the First-Aid leaflet issued by the Director-General, Factory Advice service and labour Institutes, Government of India.
(xxiv)	a bottle containing 100 tablets (each of 5 grains) of aspirin
(xxv)	Ointment for burns
(xxvi)	A bottle of a suitable surgical anti septic solution.

(2) Adequate arrangement shall be made for immediate recoupment of the equipment when necessary.

ANNEXURE 02

HSE AUDIT/INSPECTION CHECKLIST CUM COMPLIANCE REPORT

PROJECT:_____ SUBCONTRACTOR:_____

DATE : _____ OWNER :_____

INSPECTION BY:_____

Note : write 'NA' wherever the items is not applicable

Item	Yes	No	Remarks	Action
HOUSEKEEPING				
Waste containers provided and used				
Passageways and walkways clear				
General neatness of working area				
Other				
PERSONNELPROTECTIVEEQUIPTMENTS				
Goggles; shields				
Face protection				
Hearing protection				
Respiratory masks etc.				
Safety belts				
Other				
EXCAVATIONS / OPENINGS				
Openings properly covered or barricaded				
Excavations shored				
Excavations barricaded				
Overnight lighting provided				
Other				
WELDING, CUTTING				
Gas cylinders chained upright				
Cable and hoses not obstructing				
Fire extinguisher (s) accessible				
Others				
SCAFFOLDING				
Fully decked platforms				
Guard and intermediate rails in place				
Toe boards in place				
Adequate shoring				
Adequate access				
Others				
LADDER				
Extension side rails 1 m above				
Top of landing				
Properly secured				

Angle + 70^0 from horizontal				
Other				
HOISTS, CRANES AND DERRICKS				
Condition of cables and sheaf OK				
Condition of slings, chains, hooks OK				
Inspection & maintenance log maintained				
Outriggers used				
Signals observed and understood				
Qualified operators				
Others				
MACHINERY, TOOLS & EQUIPMENT				
Proper instruction				
Safety devices				
Proper cords				
Inspection and maintenance				
Other				
VEHICLE AND TRAFFIC				
Rules and regulations observed				
Inspection and maintenance				
Licensed drivers				
Other				
TEMPORARY FACILITIES				
Emergency instructions posted				
Fire extinguishers provided				
Fire-aid equipment available				
General neatness				
Others				
FIRE PREVENTION				
Personnel instructed				
Fire extinguishers checked				
No smoking in prohibited areas.				
Hydrants				
Clearance				
Others				
ELECTRICAL				
Proper wiring				
ELCB's provided				
Ground fault circuit interrupters				
Protection against damage				
Prevention of tripping hazards				
Other				
HANDLING & STORAGE OF MATERIALS				
Properly stored or stacked				
Passageways clear				
Other				
FLAMMABLE GASES AND LIQUIDS				
Containers clearly identified				
Proper storage				
Fire extinguisher nearby				

Other				
WORKING AT HEIGHT				
Safety nets				
Safety belts				
Safety helmets				
Anchoring of safety belt to the life line rope				
ENVIRONMENT				
Lubricant waste/engine oils properly dispose.				
Waste from Canteen, offices, sanitation etc. disposed properly.				
Disposal of surplus earth, stripping materials, expired batteries, oily rags and combustible materials done properly.				
HEALTH CHECKS				
Hygienic conditions at labor camps O.K.				
Availability of first-aid facilities				
Proper sanitation at site, office & labor camps.				
Arrangement of medical facilities.				
Measures for dealing with illness.				
Availability of potable drinking water for workmen & staff.				
Provision of crèches for children.				

ANNEXURE 03

REFERENCES

- Contract documents
- Relevant legislations
- HSEMSM
- Relevant Indian standards as listed below (illustrative only):

SL NO	CODE NAME	TITLE
(1)	IS : 818-1888 (Reaffirmed 2003)	Code of Practice for safety and health requirements in Electric and Gas Welding and Cutting operations.
(2)	IS: 1179-1967 (Reaffirmed 2003)	Specification for Equipment for Eye & Face protection during welding.
(3)	IS : 1989 (Part 2):1986 (Reaffirmed 1997)	Specification for Leather Safety Boots & Shoes
(4)	IS:2925 – 1984 (Reaffirmed 2010)	Specification for Industrial Safety Helmets
(5)	IS:3521 : 1999 (Reaffirmed 2002)	Industrial Safety Belts & Harnesses-Specification
(6)	IS:3646(Part II) – 1966 (Reaffirmed 2003)	Code of Practice for Interior Illumination
(7)	IS:3696 (Part I) – 1987 (Reaffirmed 2002)	Safety Code for Scaffolds and Ladders
(8)	IS: 3696(Part 2) : 1991 (Reaffirmed 2002)	Scaffolds and Ladders-Code of Safety
(9)	IS:3786 – 1983 (Reaffirmed 2002)	Method for Computation of Frequency and Severity Rates for Industrial Injuries and Classification of Industrial Incidents
(10)	IS:4770 : 1991 (Reaffirmed 2006)	Rubber Gloves – Electricals purposes-Specification
(11)	IS:4912 : 1978 (Reaffirmed 2002)	Safety Requirements for Floor and Wall Openings, Railings and Toe Boards
(12)	IS: 5983 – 1980 (Reaffirmed 2002)	Specification for Eye-Protectors
(13)	IS:6519 – 1971 (Reaffirmed 1997)	Code of Practice for Selection, Care and Repair of Safety Footwear
(14)	IS:9167:1979	Specification for Ear-Protectors
(15)	IS:6994(Part I)-1973 (Re affirmed 1996)	Specification for Industrial Safety Gloves Leather and Cotton Gloves
(16)	IS:8519 – 1977 (Reaffirmed 1983)	Guide for Selection of Industrial Safety Equipment for Body Protection.
(17)	IS 11006 : 2011	Flash Back(Flame Arrestor) Specification

(18)	IS:8520 – 1977 (Reaffirmed 2002)	Guide for Selection of Industrial Safety Equipment for Eye, Face and Ear Protection.
(19)	IS:9473:2002	Respiratory Protective Devices-Filtering Half Masks to protect against Particles-Specification.
(20)	IS:9944:1992 (Reaffirmed 2003)	Natural and Man-made Fiber Rope Slings-Recommendations on Safe working loads.
(21)	IS:11057 – 1884 (Reaffirmed 2001)	Specification for Industrial Safety Nets
(22)	IS:12254:1993 (Reaffirmed 2002)	Polyvinyl Chloride (PVC) Industrial Boots-Specification
(23)	IS:13367(Part 1):1992 (Reaffirmed 20030	Safe Use of Cranes-Code of Practice
(24)	IS:14166:1994 (Reaffirmed 2002)	Respiratory Protective Devices-Full Face Masks Specification
(25)	IS:14746 : 1999 (Reaffirmed 2003)	Respiratory Protective Devices-Half Masks and Quarter Masks - Specification
(26)	IS : 15397 :2003 (Reaffirmed 2008)	Portable Extinguisher Mechanical Foam Type(Stored Pressure)-Specification
(27)	IS: 19011:2002	Guidelines for Quality and/or Environmental Management Systems Auditing

ANNEXURE 04 : SAFETY FORMATS
&
ANNEXURE 05 : WORK PERMIT FORMATS

	POWER SECTOR	FORMAT NO: HSEP:14-F01 REV NO.: 00 PAGE NO. 01 OF 02
	INSPECTION OF FIRST AID BOX	

Name of Site :	
Name of Sub-Contractor :	
Inspected by :	
Date of Inspection :	

Number of employees on the site: -_____

Sl.No.	**Item**	**No. Available**	**Remarks**
1	No. of small sterilized dressings		
2	No of medium sized sterilized dressings		
3	No of large sized sterilized dressings.		
4	No of large sized sterilized burn dressings		
5	No of (15 grams) packets sterilized cotton wool		
6	No of pieces of sterilized eye pads in separate sealed packets.		
7	No of roller bandages 10 cm wide.		
8	No of roller bandages 5 cm wide.		
9	Whether tourniquet available		
10	Whether supply of Suitable splints available.		
11	No of packets of safety pins.		
12	Whether kidney tray available		
13	Whether sufficient number of eye wash bottles, filled with distilled water or suitable liquid, clearly indicated by a distinctive sign which shall be visible at all times, available.		
14	Whether 4%-xylocaine eye drops, and boric acid eye drops and soda by carbonate eye drops available.		
15	Whether (60ml) bottle containing a two percent alcoholic solution of iodine available		
16	Whether (two hundred ml) bottle of mercurochrome (2 per cent) solution in water available.		

Sl.No.	Item	No. Available	Remarks
17	Whether 120ml bottle containing Sal volatile having the dose and mode of administration indicated on the label, available.		
18	Whether roll of adhesive plaster (6 cmX1 meter) available		
19	No of rolls of adhesive plaster (2 cmX1 meter)		
20	Whether snake bite lancet available.		
21	Whether (30 grams) bottle of potassium permanganate crystals available.		
22	Whether a pair scissors available		
23	Whether copy of the First-Aid leaflet issued by the Director-General, Factory Advice service and labour Institutes, Government of India available.		
24	Whether bottle containing 100 tablets (each of 5 grains) of aspirin available		
25	Whether Ointment for burns available		
26	Whether bottle of a suitable surgical anti-septic solution available		

Signature of Subcontractor's Site I/C:

	POWER SECTOR	FORMAT NO: HSEP:14-F02 REV NO.: 00 PAGE NO. 1 OF 02
	HEALTH CHECK UP	

Name of Site :	
Name of Sub-Contractor :	
Name of Employee :	

NAME:

History Of Past Illness	H/O Epilepsy
	H/O Drug Allergy
	H/O Diabetics/ Hypertension
	H/O Unconsciousness
Personal History	

EXAMINATION		**OBSERVATION**	
General Physical Examination			
Height	:		
Weight	:		
BMI	:		
Built And nourishment	:		
Pallor	:		
Temperature	:		
Chest Expansion	:	Inspiration	Expansion
Lymph Node Enlargement	:		
Ear, Nose, Throat	:		
Ear	:		
Nose	:		
Throat	:		

EXAMINATION		OBSERVATION	
Cardiovascular System Examination :			
Inspection	:		
Palpation	:	Pulse	BP
Auscultation (Heart Sounds)	:		
Respiratory System	:		
Inspection	:	Respiratory Rate	
Palpation:	:		
Percussion	:		
Auscultation (Breath Sounds)	:		
Examination of Abdomen	:		
Inspection	:		
Palpation	:		
Auscultation (Bowel Sounds)	:		
Any Other	:		
Clinical Impression			

Signature of the examining doctor

	POWER SECTOR **HSE INDUCTION TRAINING**	FORMAT NO: HSEP:14-F03 REV NO.: 00 PAGE NO. 01 OF 01

Name of Site :	
Name of Sub-Contractor :	
Date :	
Name of Training Co-ordinator	

Sl No.	**Name**	**Designation**	**Organisation**	**Signature**

Signature of Training co-ordinator :

	POWER SECTOR **TOOL-BOX TALK**	FORMAT NO: HSEP:14-F04 REV NO.: 00 PAGE NO. 01 OF 01

Name of Site :	
Sub-Contractors Name :	
Date :	

Topic	**Name of person delivered Tool Box Talk**	**No. of Participants attended**	**Remarks**

Signature of Site I/C of Subcontractor :

	POWER SECTOR **PERSONAL PROTECTIVE EQUIPMENTS**	FORMAT NO: HSEP:14-F06 REV NO.: 00 PAGE NO. 01 OF 01

Name of Site :	
Name of Sub-Contractor :	
Inspected by :	
Date of Inspection :	

Item	**Issued this Month**	**Nos. Issued up to the Month**	**Percentage of usage at site**
Safety Helmet			
Safety Shoes			
Full Body Harness			
Fall Arrestor			
Safety Nets			
Other PPEs.			

Signature of Site I/C of Subcontractor :

	POWER SECTOR **INSPECTION OF T&Ps**	FORMAT NO: HSEP:14-F07 REV NO.: 00 PAGE NO. 01 OF 01

Name of Site :	
Name of Sub-Contractor :	
Date of Inspection :	

Sl.No.	Description	Remarks	
1.0	Name of equipment		
2.0	Basic Information of equipment		
2.1	Specification		
2.2	Sr. No. of equipment		
2.3	Make		
2.4	Year of manufacture		
3.0	Major repairs / overhauls(Furnish details of work carried out)		Date(s) of major repair/overhaul
3.1			
3.2			
3.3	Repairs carried out at site		
4.0	Any performance test conducted	Yes/No	
5.0	Document Submitted	Yes/No	
6.0	Manufacturer's test / guarantee certificate	Available/ Not available	
7.0	Performance test	Done/ Not Done	
8.0	Acceptance Norms		
9.0	Committee Observations		
10.0	Date of next review (if accepted)		

Signature-Site Safety Officer (BHEL)	**Signature-Subcontractor/ Subcontractor's Safety Officer**

	POWER SECTOR **STATUS OF T&Ps**	FORMAT NO: HSEP:14-F08 REV NO.: 00 PAGE NO. 01 OF 01

Name of Site	
Name of Sub-Contractor	
Date of Inspection	

Item	**Nos. Deployed**	**Identification No.**	**Nos. Tested by competent person**	**Validity of Test Certificate**
Winches				
Chain Blocks				
Wire Rope Slings				
Man Cages				
D-Shackles				
Air Compressors				
Crawler Cranes				
Mobile Cranes				
Hydra Cranes				
Others				

Signature of Site I/C of subcontractor:

	POWER SECTOR **INSPECTION OF CRANES AND WINCHES**	FORMAT NO: HSEP:14-F09 REV NO.: 00 PAGE NO. 01 OF 03

Name of Site :	
Name of Sub-Contractor :	
Inspected by :	
Date of Inspection:	

Crane Reg. No (Make/Model) _____

Name of Driver/Operator _____

Sl.no.	Description	Observation	Measures
1	Valid Driving license		
2	Hook & Hook Latch		
3	Over Hoist limit switch		
4	Boom limit switch		
5	Boom Angle Indicator		
6	Boom limit cutoff switch		
7	Condition of Boom		
8	Condition of ropes		
9	Number of load lines		
10	Size and condition of the slings		
11	Stability of the cranes		
12	Soil Condition		
13	Swing Break And Lock		
14	Proper Break And Lock		
15	Hoist Break And Lock		
16	Boom Break And Lock		
17	Main Clutch		
18	Leakage in Hydraulic Cylinders		
19	Out riggers filly extendable		
20	Tyre pressure		
21	Condition of Battery And Lamps		

Sl.no.	Description	Observation	Measures
22	Guards of moving and rotating parts		
23	Load chart provided		
24	Number and position of pedant ropes		
25	Reverse Horn		
26	Load Test Details		
27	Operator's fitness		
28	Pollution under control certificate		
29	Fire extinguisher of appropriate type.		
30	Training of the operator		

WINCH

Sl. No.	Description	YES	NO	NA	Remarks
1	Has the copy of Third Party Inspection certificate been provided in winch machine shed?				
2	Is winch machine operator experienced enough to operate the winch machine?				
3	Is the winch machine operated by someone other than the winch machine operator?				
4	Is there guard provided in all moving parts like wheel and motor's shaft?				
5	Will it protect against unforeseen operational contingencies?				
6	Are brakes, clutch and locking arrangement working properly?				
7	Has it been ensured that the guard does not constitute a hazard by itself?				
8	Are the cranks and the connecting rods protected by guardrails?				
9	Is there provision for fully covered shed with wooden plank roof?				

Sl. No.	Description	YES	NO	NA	Remarks
10	Is wire rope free from any kind of damage or wear and tear?				
11	Is split pin provided for the protection of clutch and brake locking arrangement?				
12	Is pulley inspected by competent person and certified before use?				
13	Is pulley free from any wear and tear visually?				
14	Is winch rope barricaded with clipsheet for the protection of rope and person?				
15	Is the wire rope lubricated by cardium oil?				
16	Is there any friction in wire rope which may damage the wire rope rather than the rolling parts?				
17	Is there any oil leakage in the hydraulic system of the winch machine?				
18	Has it been ensured that the guard will not cause discomfort or inconvenience to operator?				
	Total Number of NO:				
	Total Number of NA:				
	% Compliance :				

Signature of Site I/C of subcontractor :

	POWER SECTOR	FORMAT NO: HSEP:14-F10 REV NO.: 00 PAGE NO. 01 OF 02
	INSPECTION OF HEIGHT WORKING	

Name of Site :	
Name of Sub-Contractor :	
Inspected by :	
Date of Inspection:	

Sl. No.	**Descriptions**	**Observation (Yes/No)**	**Remarks**
1	All the workers have been explained safe work method?		
2	An established communication system has been established and explained to the workers.		
3	Adequate illumination has been ensured.		
4	Work area inspected prior to the start of the work.		
5	Area below the work place barricaded, particularly below hot work.		
6	Workers provided with bags /box to carry bolts, nuts and hand tools		
7	Arrangement for fastening hand tools made.		
8	All work platforms ensured to be of adequate strength and ergonomically suitable.		
9	Fabricated makeshift arrangements are checked for quality and type of material welding, anchoring etc.		
10.	Work at more than one elevation at the same segment is restricted.		
	ACCESS/EGRESS		
1	Walkways provided with handrail, mid-rail and toe guard?		
2	All checkered plates, gratings properly welded/ bolted?		
3	Are ladders inspected and they are in good condition?		
4	Are ladders spliced?		
5	Are ladders properly secured to prevent slipping, sliding or falling?		
6	Do side rails extend 36” above top landing?		
7	Are built up ladders constructed of sound materials?		

	POWER SECTOR	FORMAT NO: HSEP:14-F10 REV NO.: 00 PAGE NO. 02 OF 02
	INSPECTION OF HEIGHT WORKING	

Sl. No.	Descriptions	Observation (Yes/No)	Remarks
8	Are rugs and cleats not over 12” on center?		
9	Metal ladders not used around electrical hazards.		
10	Proper maintenance and storage.		
11	Ladders placed at right slope.		
12	Ladders / staircases welded/ bolted properly.		
13	Any obstruction in the stairs.		
14	Are landing provided with handrails, knee rails, toe boards etc.?		
15	Whether ramp is provided with proper slope.		
16	Proper hand rails / guards provided in ramps.		
	Housekeeping		
1	Walkways, aisles & all overhead workplaces cleared of loose material.		
2	Flammable materials, if any, are cleared.		
3	All the de shuttering materials are removed after de shuttering is done.		
4	Platforms and walkways free from oil/grease or other slippery material.		
5	Collected scrap are brought down or lowered down and not dropped from height.		
	PPE And Safety Devices		
1	Use of safety helmet, safety belts ensured for all workers		
2	Anchoring points provided at all places of work.		
3	Common lifeline provided wherever linear movement at height is required.		
4	Safety nets are use wherever required.		
5	Proper fall arrest system is deployed at critical workplaces.		
6	Crawler boards/Safety system or works on fragile roof are used.		

Signature of Site I/C of subcontractor :

	POWER SECTOR **INSPECTION OF WELDING AND GAS CUTTING**	FORMAT NO: HSEP:14-F11 REV NO.: 00 PAGE NO. 1 OF 02

Name of Site	
Name of Sub-Contractor	
Inspected by	
Date of Inspection	

Welding				
Sl.no.	Description	Yes	No	Remarks
1	Is electric connection given through 30 mA ELCB/RCCB to welding m/c?			
2	Is electric cable fitted properly in junction box on m/c?			
3	Is electrical cable free from joints?			
4	Are the joints attached firmly & insulated with tape?			
5	Is double earthing given to body of m/c?			
6	Is the physical condition of the m/c good?			
7	Is ON/OFF switch connected to the m/c is working and in good condition?			
8	Are indication lamps on m/c working?			
9	Is the electrode holder in good condition?			
10	Are the cables of the welding m/c lugged & tight properly?			
11	Are return lead connected properly (Rod, Angle, Channels shall not be used)			
	Total No of NO			
	Total No of YES			

	POWER SECTOR **INSPECTION OF WELDING AND GAS CUTTING**	FORMAT NO: HSEP:14-F11 REV NO.: 00 PAGE NO. 2 OF 02

Gas Cutting				
Sl. no	Description	Yes	No	Remarks
1	Are Cylinders kept on trolleys?			
2	Physical condition of Gas cylinders Good?			
3	Is there Oil/Grease on valve of the cylinder?			
4	Are pressure regulators in good condition?			
5	Condition of hose pipe OK?			
6	Are hose pipe clamped with hose clip?			
7	Is flash back arrestor & NRV fitted on torch both for O2 and LPG cylinder?			
8	Is nozzle of the torch cleaned?			
	Total Number of NO			
	Total No of YES			
	% Compliance			

Signature of Site I/C of subcontractor :

	POWER SECTOR **INSPECTION OF ELECTRICAL INSTALLATION**	FORMAT NO: HSEP:14-F12 REV NO.: 00 PAGE NO. 01 OF 02

Name of Site	
Name of Sub-Contractor	
Inspected by	
Date of Inspection:	

Sr. No.	**Contents**	**Yes/No**	**Remarks**
A	**Cable**		
1.	Whether the condition of cable is checked?		
2.	Are cables received from other sites checked for insulation resistance before putting them into use?		
3.	Are all main cables taken either underground / overhead?		
4.	Are welding cables routed properly above the ground?		
5.	Are welding and electrical cables overlapping?		
6.	Is any improper joining of cables/wires prevailing at site?		
B	**DBs/SDBs**		
1.	Is earth conductor continued up to DB / SDB?		
2.	Whether DBs and extension boards are protected from rain / water?		
3.	Is there any overloading of DBs / SDBs?		
4.	Are correct / proper fuses & CBs provided at main boards and sub-boards?		
5.	Is energized wiring in junction boxes, CB panels & similar places covered all times?		
C	**ELCB**		
1.	Whether the connections are routed through ELCB?		
2.	Is ELCB sensitivity maintained at 30 mA?		

Sr. No.	Contents	Yes/No	Remarks
3.	Are the ELCB numbered and tested periodically & test results recorded in a logbook countersigned by a competent person?		
D	**Grounding**		
1.	Is natural earthing ensured at the source of power (main DB at Generator or Transformer)?		
2.	Whether the continuity and tightness of the earth conductor are checked?		
3.	Mention the gauge of the earth conductor used at the site.		
4.	Mention the value of Earth Resistance.		
E	**Electrically operated Machines or Accessories**.		
1.	Whether the plug top is provided everywhere.		
2.	Are all metal parts of electrical equipment and light fittings / accessories grounded?		
3.	Is there any shed or cover for welding machines?		
4.	Are halogen lamps fixed at proper places?		
5.	Are portable power tools maintained as per norms?		
6.	Any other information:		

Signature of Site I/C of subcontractor :

	POWER SECTOR **INSPECTION OF ELEVATOR**	FORMAT NO: HSEP:14-F13 REV NO.: 00 PAGE NO. 01 OF 01

Name of Site	
Name of Sub-Contractor	
Inspected by	
Date of Inspection	

Sr. No.	**Description**	**Remarks**
1.0	Name of equipment	
2.0	Basic Information of equipment	
2.1	Specification	
2.2	Sr. No. of equipment	
2.3	Make	
2.4	Year of manufacture	
3.0	Major repairs/overhauls(Furnish details of work carried out)	Date(s) of major repair/overhaul
3.1		
3.2		
3.3	Repairs carried out at site	
4.0	Any performance test conducted	Yes/No
5.0	Document Submitted	Yes/No
6.0	Manufacturer's test / guarantee certificate	Available/ Not available
7.0	Performance test	Done/ Not Done
8.0	Acceptance Norms	
9.0	Committee Observations	
10.0	Date of next review (if accepted)	

Signature-Subcontractor/ Subcontractor's Safety Officer	**Signature-Site Safety Officer (BHEL)**

	POWER SECTOR	FORMAT NO: **HSEP:14-F13E** REV NO.: 00 PAGE NO. 01 OF 01
	Inspection of Excavation	

Name of Site :	
Name of Sub-Contractor :	
Inspected by :	
Date of Inspection :	

Sl.no.	Description	Yes	No	Remarks
1	Precautions taken for Underground Electrical Cable			
2	Precautions taken for Under / Above ground sewer/ Drinking Water Line			
3	Precautions taken for Underground Telecommunication Line			
4	Precautions taken for Underground Product/Utility Line			
5	Precautions taken for Underground Fire Water Line			
6	Shoring / Shuttering / Sheet piling done to prevent collapse of excavation walls. Strength of Excavation wall ensured at all times			
7	Slope Cutting / Angle Maintained			
8	Hard Barricading & Edge Protection provided			
9	Separate Safe Access for Man and Vehicle			
10	Lighting arrangement			
11	Banksman Provided			
12	Required basic PPEs provided			
13	Excavated soil / Construction Material / equipment kept away from the edge.			
14	First aid in attendance.			
15	Other:			
	Total No of YES			

Signature-Subcontractor/ Subcontractor's Safety Officer **Signature-Site Safety Officer (BHEL)**

Sub: MEMO for Penalty for non-compliances in Safety

Following lapse (tick marked) was observed and penalty is imposed as stated at the bottom of this memo. It is requested that such occurrences be please avoided in future.

Safety Area

SN	Violation of Safety Norms	Fine (in Rs)
01	Not Wearing Safety Helmet	200/- *
02.	Not wearing Safety Belt or not anchoring life line	500/-*
03	Not wearing safety shoe	200/-*
04	Not keeping gas cylinders vertically	200/-
05	Not using flash back arrestors	100/-
06	Not wearing gloves	50/- *
07.	Grinding Without Goggles	50/- *
08.	Not using 24 V Supply For Internal Work	500/-
09.	Electrical Plugs Not used for hand Machine	100/-
10.	Not Slinging properly	200/-
11.	Using Damaged Sling	200/-
12.	Lifting Cylinders Without Cage	500/-
13.	Not Using Proper Welding Cable With Lot of Joints And Not Insulated Property.	200/-
14.	Not Removing Small Scrap From Platforms	500/-
15.	Gas Cutting Without Taking Proper Precaution or Not Using Sheet Below Gas Cutting	500/-
16.	Not Maintaining Electric Winches Which are Operated Dangerously	500/-
17.	Improper Earthing Of Electrical T&P	500/-
18	No or improper barricading	500/-
19.	Activity carried out without Safety work permit (Height work, Lifting activity, Hot work-each person/case)	1000/-
20.	Incident Resulting in Partial Loss in Earning Capacity	25,000/- per victim
21.	Fatal Incident Resulting in total loss in Earning Capacity	1,00,000/- per victim for first instance #

Legend: -

*: per head. For repeated violation by the same person, the penalty would be double of the previous penalty. Date of "Repeated violation" will be counted from subsequent days.

#: or as deducted by customer, whichever is higher. For repeated fatal incident in the same Unit incremental penalty to be imposed. The subcontractor will pay 2 times the penalty compared to previously paid in case there are repeated cases of fatal incidents under the same subcontractor for the same package in the same unit.

Details (if any) related to non- compliance (Name of persons, Nature of deficiency, etc.)

_____

Penalty imposed:

1, Rate as per above chart_____

2. No. of Persons/ machine/ event/ labour _____

3. Total Penalty= 1. X 2. =_____

Signature:

Witnessed by: (Sub- Contractor representative) (BHEL Personnel)

Name_____ Name_____

Distribution: 1 Copy: to Sub- contractor,
1 Copy to Site Construction Manager (BHEL)

बी एच ई एल BHEL	**POWER SECTOR- HQ** **Incident Report** (To be submitted within 24 hours of time of incident)	FORMAT NO: HSEP:14-F15 REV NO.: 00 PAGE NO. 01 OF 01

Type of incident: Fatal/Major/ Minor/Fire/Property Damage/Near-miss

1	NAME OF SITE		3	ACTIVITY AREA	
2	SCOPE OF WORK		4	NAME OF CONTRACTOR	
			5	NAME & DESIGNATION OF BHEL ACTIVITY I/C	
6	DATE & TIME OF ACCIDENT		7	DATE RESUMED	
8	NO. OF WORK-DAYS LOST BY VICTIM (If duty not resumed, give estimated figure)				
9	NO. OF MANHOURS LOST BY OTHERS				
10	PERSONAL DETAILS OF INJURED AND / OR DETAILS OF MATERIALS / EQUIPMENT / PROPERTY DAMAGED				

NAME				NAME OF MATERIAL / EQUIPMENT / PROPERTY	
PERIOD OF EMPLOYMENT					
AGE	YRS	SEX	MALE/ FEMALE	ESTIMATED COST	ACTUAL COST
MARITAL STATUS		SINGLE / MARRIED			
OCCUPATION				NATURE OF DAMAGE	
PART OF BODY INJURED					
NATURE OF INJURY					
AGENCY (OBJECT / EQUIPMENT / SUBSTANCE) MOST RESPONSIBLE FOR CAUSING ACCIDENT / INJURY / DAMAGE					
12	PERSON (NAME & DESIGNATION) WITH MOST CONTROL OVER AGENCY (OBJECT / EQUIPMENT / SUBSTANCE) CAUSING ACCIDENT INJURY / DAMAGE				
13	DESCRIBE CLEARLY HOW THE ACCIDENT OCCURRED (USE ADDITIONAL SHEET, IF REQUIRED				
ANALYSIS					
14	WHAT ACTS AND / OR CONDITIONS CONTRIBUTED MOST DIRECTLY TO THIS ACCIDENT				
15	WHAT ARE THE BASIC REASON FOR THE EXISTENCE OF THESE ACTS AND / OR CONDITION ?				
16	WHAT CORRECTIVE ACTIONS HAVE BEEN TAKEN TO PREVENT ACCIDENT RECURRENCE ?				
	DATE :			SIGNATURE OF SITE HSE COORDINATOR	
17	COMMENTS OF HEAD / SOX				
	DATE:			SIGNATURE OF HEAD/SOX	

	POWER SECTOR	FORMAT NO: **HSEP:14-F30** REV NO.: 00 PAGE NO. 01 OF 3
	Format for Monthly HSE Planning & Review	

Note: This is a template and can be modified in consultation with BHEL			
Name of the Site		**Name of the Subcontractor**	
Scope of Work		**Date**	
PART- A: PLAN OF HSE ACTIVITIES FOR THE MONTH OF……			**PART-B: REVIEW ON ……**
SN.	**Description of HSE Activity & Formats**	**Plan & Targets for the month**	**Review**
1	Availability of First Aid Box at Required Places and Inspection thereof as per Format: F01	Areas 1. … …	
2	Health check-up as per Format: F02	Health check-up for Nos 1. New inductees 2. Drivers & Operators 3. Workers in following high risk areas: a. …	
3	Induction training of newly joined workers as per Format: F03	Minimum No. of workers:	
4	Toolbox talks (TBT) conducted before start of work as per Format: F04	Locations of TBTs & No. of workers **1.** …	
5	PPE usage and issue as per Format: F06		
6	Inspection of T&Ps as per Format: F07	List of T&Ps to be inspected 1.	
7	Identification & Inspection Status of T&Ps as per Format: F08		
8	Inspection of Cranes & Winches as per Format: F09	List of Cranes & Winches & Nos. 1. …	
9	Inspection of Height Working as per Format: F10	Areas: 1. …	
10	Inspection of Welding & Gas Cutting operations as per Format: F11	Areas: 1. …	
11	Inspection of Electrical Installations as per Format: F12	Locations: 1. …	
12	Inspection of Elevators (as applicable) as per Format: F13	Locations: 1. …	
13	Inspection of Excavation as per Format: F13E	**Locations:** **1. …**	

SN.	Description of HSE Activity & Formats	Plan & Targets for the month	Review
14	Job Safety Analysis as per Format F32B	**Activities:** **1. …**	
15	Regular Job Specific Training (Re-training) for workers involved in hazardous activities	Topics/ Hazards & No. of workers **1.** …	
16	Mass housekeeping (HK) drive in work areas	Areas **1.** …	
17	Vertigo Test of Height workers	Minimum No. of workers:	
18	Deployment of qualified HSE Officers as per contract	Location(s) & Nos. **1.** …	
19	Deployment of qualified HSE Stewards as per contract	Location(s) & Nos. **1.** …	
20	Deployment of Safety tools & Equipment (Safety Nets, Lifelines, Fall arrestors, Man-cages, flashback arrestors, scaffolding etc.)	Tool/ Equipment & Location **1.** …	
21	Safety Walks by site in charge of agency (4 -Weekly once)	Dates:	
22	Safety walks by departmental head (8-Weekly twice)	Dates:	
23	Availability/ deployment of Safety posters/ placards/ signage at strategic locations	Locations: Nos. **1.** …	
24	Provision of clean drinking water sources for workers	Locations: Nos. **1.** …	
25	Provision of toilets for workers (separate for male & female workers)	Locations: Nos. **1.** …	
26	Rest sheds for workers during lunchtime, rain, dust storm etc.	Locations: Nos. **1.** …	
27	Availability of following in Labor colony	**1. Clean drinking water** **2. Toilets** **3. Cleanliness & Hygiene** **4. Grass cutting,** **5. Fogging** **6. Electrical Inspection …**	

SN.	Description of HSE Activity & Formats	Plan & Targets for the month	Review
28	Availability of dust/ waste bins at various locations	Locations: **1.** …	
29	Availability of Ambulance (individual/ joint) in each shift	Ambulance No.	
30	Availability of emergency vehicle in each shift	Emergency vehicle	
31	Deployment/ Availability of tested Fire Extinguishers	Locations & Nos. **1.** …	
32	Tree plantation	Locations & Nos. **1.** …	
33	Waste disposal & Scrap Bins	Locations **1.** …	
34	Illumination checks	Locations **1.** …	
35	Safety award function: 1. Display of good practices Award presentation	Minimum 1 per month	
36	**Submission of Daily Reports as per Format No.F31A**	**Daily Reports (Night & Day Shifts)**	

PLAN		**REVIEW**	
Agency Name: Sign: Date:	**BHEL** Name: Sign: Date:	**Agency** Name: Sign: Date:	**BHEL** Name: Sign: Date:

	POWER SECTOR	FORMAT NO: **HSEP:14-F31** A REV NO.: 00 PAGE NO. 01 OF 1
	Format for Daily HSE Reporting	

Note: Following format to be submitted (preferably) in excel/ soft copy by subcontractor daily at the end of each shift. Any photographs/ records to be attached

Site									**Subcontractor**																		
Year								**Month**												**Day**							
SHIFT	Submitted By	Work Area(s)	Staff	Man-Power	Safety Officers	Safety Stewards	Tool Box (Topics and No. of Participants)	Induction Training (No. of Participants)	Vertigo Test (Numbers Tested)	On-the-Job Training (Topic & participants)	Work Permits	Job Safety Analyses conducted	Height Work Inspection	Other Hazardous Activities Inspection	T&P Inspection (Names & Nos. Inspected)	Safety Walk (Designation, Areas)	HSE Meeting	Safety Reward (Details)	Housekeeping/ Dust Suppression/ Tree Plantation Activities (Locations/Details)	Lost time Accident	Restricted Work Case	Medical Treatment Case	First Aid Case	Near miss	Property Damage/ Fire	Non-Compliances Submitted by BHEL	Complied by Agency	Any other Remarks/ Inputs
Day																											
Night															NA		NA	NA	NA								

	POWER SECTOR	FORMAT NO: **HSEP:14-F32B** REV NO.: 00 PAGE NO. 01 OF 1
	Job Safety Analysis Format	

Name of the Site	
Name of the Subcontractor	
Activity, Area	

HAZARDS	**PRECAUTIONS**

(Name)	**Submitted By (Agency HSE)**		**Reviewed By (BHEL Execution)**		**Approved By (BHEL HSE)**	
(Sign)						
(Date)						

SL	Parameter for Measurement	M/ O	Wt	Supporting Documents
1a	Induction training for new workers conducted through audio-visual medium & documented ?	M	1	Induction Training Records
1b	Tool box talk conducted regularly as per plan, and documented?	M	1	Toolbox Talk Records
1c	Contractor in charge and safety in charge attended safety meetings?	M	2	Minutes of Meeting
1d	Whether observations in safety meetings are complied before next meeting?	M	2	-do-
1e	Preparation and submission of Monthly HSE report within stipulated time	M	1	Report submission date
1f	Preparation and submission of Incident/near-miss report and RCA Report (as applicable) within stipulated time	M	1	Incident/ Near Miss Records
1g	Carrying out Inspections and submission of Inspection reports within stipulated time	M	1	Inspection Records
1h	Regular Job Specific Training ensured for High Risk Workers (through audio-visual medium) as per plan	M	1	Training & Attendance Records
2a	Whether the contractor is registered under BOCW	M	2	BOCW Registration Certificate
2b	Availability of Qualified safety officer (1 for every 500 labour)	M	2	Safety Officer qualification & experience records
2c	Availability of Qualified safety supervisor (1 for every 100 labour)	M	2	Safety Officer qualification & experience records
2d	All the workers are provided and using safety helmets and safety shoes/gum boots	M	2	PPE Issue Records, Inspection/ non-conformity records
2e	Housekeeping done on regular basis and scrap removal at site	M	1	Housekeeping records, Inspection/ non-conformity records
2f	Usage of Goggles/Face shields and Hand gloves for gas cutter and grinders		1	PPE Issue Records, Inspection/ non-conformity records
2g	Wall openings & floor openings are guarded?		1	Inspection/ non-conformity records
2h	Adequate illumination provided in all working area?		1	Inspection/ non-conformity records
2i	Safety posters, sign boards and emergency contact numbers in all prominent location are displayed?		1	Inspection/ non-conformity records
2j	Availability of automatic reverse horns, Main horn, hook latches for Vehicles, mobile cranes, Hydras		1	Inspection/ non-conformity records
2k	Ban of carrying mobile phones to work place is implemented for workers		1	Inspection/ non-conformity records
2l	Availability of Tags & Inspection Certificates for Cranes of all capacities		1	Master T&P List with internal & external test details
2l.2	Availability of Tags & Inspection Certificates for Winches of all capacities		1	Master T&P List with internal & external test details
2l.3	Availability of Tags & Inspection Certificates, color coding for Chain pulley blocks		1	Master T&P List with internal & external test details
2l.4	Availability of Tags & Inspection Certificates for Vehicles - Trailers, Dozers, Dumpers, Excavators. Mixers etc.		1	Master T&P List with internal & external test details
2l.5	Availability of Tags & Inspection Certificates for Welding machines, grinders, Drilling machines, etc.		1	Master T&P List with internal & external test details
2l.6	Availability of Tags & Inspection Certificates, colour coding for Wire rope slings etc.		1	Master T&P List with internal & external test details
2l.7	Availability of Tags & Inspection Certificates for Batching plants		1	Master T&P List with internal & external test details

SL	Parameter for Measurement	M/ O	Wt	Supporting Documents
2m.1	Use of Lifting Permit as per requirement		1	Permit Records
2m.2	Use of Height Permit as per requirement		1	Permit Records
2m.3	Use of Hot Work Permit as per requirement		1	Permit Records
2m.4	Use of Excavation permit as per requirement		1	Permit Records
2m.5	Use of Confined space work permit as per requirement		1	Permit Records
2m.6	Use of Grating removal and safety net removal permit as per requirement		1	Permit Records
2m.7	Use of Lockout-Tag out permit as per requirement		1	Permit Records
2m.8	Use of Radiography permit as per requirement		1	Permit Records
2m.9	Use of Night/ Holiday Work Permit as per requirement		1	Permit Records
2m.10	Use of Any other Applicable Permit as per requirement		1	Permit Records
3a	Material safety data sheet(MSDS) available for all chemicals and displayed in usage and storage area?		1	Inspection/ non-conformity records
3b	Spillages of oil/concrete and other chemical is controlled and cleaned by proper method in case of spill?		1	Inspection/ non-conformity records
3c	Availability of adequate number of urinals in workplace and in elevations and maintained	M	1	
3d	Availability of rest rooms for workers at site	M	1	
3e	Availability of Drinking water facility at work spot		1	
3f	Hygienic Labour colony is provided for workers.		1	
4a	Is heavy/complex critical lifting permit obtained for heavy, complex materials before handling/erection activity?		1	Work Permit records
4b	Whether area below lifting activities barricaded		1	Inspection/ non-conformity records
4c	Availability of experienced rigging foreman		1	Experience details of rigging foreman
4d	Is agency is following proper storage and handling procedure as per manufacturer standard for all hazardous material?		1	Procedure for storage & handling
4e	Are oxygen and acetylene cylinders are transported to work place from storage area in trolleys		1	
5a	Whether all deep excavation has been protected by barrier		1	Inspection/ non-conformity records
5b	Sloping/benching & shoring provided for excavation as per requirement?		1	-do-
5c	Proper access and egress provided for excavations?		1	-do-
5d	Blasting is done in controlled manner?		2	-do-
6a	Whether Electrical booth is equipped with Co_2 fire extinguishers and fire buckets filled with sand?		2	Inspection/ non-conformity records
6b	Availability of Illumination lamp in electric booth?		1	-do-
6c	whether Caution Boards have been displayed?		1	-do-
6d	Usage of Metal Plug top for all hand power tools ?		1	-do-
6e	Usage of Insulated welding cables.		1	-do-
6f	Electrical Booth/Distribution Board to be covered by proper Canopy.		1	-do-
6g	Availability of functional & individual 30ma ELCB / RCCB and MCB for protection and conducting periodical check-up?		1	-do-
6h	Double earthing for panel boards and all machinery & proper earth pit with regular inspection available?		1	-do-
6i	Whether Electrician is qualified and experienced		1	Qualification & Experience records of electrician
6j	Availability and usage of Rubber hand gloves by electrician?		1	Inspection/ non-conformity records

SL	Parameter for Measurement	M/ O	Wt	Supporting Documents
7a	Whether Scaffolding pipes made with steel or aluminum, are being used and checked periodically by experienced/ certified scaffolder?		2	Inspection/ non-conformity records
7b	8mm Stainless Steel wire rope with plastic cladding is provided for life line (Vertical / Horizontal) during height work?		2	-do-
7c	Availability of emergency lighting in case of power failure		1	-do-
7d	Whether all the openings are covered with Safety Nets made of fire proof Nylon?		1	-do-
7e	Whether MS pipe rails around staircases & platforms in usage are provided with top, middle rails and toe guard ?		1	-do-
7f	Whether Ladder with vertical life line /Fall arrestor is available to climb?		1	-do-
7g	Whether all workers deployed for working at height have been issued height pass after undergoing vertigo test?		1	Height Pass records
7h	Whether all workers deployed for height work / climbing ladder are provided and using Double lanyard safety belt?		1	PPE Issue records, inspection/ non-conformity reports
7i	Is all hand tools/Small material used by height workers is tied firmly to prevent fall?		1	-do-
8a	Flash back arrestors for all gas cutting sets is available on Torch side and cylinder side		1	Inspection/ non-conformity records
8b	Oxygen/Acetylene/LPG cylinders not in use have caps in place and stored separately?		1	-do-
8c	Availability of Face screen, Hand gloves, and Apron, for welders		1	-do-
8d	Protection from falling hot molten metal during metal cutting / welding at height by providing GI sheet below the cutting area especially in fire prone areas		1	-do-
9a	Pre-employment medical check-up done for all workers and submitted?		1	Medical check records
9b	Availability of first aid center, with MBBS doctor(Own or Sharing basis)	**M**	2	Attendance records
9c	Availability of Ambulance facility 24 hours (Own or sharing basis)	**M**	2	-do-
9d	Is First aid trained personnel's are available and their names are displayed at site?	**M**	1	-do-
9e	Availability of Emergency vehicle at site		1	
9f	Periodical medical check-up is conducted for all the workers and submitted?		1	Medical check records
9g	Availability of sufficient number of first aid box as per standard list and maintaining record		1	Inspection records
10a	Availability of Fire extinguishers, buckets at all vulnerable points		2	Fire extinguisher records
10b	Periodic fire mock drill conducted?		1	Fire, Mock drill records
10c	Are all flammable materials are stored separately?		1	
10d	Periodic grass cutting is done in material storage area?		1	
10e	Availability of 24V DC lighting in confined space work area		1	
10f	Availability of exhaust fan in confined space work area		1	

Note:

- **M: Mandatory; O: Optional**. Points other than mandatory can be excluded with appropriate justification (scope etc.) by BHEL
- Additionally: 30 Marks for each Fatal Accident and 10 mark for each major accident shall be deducted.

SAFETY WORK CLEARANCE	Permit no.
Project:	Emergency Contact Nos:
Subcontractor:	

BURNING/WELDING /HOT WORK PERMIT

Area :_____ Date:_____ Time:_____

Name of Site Engineer (Permit Requesting Authority):_____ Sign:_____

Name of Work Performing Contractor: _____

Name of Package In charge:_____ Sign:_____ Date:_____

Description of Work: _____

_____

Work Execution Date:_____ Time Valid from:_____ to _____

The above signing person(s) will be responsible to ensure that the above described work will be done under all the safety precautions mentioned on the permit to work.

The following precautions are to be taken:

No.	Item	Yes	Not required
1.	Proper Access/Exit available		
2.	Proper ventilation and /or lighting provided.		
3.	Proper and safe scaffolding, platform, ladder provided.		
4.	Welding machine located in a clean and dry area.		
5.	Welding machine grounded at the equipment and proper leakage current protection device (ELCB) provided for welding machine.		
6.	Emergency STOP buttons are in working condition. Welder /Helper knows how to operate it.		
7.	Welding machine input/output cables, welding holder and weld return clamp (Holder) are insulated and in good condition.		
8.	Welder & Fitter trained to connect ground/work return clamps (Holder) to work place prior to energization of welding machine.		
9.	Gas cylinders are stacked vertically and not below the welding / cutting area. Regulator key is available with cylinder.		
10.	Pressure gauges/Flash back arrestor provided and in working condition.		
11.	Personal Protective equipment Minimum applicable: safety helmet, safety goggles, welding helmet, safety shoes, leather gloves, long sleeve and nose mask -provided		
12.	In case of pits, water removed from the pit and wood/rubber insulation provided.		
13.	Safety signboards are in place.		
14.	Adequate and Suitable nos. of fire fighting extinguisher provided.		
15.	Nearby combustible material removed. Housekeeping done.		
16.	Other		

Name of Contractor Safety Officer:_____ Sign:_____ Date:_____ Time: _____

Reviewed and approved by BHEL Site Engineer (Permit Issuing Authority):

Name:_____ Sign:_____ Date:_____ Time:_____

Name of BHEL Safety Representative:_____ Sign: _____

I understand the precaution to be taken as described above and as per project requirement and hereby confirm that work will be executed under my supervision by following all precaution and Safety Rules.

Name of Work Performing Authority:_____ Sign:_____ Date:_____ Time:_____

Permit Cancellation:

I hereby declare that the work is complete, all workers under my control have been withdrawn and the site restored to safe tidy condition.

Name of Work performing Authority:_____ Sign:_____ Date:_____ Time:_____

Name of Site Engr. (Permit Requesting Authority):_____ Sign:_____ Date:_____ Time:_____

Name of BHEL Site Engr. (Permit Issuing Authority):_____ Sign:_____ Date:_____ Time: _____

(This permit is valid only for the date it is issued)

Original at BHEL site **Second Copy – BHEL SAFETY** **Third Copy : Contractor**

SAFETY WORK CLEARANCE	Permit no.
Project:	Emergency Contact Nos:
Subcontractor:	

LIFTING ACTIVITY PERMIT

Area :_____ Date:_____ Time:_____

Name of Site Engineer (Permit Requesting Authority):_____ Sign: Name of Work

Performing Contractor: _____

Name of Package In charge:_____ Sign:_____ Date:_____

Description of Work: _____

_____

Work Execution Date:_____ Time Valid from:_____ to _____

The above signing person(s) will be responsible to ensure that the above described work will be done under all the safety precautions mentioned on the permit to work.

The following precautions are to be taken:

No.	Item	Yes	Not required
1.	Crane used for lifting activity tested, certified and approved for rated lifting		
2.	All lifting tackles, gears/appliances are tested and certified for lifting works.		
3.	Crane operator is trained and competent for lifting operation.		
4.	Lifting sling/ belt is protected against sharp edge of the jobs to be lifted.		
5.	Access and exit marked and without obstruction.		
6.	Lifting arrangement adequate.		
7.	Unwanted rubbish material removed from work platform.		
8.	Minimum 2 guidelines have been provided for balancing and guiding jobs to be lifted.		
9.	Periphery area of crane booms as well as lifting job is barricaded and unauthorized/no-entry sign board posted.		
10.	Rigger and signal man is trained and competent for lifting work.		
11.	No lifting activity to be carried out during lightening, heavy wind/rain.		
12.	If scaffolding to be used during lift, scaffolding with valid tag available for use.		
13.	Double lanyards safety harness/belt checked an in working condition.		
14.	Safety shoes (non-slip), helmet with chin strap available with employees.		
15.	Others.		

Name of Contractor Safety Officer:_____ Sign:_____ Date:_____ Time: _____

Reviewed and approved by BHEL Site Engineer (Permit Issuing Authority):

Name:_____ Sign:_____ Date:_____ Time:_____

Name of BHEL Safety Representative:_____ Sign: _____

I understand the precaution to be taken as described above and as per project requirement and hereby confirm that work will be executed under my supervision by following all precaution and Safety Rules.

Name of Work Performing Authority:_____ Sign:_____ Date:_____ Time:_____

Permit Cancellation:

I hereby declare that the work is complete, all workers under my control have been withdrawn and the site restored to safe tidy condition.

Name of Work performing Authority:_____ Sign:_____ Date:_____ Time:_____

Name of Site Engr. (Permit Requesting Authority):_____ Sign:_____ Date:_____ Time:_____

Name of BHEL Site Engr. (Permit Issuing Authority):_____ Sign:_____ Date:_____ Time: _____

(This permit is valid only for the date it is issued)

Original at BHEL site **Second Copy – BHEL SAFETY** **Third Copy : Contractor**

SAFETY WORK CLEARANCE	Permit no.
Project:	Emergency Contact Nos:
Subcontractor:	

WORKING AT HEIGHT PERMIT

Area :_____Date:_____Time:_____

Name of Site Engineer (Permit Requesting Authority):_____Sign: Name of Work

Performing Contractor: _____

Name of Package In charge:_____Sign:_____Date:_____

Description of Work: _____

_____

Work Execution Date:_____Time Valid from:_____to _____

The above signing person(s) will be responsible to ensure that the above described work will be done under all the safety precautions mentioned on the permit to work.

The following precautions are to be taken:

No.	Item	Yes	Not required
1.	All workers on job are medically fit for working at height (Person should not have vertigo)		
2.	Scaffolding with valid tag available for use		
3.	Safety harness with life line support/ fall arrester are checked and in working condition		
4.	Safety shoes (non-slip), Helmet with chin strip available with employees		
5.	Safety nets are provided as per design and provided 25 ft. below working area & extending 8 ft beyond.		
6.	Horizontal life lines are provided to cater to design specification of 2300kg per person.		
7.	Ladders have been inspected and provided as per BHEL standard/contract.		
8.	All lifting / tightening tools, hand tools/equipment checked and in good condition		
9.	Access and exit marked and without obstruction.		
10.	Lighting arrangement adequate.		
11.	Unwanted and rubbish material removed from working platform.		
12.	Electrical cable, welding Hose/Compressed air hose properly secured and lay down without obstruction.		
13.	Signboards provided on working platforms		
14.	Hazards in the vicinity are identified and communicated to the worker.		
15.	Other		

Name of Contractor Safety Officer:_____Sign:_____Date:_____Time: _____

Reviewed and approved by BHEL Site Engineer (Permit Issuing Authority):

Name:_____Sign:_____Date:_____Time:_____

Name of BHEL Safety Representative:_____Sign: _____

I understand the precaution to be taken as described above and as per project requirement and hereby confirm that work will be executed under my supervision by following all precaution and Safety Rules.

Name of Work Performing Authority:_____Sign:_____Date:_____Time:_____

Permit Cancellation:

I hereby declare that the work is complete, all workers under my control have been withdrawn and the site restored to safe tidy condition.

Name of Work performing Authority:_____Sign:_____Date:_____Time:_____

Name of Site Engr. (Permit Requesting Authority):_____Sign:_____Date:_____Time:_____

Name of BHEL Site Engr. (Permit Issuing Authority):_____Sign:_____Date:_____Time: _____

(This permit is valid only for the date it is issued)

Original at BHEL site **Second Copy – BHEL SAFETY** **Third Copy : Contractor**

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SECTION – I
Instructions to Tenderers
GENERAL INSTRUCTION TO TENDERERS

1.1 Submission of Tender in "Three Parts".

(1) Technical Tender: All particulars asked for from the Vendor except the Price Bid & E.M.D in an envelope.

(2) EMD in a sealed envelope clearly superscribing on the envelope "E.M.D", the Tender Number, Name of Work, addresses of Vendor and addressee. One time EMD holders needn't enclose this provided that proof of EMD remittance is enclosed in the technical tender.

(3) Price Bid in the price schedule enclosed in the tender, in sealed envelope, clearly superscribing "Price Bid", Tender Number, Name of Work, Name of the Vendor and addressee.

Note: However, in case of e-tender instructions mentioned in the NIT document to be followed.

1.1.1 This Tender specification as a whole, duly furnishing the following details

1.1.1.1 Earnest Money Deposit.

1.1.1.2 Income Tax Certificate.

1.1.1.3 Detailed organisation chart for manpower resources available with the tenderer and to be employed for the present jobs.

1.1.1.4 A list of experience as mentioned in the tender document.

1.1.1.5 The details of the present jobs being handled.

1.1.1.6 A certificate from the Scheduled Bank to prove his financial capacity/capability to undertake the work or solvency certificate from the concerned authority.

1.1.1.7 Attested copies of partnership deed, power of attorney and tender specifications duly signed as mentioned in the tender documents.

1.1.1.8 Price schedule and other relevant information.

NOTE: All Xerox copies enclosed by the Vendor should be attested and sealed for authenticity.

1.1.2 The tender shall be addressed to:

Head/SCT
BHARAT HEAVY ELECTRICALS LIMITED,
POWER SECTOR SOUTHERN REGION,
SERVICE AFTER SALES,
EK TARA BUILDING, 39 SD ROAD,
SECUNDERABAD – 500003.

1.1.3 Tenders shall be opened by the authorised officer of BHEL at his office at the time and date as specified in the tender notice in the presence of such of those tenderers or their authorised representatives who may be present.

1.1.4 The Tenderer shall closely peruse 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 or 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 offer.

1.1.5 Before tendering, the tenderer is advised to inspect the site of work and the environments and be well acquainted with the actual working and other prevalent conditions, facilities available, position of material and labour. No claim will be entertained later on the ground of lack of knowledge.

1.1.6 Tenderers 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 & declaration must be signed bearing seal and submitted along with the offers by the Tender in token of complete acceptance thereof. The information furnished shall be complete by itself. The booklet of G.S.C.C may be retained by the bidder if declaration is enclosed along with the bid duly filled in and signed and sealed. In case of e-tendering document digitally signing on cover page is also acceptable.

1.1.7 The tender shall quote the rates in English language and internationals numerals. The rates shall be in whole rupees. These rates shall be entered in figures as well as in words. For the purpose of the tender, the metric system of units shall be used.

1.1.8 All entries in the tender shall either be typed or be in ink. Erasures and overwriting are not permitted and may render such tenders liable to summary rejection. All cancellations and insertions shall be duly attested by the tenderer.

1.2 **Qualifications of Tenderers**:

Only tenderers who have previous experience in work of this nature and description detailed in this tender specification and/or registered with BHEL, PSSR-SAS for such works are expected to quote for this work duly detailing their experience along with the offer. Offers from tenderers who do not have established experience in the field are not likely to be considered.

1.3 **Data to be enclosed**:

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

1.3.1 Financial Status:

a) A certificate from the Scheduled Bank to prove his financial capacity/capability to undertake the work or solvency certificate from the concerned authority.

b) Contractors other than those who are registered in PSSR SAS, should submit their audited annual accounts for three years preceding the financial year in which tenders are called for.

1.3.2 Previous Experience:

A statement giving particulars duly supported by documentary evidence of the various services rendered for each similar work by the tenderer indicating the particulars and value of each work, the site location and the duration and date of completion and also a list of site locations and particulars and value of various services that are under progress.

1.3.3 Organisation Chart:

The organisation pattern that is totally available with the tenderer and that will be employed by the tenderer for this work duly indicating the number of Engineers and Supervisors, their qualification and experience in the line, the number of skilled and unskilled workmen etc.

1.3.4 An attested copy of the Power of Attorney, in case the tender is signed by an individual other than the sole proprietor, shall also be attached.

1.3.5 In case of an individual:

His full name, address and place and nature of business.

1.3.6 In case of Partnership firms:

The name of all the partners and their addresses. A copy of the Partnership Deed (Instrument of partnership) duly certified by the Notary Public shall be enclosed.

1.3.7 In case of Companies:

Date and place of registration including Date of Commencement Certificate in case of public companies (certified copies of Memorandum and Articles of Associations are also to be furnished).

1.3.8 Nature of business carried on by the Company and the provision of the Memorandum relating thereof.

1.3.9 Names and particulars including addresses of all the Directors and their previous experience.

1.3.10 A list of tools and tackles that the tenderer is having and those that will be earmarked for this job.

1.3.11 In addition to the above, the particulars required in various annexures.

1.4 EARNEST MONEY DEPOSIT (EMD):

1.4.1 Every tender Must be accompanied by the prescribed amount of Earnest Money Deposit in any one of the following forms:

1.4.1.1 Cash deposit as permissible under the extant Income Tax Act (Before tender opening)

1.4.1.2 Electronic Fund Transfer credited in Bharat Heavy Electricals Limited, PSSR SAS' account (before tender opening). RTGS details of BHEL-PSSR SAS is available in tender.

1.4.1.3 Banker's Cheque/Pay Order/Demand Draft payable at Secunderabad duly pledged in Favour of Bharat Heavy Electricals Limited,Secunderabad (along with offer).

1.4.1.4 Fixed Deposit Receipt (FDR) issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL).

1.4.1.5 Any other mode as per latest guidelines issued by Govt. of India.

1.4.1.6 In addition to above, the EMD amount in excess of Rs. 2 Lakh may also be accepted in the form of Bank Guarantee from scheduled bank. The Bank Guarantee in such cases shall be valid for atleast six months.

1.4.1.7 Parties/bidders who have submitted/submits One Time EMD (OEMD) in this Power Sector Region (i.e. BHEL-PSSR) for Service After Sales (SAS) a sum of amount Rs. 5,00,000/- (Rupees Five Lakh only) are exempted from payment of E.M.D. on each such tender in that unit on case to case basis.

1.4.2 Tenders received without Earnest Money in full in the manner prescribed above are liable to be rejected. EMD shall not carry any interest.

1.4.3 The Earnest Money Deposit of the successful tenderer will be retained as part of Security Deposit.

1.4.4 EMD given by all unsuccessful tenderers shall be refunded normally within 15 days of award of work.

1.4.5 BHEL reserves the right of forfeiture of Earnest Money Deposit submitted by the tenderer if:-

a) After opening the tender and within the offer validity period, the tenderer revokes his tender or makes any modification in his tender which is not acceptable to BHEL.

b) The Contractor fails to deposit the required Security Deposit or commence the work within the period as per LOI/Contract.

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

1.5 **Authorisation and Attestation**:

1.5.1 Tenders shall be signed by persons duly authorised/empowered to do so. Certified copies of such authority and relevant documents shall be submitted along with the tenders.

1.6 **Validity of Offer**:

The rates in the tender shall be kept open for acceptance for a minimum period of six months from the due date of opening of tenders. If a tenderer withdraws or revokes his tender or increases the tender rates and/or conditions for any item within the aforesaid period, his Earnest Money Deposit is liable to be forfeited. In case the Bharat Heavy Electricals Limited calls for negotiations, such negotiation shall not amount to cancellation or withdrawal of the original offer which shall be binding on the tenderers.

1.7 **Execution of Contract**:

The successful tender's responsibility under this contract commences from the date of issue of the Letter of Intent by Bharat Heavy Electricals Limited.

1.8 **Security Deposit (SD)**:

1.8.1 Security Deposit means the security provided by the contractor towards fulfilment of any obligations in terms of the provisions of the contract. Upon acceptance of tender, the successful tenderer within the time specified in the Letter of Intent must deposit the required amount towards Security Deposit before start of the work. The Security Deposit shall not carry any interest.

1.8.2 The total amount of Security Deposit will be 5% (Five percent) of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.

1.8.3 If the value of the work done at any time exceeds the accepted agreement value, the Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall immediately be deposited by the contractor or recovered from payments due to the contractor.

1.8.4 Regarding adjustment of Earnest Money Deposit towards part of Security Deposit, refer clause 1.8.2 above, the successful tenderer shall not commence any work under the contract before remitting the Security Deposit except as directed by BHEL.

1.8.5 Failure to deposit the Security within the stipulated time may lead to forfeiture of Earnest Money and cancellation of the award of work.

1.8.6 The balance amount to make up the required Security Deposit of 5% of the contract value may be furnished in any one of the following forms:

i) Cash (as permissible under the Income Tax Act)

ii) Local cheques of scheduled banks (subject to realization)/Pay Order/Demand Draft/Electronic Fund Transfer credited in Bharat Heavy Electricals Limited, PS-SR' account.

iii) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL. Bank Guarantee for S.D. must be posted by the Bank by registered post directly to us, and it should not be submitted by the bidder directly to us.

iv) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the contractor, A/C BHEL).

v) Securities available from Indian Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/hypothecated/ pledged, as applicable, in favour of BHEL).

vi) Any other mode as per latest guidelines issued by Govt. of India.

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.

1.8.7 Collection of Security Deposit:

1.8.7.1 At least 50% of the required Security Deposit, including EMD, should be collected before start of work. Balance of the Security Deposit can be collected by deducting 10% of the gross amount progressively from each of the running bills of the contractor till the amount of the required Security Deposit is collected.

1.8.7.2 If the value of the work done at any time exceeds the accepted agreement value, the Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall immediately be deposited by the contractor or recovered from payments due to the contractor.

1.8.7.3 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, subject to approval of BHEL.

1.8.7.4 Security Deposit should cover up to the period of guarantee also.
(Note: In case of SAS jobs, work can be started before the required Security Deposit is collected. However, payment can be released only after collection/ recovery of initial 50% Security Deposit).

1.8.8 BHEL reserves the right of forfeiture of Security Deposit in addition to other claim and penalties in the event of the contractor's failure to fulfil any of the contractual obligations including statutory or in the event of termination of contract as per terms and conditions of contract.

1.8.9 Return of Security Deposit:

If the contractor duly performs and completes the contract in all respects to the entire satisfaction of BHEL, and presents an absolute "No Demand Certificate" in the prescribed form and return properties belonging to BHEL handed over, lent or hired by him for carrying out the said works the security deposit will be released to the contractor after deducting all costs or expenses or other contracts entered into with the contractor, only after the satisfactory completion of guarantee period as per clause 2.12.

1.8.10 No interest shall be payable by BHEL on Earnest Money / Security Deposit or any money due to the contractor from BHEL.

1.8.11 In no case Security Deposit can be released before settling all claims under this contract.

1.9 **Rejection of Tender and other conditions**:

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

a) to reject any or all of the tenders.

b) To split up the work amongst two or more tenderers.

c) To award the work in part.

d) Either of the contingencies stated in (b) and (c) to modify the time for completion suitably.

e) To modify the scope of work after mutual agreement.

1.9.2 Conditional and unwitnessed tenders:

Tenders containing absurd or unworkable rates and amounts and tenders which are incomplete and otherwise considered defective and tenders not in accordance with the tender conditions, specifications etc. are liable to be rejected.

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

1.9.4 BHEL will not be bound by any Power of Attorney granted by the tenderer or by changes in the compositions of the firm made subsequent to the execution of the contract. They may, however, recognise such

power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.

1.9.5 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.

1.9.6 Canvassing in any form in connection with the tenders is strictly prohibited and the tenders submitted by the contractor who resort to canvassing are liable to rejection.

1.9.7 Should a tenderer or contractor or in the case of a firm or Company of Contractors one or more of its Partners/shareholders/Directors have a relation or relations employed in the capacity of an officer of BHEL, the authority inviting tender shall be informed of the fact 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.

1.9.8 The successful tenderer should not sub-contract the part or complete work detailed in this tender specification undertaken by him without permission of BHEL. The tenderer is solely responsible to BHEL for the work awarded to him. Any deviation in this regard will entail termination of such contract by BHEL at the risk and responsibility of contractor.

1.9.9 The successful tenderer shall inform /keep BHEL informed if he has already undertaken any work/is likely to be awarded any job with the same customer with whom BHEL is entering into contract.

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SECTION – II
GENERAL TERMS & CONDITIONS OF THE CONTRACT

2.1 **Definition**:

The following terms and expressions shall have the meaning hereby assigned to them except where they context otherwise requires:

2.1.1 'BHEL' (or B.H.E. Ltd.) shall mean Bharat Heavy Electricals Limited, a company registered under Indian Companies Act., 1956, with its Registered Office at BHEL House, SIRI FORT, NEW DELHI-110049 and SAS Office address Power Sector Southern Regoin-Services After Sales, EK Tara Building, 39 SD Road, Secunderabad – 500003 or its Administrative officers or its site Engineer or the employees authorised to deal with any matters with which these persons are concerned on its behalf.

2.1.2 "GENERAL MANAGER"/DEPUTY IN CHARGE" shall mean the Officer in Administrative charge of BHEL, PS-SR, SAS – Services, Secunderabad.

2.1.3 "ENGINEER" or "ENGINEER IN CHARGE" shall mean Engineer deputed by BHEL. The terms include "SITE ENGINEER", "RESIDENT ENGINEER" and "ASSISTANT SITE ENGINEER" of BHEL at the site as well as the officers in-charge at SAS Secunderabad office.

2.1.4 "SITE" shall mean the place or places at which the plants/equipment are to be overhauled and services are to be performed as per the specification of this contract.

2.1.5 "CLIENTS OF BHEL" or "CUSTOMER" shall mean the Project authorities to whom BHEL is supplying the equipment/services.

2.1.6 "CONTRACTOR" shall mean the individual, firm or company who enters into this contract with BHEL and shall include their executors, administrators, successors and permitted assigns.

2.1.7 "CONTRACT" or "CONTRACT DOCUMENT" shall mean and include the agreement or work order, the accepted appendices of rates, schedule of quantities, if any and general condition of contract, the special conditioning of contract instructions of the tenderers, the drawings, the specifications, the special specification, if any, the tender specifications, the special specification, if any, the tender documents and the Letter of Intent/Accepting Letter issued by BHEL. Any conditions or terms stipulated by the contractor in the tender documents or supporting letters shall not form part of the contract unless specifically accepted in writing by BHEL and incorporated in the agreement.

2.1.8 "GENERAL CONDITIONS OF CONTRACT" shall mean the instructions to tenderers and general conditions of contract pertaining to the work detailed.

2.1.9 "TENDER SPECIFICATION" shall mean the "Specific Conditions, technical specifications, appendices, site information and drawings, "pertaining to the work for which the tenderers are required to submit their offer. Also this will include the specifications detailed in NIT of client of BHEL for overhauling, erection, testing and commissioning of plant. Individual specification no. will be assigned to each tender specification.

2.1.10 "TENDER DOCUMENTS" shall mean the General conditions of contract (2.1.8) and tender specification (2.1.9)

2.1.11 "LETTER OF INTENT" shall mean the intimation by a letter to the tenderer that the tender has been accepted in accordance with provisions contained in that letters. The responsibility of the contractor commences from the date of issue of this letter and all the terms and conditions of contract are applicable from this date.

2.1.12 "COMPLETION TIME" shall mean the period by date specified in the acceptance of tender for handing over the overhauled equipment/plant which are found acceptable by the engineer being of required standard and conforming to the specification of the contract or recommissioning of the machine Successfully whichever is later. Completion time will be reckoned from the date of LOI with the period for mobilisation as prided with LOI, added to the same.

2.1.13 "PLANT" shall mean and connote the entire assembly of the plant and equipments covered by the contract.

2.1.14 "EQUIPMENT" shall mean all equipments, machineries, materials, structurals, electricals and other components of the plant covered by the contract.

2.1.15 "TESTS" shall mean and include such test or tests to be carried out on the part of the contractor as are prescribed in the contract or considered necessary by BHEL, in order to ascertain the quality workmanship, performance and efficiency of the contract work or part thereof.

2.1.16 "APPROVED" "DIRECTED" or "INSTRUCTED" shall mean approved, directed or instructed by BHEL.

2.1.17 "WORK OR CONTRACT WORK" shall mean and include supply of all categories of labour, specified consumables, tools and tackles required for complete and satisfactory site Transportation, handling, stacking, storing, overhauling erection, testing and commissioning of the equipment to the entire satisfaction of BHEL.

2.1.18 "SINGULAR AND PLURAL ETC" words carrying singular number shall also include plural and vice versa, where the context so requires, words importing the masculine gender shall be taken to include any company or Association or body of individuals, whether incorporated or not.

2.1.19 "HEADINGS" The Leadings in these general conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken into consideration in interpretation or construction thereof or of the contract.

2.1.20 'MONTH" shall mean calendar month.

2.1.21 "WRITING" shall include any manuscript, type written or printed statement under the signature or seal as the case may be.

2.2 **Law governing the contract and Court Jurisdiction**:

The contract shall be governing by the Law for the time being in force in the Republic of India. The Civil Court having ordinary original civil jurisdiction, Hyderabad shall alone have exclusive Jurisdiction in regard to all claims in respective of this contract.

2.3 **Issue of Notice**:

The contractor shall furnish to the BHEL Engineer the name, designation and address of his authorised agent and all complaints, notices, communications and reference shall be deemed to have been duly given to the contractor if delivered to the contractor or his authorised agent or left at or posted to the address either of the contractor or of his representative and shall be deemed to have been so given in the case of posting on the day on which they would have reached such address in the ordinary course of past or on which they were so delivered or left.

2.4 **Use of Land**:

No land belonging to BHEL or their customer, under temporary possession of BHEL shall be occupied by the contractor without the written permission of BHEL.

2.5 **Commencement of Work**:

2.5.1 The contractor shall commence the work within the time indicated in the Letter of Intent from BHEL and shall proceed with the same with due expedition without delay. For computing the scheduled completion date, commencement of work will be reckoned from the date of complete mobilisation as per LOI, unless specifically amended by Head (Services), BHEL, PSSR SAS.

2.5.2 If the successful tenderer fails to start the work within the stipulated time, BHEL as its discretion will have the right to cancel the contract. His Earnest Money and / or Security Deposit with BHEL will stand forfeited without any further reference to him, without prejudice to any and all of BHEL's other rights and remedies in this regard.

2.5.3 All the works shall be carried out under the direction and to the satisfaction of BHEL.

2.5.4 The erected overhauled plant or work performed under the contract shall be taken over when it has been completed in all respects and or satisfactorily put into operation at site.

2.6 **Mode of payment and measurement of the work completed**.

2.6.1 "All payment due to the contractor shall be paid only by Account payee Cheques" or through NEFT.

2.6.2 The contractor shall present his bill on the format prescribed by BHEL for every payment. After verification of such bills by BHEL, all items having financial value shall be entered and certified in BHEL Measurement Book by BHEL Engineer and the bills prepared based on the same and connected technical documents which form part of this tender specification.

2.6.3 Lump sum omission will be entered for deduction. Measurement shall be restricted to that for which it is required to ascertain the financial liability of BHEL under this Contract.

2.6.4 Work which is to be measured in details shall be measured as per standard procedure without reference to any local procedures excepting where it is otherwise stated in the tender documents. The measurement shall be taken jointly by person duly authorised on the part of BHEL and by the contractor.

2.6.5 If, at any time due to reason whatsoever, it becomes necessary to remeasure the work done in full or in part, the expenses towards such remeasurement shall be borne by the contractor.

2.6.6 The contractor shall bear the expenditure involved, if any in making the measurement. The Contractor shall, without extra charges, provide all the assistance with appliances and other things necessary for measurement.

2.6.7 The measurement entered in the Measurement Books and the bills prepared shall be signed with dates by both the contracting parties.

2.6.8 The Contractor will be intimated in writing by the site Engineer, the proposed date of measurement. If the contractor, representative fails to participate in the joint measurement, the BHEL engineer shall have the power to proceed by himself to take measurement in which case the measurement shall be accepted by the contractor as final.

2.6.9 Passing of measurement as per bills does not amount to acceptance of the completion of work mentioned. Any left out work has to be completed if pointed out by BHEL at a later date.

2.7 **Rights of BHEL**:

2.7.1 To withdraw any portion of work and/or to restrict / alter the quantum of work as indicated in the contract during the progress of work and get it done through other agency and/or by departmental labour to suit BHEL's commitment to its customer or in case BHEL decides to advance

the date of completion due to other emergency reasons / BHEL's obligation to its customer.

2.7.2 To terminate the contract or withdraw portion of work and get it done through other agency, at the risk and cost of the contractor after due notice of a period of 14 days' by BHEL in any of the following cases:

i) Contractor's poor progress of the work vis-à-vis execution timeline as stipulated in the Contract, backlog attributable to contractor including unexecuted portion of work does not appear to be executable within balance available (#) period considering its performance of execution.

ii) Withdrawal from or abandonment of the work by contractor before completion of the work as per contract.

iii) Non-completion of work by the Contractor within scheduled completion period as per Contract or as extended from time to time, for the reasons attributable to the contractor.

iv) Termination of Contract on account of any other reason (s) attributable to Contractor.

v) Assignment, transfer, subletting of Contract without BHEL's written permission.

vi) Non-compliance to any contractual condition or any other default attributable to Contractor.

(#) In-case inputs from BHEL/Customer are likely to be delayed or are actually delayed, this delay may also be taken into account while considering balance period available for execution of Contract.

Risk & Cost Amount against Balance Work:

Risk & Cost amount against balance work shall be calculated as follows:

Risk & Cost Amount= [(A-B) + (A x H/100)]

Where,

A= Value of Balance scope of Work (*) as per rates of new contract

B= Value of Balance scope of Work (*) as per rates of old contract being paid to the contractor at the time of termination of contract i.e. inclusive of PVC, if any.

H = Overhead Factor to be taken as 5

In case (A-B) is less than 0 (zero), value of (A-B) shall be taken as 0 (zero).

(*) Balance scope of work (in case of termination of contract):

Difference of Contract Quantities and Executed Quantities as on the date of issue of Letter for 'Termination of Contract', shall be taken as balance scope of Work for calculating risk & cost amount. Contract quantities are the quantities as per original contract. If, Contract has been amended, quantities as per amended Contract shall be considered as Contract Quantities.

Items for which total quantities to be executed have exceeded the Contract Quantities based on drawings issued to contractor from time to time till issue of Termination letter, then for these items total Quantities as per issued drawings would be deemed to be contract quantities.

Substitute/ extra items whose rates have already been approved would form part of contract quantities for this purpose. Substitute/ extra items which have been executed but rates have not been approved, would also form part of contract quantities for this purpose and rates of such items shall be determined in line with contractual provisions.

However, increase in quantities on account of additional scope in new tender shall not be considered for this purpose.

NOTE: In-case portion of work is being withdrawn at risk & cost of contractor instead of termination of contract, contract quantities pertaining to portion of work withdrawn shall be considered as 'Balance scope of work' for calculating Risk & Cost amount.

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

LD against delay in executed work shall be calculated in line with LD clause as per GCC/SCC/TCC/Special note/any other annexure of tender document (in compliance with order of precedence), 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

iv) Delay in executed work attributable to contractor i.e. T2=[1-(X/Y)] x T1

v) LD shall be calculated in line with LD clause [as per GCC/SCC/TCC/Special note/any other annexure of tender document (in compliance with order of precedence)] of the Contract for the delay attributable to contractor taking "X" as Contract Value and "T2" as period of delay attributable to contractor.

2.7.3 Recoveries arising out of Risk & Cost and LD or any other recoveries due from Contractor

Following sequence shall be applicable for recoveries from contractor:

a) Dues available in the form of Bills payable to contractor, SD, BGs against the same contract.

b) Demand notice for deposit of balance recovery amount shall be sent to contractor, if funds are insufficient to effect complete recovery against dues indicated in (a) above.

c) If contractor fails to deposit the balance amount to be recovered within the period as prescribed in demand notice, following action shall be taken for balance recovery:

i) Dues payable to contractor against other contracts in the same Region shall be considered for recovery.

ii) If recovery cannot be made out of dues payable to the contractor as above, balance amount to be recovered, shall be informed to other Regions/Units for making recovery from the Unpaid Bills/Running Bills/SD/BGs/Final Bills of contractor.

iii) In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against contractor.

2.7.4 To terminate the contract or to restrict the quantum of work and pay for the portion of work executed in case BHEL's contract with their customers are terminated for any reason.

2.7.5 While every endeavour will be made by BHEL they cannot guarantee uninterrupted work due to conditions beyond their control. Contractor will not be entitled to any compensation / extra payment on this account.

2.7.6 Short closure of contract

In the unforeseen event of inordinate delay in receipt of materials, drawings, fronts, etc, due to which inordinate discontinuity of work is anticipated, BHEL at its discretion may consider contractor's request to short close the contract in following cases:

a) The balance works (including but not limited to successful commissioning 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 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 successful commissioning etc.) as mutually agreed, shall however be reduced from the final contract value.

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

2.8 **Responsibilities of the Contractor**:

The following are the responsibilities of the contractor in respect of observation of local laws, employment of personnel, payment of taxes and execution of job etc.

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

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

2.8.3 The contractor shall comply with all state and central Laws, Statutory Rules, Regulations etc., such as:

The payment of wages Act, Minimum Wage Act, Workmen compensation Act, Employers Liability Act, Industrial Disputes Act, Employees Provident Fund Scheme,Employees Insurance Scheme, Contract Labour (Regulation & Abolition) Act 1970 and other Acts, Rules & Regulations

for labour as may be enacted by the Government during the tenure of the Contract and having force or jurisdiction at site. The Contractor shall give to the local Governing Body, Police and other relevant authorities all such notices as may be required by law.

2.8.4 The Contractor shall pay all taxes, fees, licence charges, deposits duties, tolls, royalty, commission or other charges which may be leviable on

account of any of his operations in executing the contract. In case, BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from the contractor either from his bills or otherwise as deemed fit.

2.8.5 The Contractor shall be responsible for provision of health and sanitary arrangements, more particularly described in contract Labour (Regulation & Abolition Act) safety precautions etc., as may be required of same and satisfactory execution of the contract.

2.8.6 The contractor shall fulfil all his obligation in respect of accommodation including proper medical facilities for the personnel employed by him.

2.8.7 The contractor shall be responsible for the proper behaviour at site and observance of all regulations by the staff employed by him.

2.8.8 The Contractor shall ensure that no damage is caused to any person / property of other parties working at site. If any such damages is caused, it is the responsibility of the contactor to make the losses or compensate for the same.

2.8.9 All the properties / equipments / components of BHEL / their client loaned with or without deposit to the contractor in connection with the contract shall remain the properties of BHEL / their client. The Contractor shall use such properties for the purpose of execution of this contract. All such properties / equipment / components shall be deemed to be in good condition when received by the contractor unless he notified within 48 hours to the contrary. The Contractor shall return them in good conditions as and when required by BHEL / their client. In case of case of non-return, loss damage, repairs, etc. the cost thereof, as may be fixed by the site Engineer, will be recovered from the contractor.

2.8.10 It is not obligatory on the part of BHEL to supply any tools and tackles or other materials other than those specifically agreed to do so by BHEL. However, depending upon the availability / possibility BHEL's customers' handling equipment and other plants may be made available to the contractor on payment of the hire charges / free of charges as fixed, subject to the condition laid down by BHEL & Customer from time to time, Unless paid in advance, such hire charges if applicable shall be recovered from contractor's bill / security Deposit in one instalment.

2.8.11 The contractor shall not claim any compensation of the scope of the work, due to changes in design which curtails quantum.

2.8.12 The Contractor shall fully indemnify BHEL against all claims of whatsoever nature arising during the course of erection / overhauling / performing work under the contract.

2.8.13 In case the contractor is required to undertake any major work outside the scope of this contract the rates payable shall be decided by BHEL Resident Engineer.

2.8.14 The contractor shall keep the area of work clean and shall remove debris etc., while executing day to day work. Upon completion of work, the contractor shall remove from the vicinity of work, all scrap, packing materials, rubbish, unused and other materials and deposit them in places to be specified by the BHEL Engineer. The contractor will also demolish all hutments, sheds, partitions, offices, constructed and used by him and shall clean the debris. In the event of his failure to do so, the same will be arranged to be removed by the BHEL. The expenses thereof will be recovered from contractor.

2.8.15 The contractor shall arrange and co-ordinate his work in such a manner as to cause no inconvenience to other agencies working in the area.

2.8.16 All safety rules and codes applied by the client / BHEL at site shall be observed by the contractor without exception. The contractor shall be responsible for the safety of the equipment / material and work to be performed by him and shall maintain all light, fencing guards, signs etc. or other protection necessary for the purpose. Contractor shall also take such additional precautions as may be indicated from time to time by the Engineer with a view to prevent pilferage, accidents, fire hazards and atmospheric conditions. Suitable number of electrical staff, watch and ward, store keepers to take care of the equipment, materials and construction tools and tackles, shall be posted at site by the contractor till completion of the work under this contract. The contractor shall arrange for such safety devices as are necessary for such type of work and carry out the requisite tests of handling equipment, lifting tools, tackles etc., as per prescribed standards and practices.

2.8.17 The contractor will be directly responsible for payment of wages to his workmen. A pay roll sheet giving all the payments given to workers and duly signed by the contractor's representative should be furnished to BHEL site office for record purpose. BHEL site In-charge may be intimated the date of disbursement of wages to the workmen engaged for the work, so that his representative can witness the same.

2.8.18 The intent of specification, is to provide services according to most modern and proven techniques and codes. The omission of specific reference to any method, requirement or material necessary for the proper and efficient performance of work shall not relieve the contractor of the responsibility of providing such facilities to complete the work.

2.8.19 In case of any clause of the work for which there is no such specification as laid down in the contract, such work shall be carried out in

accordance with the instructions and requirements of the BHEL Engineer.

2.8.20 No levy or payment or charge made or imposed shall be impeached by reason of any clerical error or by reason of any mistake in the amount levied or demanded or charged.

2.8.21 The details drawings, specifications, instructions manual, if any available with the BHEL Engineer will form part of tender specification. These documents will be made available for reference only to the contactor during execution of work.

2.8.22 Should any error or ambiguity be discovered in the specification or information, the contractor shall forthwith bring the same to the notice of BHEL before commencement of work. BHEL's interpretation in such cases shall be final and binding on the contractor.

2.8.23 No idle labour charges will be admissible in the event of any stoppage caused in the work resulting in contractor's labour being rendered idle due to any cause of any type.

2.8.24 No overrun charges shall be paid in the event of the completion period being extended for any reason whatsoever.

2.8.25 It is possible that some repair/rectification, modification may be needed on the equipments to be overhauled / work to be performed under this specification, for reasons not attributions to the contractor. All such repair / rectification / modification work which can be done, with the available facilities at site shall be carried out by the contractor free of cost and no extra charges shall be paid to contractor.

2.8.26 The quality and progress of work will be regularly reviewed. The schedule and progress of work will be given to the contractor in advance and it will be the obligation / responsibility of the contractor to achieve the desired quality and progress of work by suitably reinforcing their labour force and/or by working extra hours or in more than one shift without any extra cost. Workmen found unsuitable for the work will be replaced immediately by the contractor on being informed by BHEL.

2.8.27 During the overhauling work under the contract it is very essential that proper and adequate inspection should made constantly to maintain the quality or workmanship so that any deviation from design dimension does not exceed permissible limits. The proper functioning of the unit, while in operation, depends to a great extent on the above factors. The fact that effective supervision and inspection at the execution stage is less costly than any down time of running unit even for a short period need not be over emphasized. For the details regarding alignment and permissible dimensional deviations in the sub-assembles BHEL Engineer may be consulted.

2.8.28 The contractor shall furnish daily labour report showing by classification of number of employees engaged in various categories or work date wise and submit a progress report of work as required by BHEL Engineer.

2.8.29 The contractor shall execute the work in the most substantial and workmen-like manner in stipulated time. Accuracy of work and timely execution are the essence of this contract. The contractor shall be responsible to ensure that the assembly and workmanship conform to the dimensions and clearances given in the drawings and/or as per instructions of BHEL Engineers.

2.8.30 The contractor shall take all responsible care to protect the materials and work till such time the plant/equipment has been taken over by BHEL / their client. Where necessary, suitable temporary fencing and lighting shall have to be provided by the contractor as a safety measure against accident and damage of property of BHEL. Suitable caution notice shall be displayed where access to any part may be deemed to be unsafe and hazardous.

2.8.31 It will be the responsibility of the contractor to ensure safe lifting of the equipments taking due precautions to avoid any accidents and damage to other equipments and personnel.

2.9 **Insurance**:

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

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

2.9.3 If due to negligence and /or non-observations of safety and other precautions, any accident / injury occurs to any other person/public, the Contractor shall have to pay necessary compensation and other expenses, if so decided by the appropriate authorities. Third party insurance coverage is to be made by the contractor.

2.9.4 If due to contractor's carelessness, negligence or non-observance of safety precautions damage to BHEL's /Customer's property and personnel should occur, and if BHEL is unable to recover, in full, cost from the Insurance Company, the balance will be recovered from the Contractor.

2.10 **Strikes & Lockouts** :

The contractor will be fully responsible for all the disputes and other issues connected with his labour. In the event of the contractor's labour resorting to strike or the lockout declared is not settled within a period of one week BHEL shall have the right to get the work executed employing the own labour or through any other agencies or both and the cost so incurred by BHEL, shall be deducted from the contractor's bills as per clause 2.7. For all purposes whatsoever, the employees of the contractor shall not be deemed to be in the employment of BHEL.

2.11 **Force Majeure** :

2.11.1 The following shall amount to Force Majeure:

Acts of God, Acts of any Government, war, sabotage, riots, civil commotion, police action, revolution, flood, fire, cyclones, earthquake and epidemic and other similar causes over which the contractor has no control.

2.11.2 If the contractor suffers delay in the due execution of the contractual obligation due to delays caused by Force Majeure as defined above, the agreed time of completion of the job covered by this contract or the obligations of the Contractor shall be extended by a period of time equal to the period of delay provided that on the occurrence of any such contingency the Contractor immediately reports to BHEL in writing the causes of delay and the contractor shall not be eligible for any compensation.

2.12 Performance Guarantee:

Even though the work will be carried out under supervision of BHEL Engineers. The contractor shall guarantee against defects attributable to faulty workmanship or procedure adopted in the overhaul for items covered in the contract for a period of six months from the date of re-commissioning of the set after the capital overhaul. The guarantee should cover all defects notified during this period and shall have to be attended to free of cost immediately or at the time our clients are able to give shut down of the set for the required period. when necessary. In case of failure of contractor to attend to such defects as and when required in time, BHEL shall arrange to attend the defects and the charges shall be levied to contractor's account and shall be recoverable from the security deposit / progressive payments.

2.13 **ARBITRATION & CONCILIATION**:

2.13.1 <u>ARBITRATION</u>:

2.13.1.1 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 2.13.2 herein below 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, commence arbitration in respect of such Dispute by issuance of a notice in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice'). The Notice shall contain the particulars of all claims to be referred to arbitration in sufficient detail and shall also indicate the monetary amount of such claim. The arbitration shall be conducted by a sole arbitrator to be appointed by the Head of the BHEL Power Sector Southern Region issuing the Contract within 60 days of receipt of the complete Notice. The language of arbitration shall be English.

The Arbitrator shall pass a reasoned award.

Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder as in force from time to time shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be Hyderabad (the place from where the contract is Issued). The Contract shall be governed by and be construed as per provisions of the laws of India. Subject to this provision 2.13.1.1 regarding ARBITRATION, the principal civil court exercising ordinary civil jurisdiction over the area where the seat of arbitration is located shall have exclusive jurisdiction over any DISPUTE to the exclusion of any other court.

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

In the event of any dispute or difference relating to the interpretation and application of the provisions of 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. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018 as amended from time to time.

2.13.1.3 The cost of arbitration shall initially be borne equally by the Parties subject to the final allocation thereof as per the award/order passed by the Arbitrator.

2.13.1.4 Notwithstanding the existence of any dispute or differences and/or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner unless the dispute inter-alia relates to cancellation, termination or short-closure of the Contract by BHEL.

2.13.2 CONCILIATION:

If at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation effect, interpretation or breach of the agreement, contract), which the Parties are unable to settle mutually, arise inter-se the Parties, the same may, be referred by either party to Conciliation to be conducted through Independent Experts Committee (IEC) to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators.

Notes:

1. *No serving or a retired employee of BHEL/Administrative Ministry of BHEL shall be included in the BHEL Panel of Conciliators.*
2. *Any other person(s) can be appointed as Conciliator(s) who is/are mutually agreeable to both the parties from outside the BHEL Panel of Conciliators.*

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 2.3 : "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com). The Procedure 2.3: "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com) together with its Formats (as available in www.bhel.com) will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in this GCC.

The Contractor hereby agrees that BHEL may make any amendments or modifications to the provisions stipulated in the Procedure 2.3 : "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com) from time to time and confirms that it shall be bound by such amended or modified provisions of the Procedure 2.3 : "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com) with effect from the date as intimated by BHEL to it.

2.14 **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.

2.15 PRICE VARIATION COMPENSATION

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

2.15.1.1 PVC shall be applicable only if execution of works starts after contract validity period mentioned in the original work order or LOI, if any, subject to other conditions as described in this section. However, date of start of work to be reckoned as the date of mobilization intimated by BHEL to vendor. In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor.

2.15.1.2 If the work starts within the contract validity period of original work order or LOI, the contract validity period will get extended automatically till completion of works and no PVC shall be applicable.

2.15.1.3 In case of demobilization of vendor, due to reasons not attributable to vendor, PVC shall be applicable for balance portion of works after remobilization provided there is a gap of minimum two months between demobilization and remobilization and work period of balance portion of works falls beyond contract validity period original work order or LOI. In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor.

2.15.2 85% component of executed Contract Value shall be considered for PVC calculations and remaining 15% shall be treated as fixed component. The basis for calculation of price variation in each category, their component, Base Index, shall be as under:

Sl. No.	CATEGORY	BASE INDEX	PERCENTAGE COMPONENT ('K')				
			CIVIL PACKAGES (See Note A/B/C)			MECHA NICAL PACKA GES	Electrical, C&I, Material Management / Handling and other labour oriented packages
			A	**B****	**C**		
i)	LABOUR (ALL CATEGORIES)	'MONTHLY ALL-INDIA AVERAGE CONSUMER PRICE INDEX NUMBERS FOR INDUSTRIAL WORKERS' published by Labour Bureau, Ministry of Labour and Employment, Government of India. (Website: labourbureau.nic.in)	**40**	**25**	**30**	**65**	**80**
ii)	HIGH SPEED DIESEL OIL	Name of Commodity: HSD Commodity code: 1202000005 (**See Note E**)	**5**	**3**	**5**	**5**	**5**
iii)	WELDING ROD	Name of Commodity: MANUFACTURE OF BASIC METALS Commodity code:1314000000 (**See Note E**)				**15**	
iv)	CEMENT	Name of Commodity: ORDINARY PORTLAND CEMENT Commodity code: 1313050003 (**See Note E**)		**20**	**30**		
v)	STEEL (Structural and Reinforcement Steel)	Name of Commodity: MILD STEEL: LONG PRODUCTS Commodity code: 1314040000 (**See Note E**)		**25**			
vi)	ALL OTHER MATERIALS (Other than Cement & Steel)	Name of Commodity: ALL COMMODITIES Commodity code: 1000000000 (**See Note E**)	**40**	**12**	**20**		

Note:

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

B) Cement & Steel: In Contractor Scope

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

D) For Composite packages (i.e. Civil + Mechanical + Electrical and / or CI or Civil +Mechanical or Mechanical + Electrical and / or CI), the Component ('K') for various categories shall be as per respective packages as above

E) As per the 'MONTHLY WHOLE SALE PRICE INDEX' for the respective Commodity and Type, published by Office of Economic Adviser, Ministry of Commerce and Industry, Government of India. (Website: http://www.eaindustry.nic.in/download data 0405.asp). Revisions in the index or commodity will be re adjusted accordingly.

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

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

Where

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

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

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

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

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

2.15.4 Base date shall be the date of calendar month of expiry date of contract validity as per Letter of Intent or work order.

2.15.5 PVC shall not be payable for the Supplementary / Additional Items, Extra works. However, PVC will be payable for items executed under quantity variation of BOQ items under originally awarded contract.

2.15.6 The contractor shall furnish necessary monthly bulletins in support of the requisite indices from the relevant websites along with his Bills.

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

2.15.8 PVC shall be applicable only, during extended period of contract (if any) after the scheduled completion period and for the portion of work delayed/backlog for the reasons not attributable to the contractor.

However, the total Quantum of Price Variation Amount payable/recoverable shall be regulated as follows:

i) For the portion of shortfall/backlog not attributable to contractor, PVC shall be worked out on the basis of indices applicable for the respective month in which work is done. Base index shall be applicable as defined in clause 2.15.4

ii) In case of Force Majeure, the PVC shall be regulated as per (a) or (b) below.

a) Force Majeure is invoked before "Base Date" / "revised base date" (as explained below) OR immediately after "base date" / "revised base date" in continuation (i.e. during the period when PVC is not applicable):

1. Base date shall be revised: Revised Base date = Previous base date + duration of Force Majeure. No PVC will be applicable for the work done till revised base date.
2. PVC will be applicable for the work done after "base date"/" revised date" as the case may be (during extended period when delay is not attributable to contractor). PVC shall be worked out on the basis of indices applicable for the respective month in which work is done with base index as on "base date"/ "revised base date" as the case may be.

b) Force Majeure is invoked after "base date"/ "revised base date" as the case may be (during extended period when delay is not attributable to contractor).

1. PVC shall be applicable for the work done after revocation of Force Majeure.
2. PVC for the work done after revocation of Force Majeure shall be worked out on the basis of indices applicable for the respective month on which work is done excluding the effect of change in indices during total period of Force Majeure(s) invoked after "base date" / "revised base date" as the case may be. Base index shall be taken as on "base date" / "revised base date" as the case may be.

The total amount of PVC shall not exceed 15% of the cumulatively executed contract value.

Executed Contract value for this purpose is exclusive of PVC, Supplementary / Additional items and Extra works except items due to quantity variation.

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SECTION – III
SPECIAL CONDITIONS OF CONRACT

3.1 **Quantum of Work**:

3.1.1 The scope of work given in the tender specification is only approximate and is liable to variation and alternation at the discretion of BHEL Resident Engineer. No compensation on this account shall be payable to the contractor unless specifically recommended by BHEL Resident Engineer as the variation forming major additions to the original scope of work. All repair / rectification work arising out of normal wear and tear, seizure of parts etc. have to be done by the contractor and the same will be covered by the scope of work of the contract.

3.1.2 The scope of work details out the major activities only. However, as per the general maintenance requirement and site condition, certain related activities may have to be carried out without any extra cost.

3.2 **Commencement and completion of work** :

3.2.1 The starting time and completion time is the essence of the tender. As the time bound programme is firmly committed to customer, the starting time and completion time should be strictly adhered to. It will not be possible to grant extension in completion time except in extraordinary circumstance, which will be decided entirely at the discretion of BHEL Resident Engineer. Work should normally be carried out in two shifts and sometimes also in three shifts in consultation with BHEL Resident Engineer.

A detailed programme of the various activities covered under this contract with specific time period to fall in the overall frame work of the above dates should be prepared and got approved by BHEL Resident Engineer. The progress against this programme shall be reviewed with BHEL Resident Engineer at the end of each day and critical areas identified and suitable steps taken in time.

If during the review, at any stage of overhauling, BHEL Resident Engineer feels that the delays are not likely to be made up, BHEL reserves the right to take corrective steps as considered necessary by BHEL Resident Engineer to complete work in scheduled time and debit the cost incurred thereon to the contractor. This does not however absolve the contractor of his own efforts in consultation with BHEL Resident Engineer. Every endeavour will be made to see that work proceeds uninterruptedly.

3.2.2 The Contractor shall ensure completion of the job in all respects within the day from the date of commencement of work as given in contract.

3.3 **Penalty for delay**:

In the event of failure to complete the work in given time, an amount equal to ½% [half percent] of the contract value per day subject to a maximum of 10% [ten percent] of the contract value will be levied as penalty, in case the balance work is allowed to be completed by the contractor beyond the scheduled time of completion, which is at the discretion of BHEL. In case of delays on contractor's part, at any stage during the scheduled period or after, BHEL shall have the option of ensuring completion of the job by any other means at its disposal and the charges on this account shall be levied on the contractor. These shall be adjusted against contractor's bills or Security Deposit. Contract Value for this purpose, shall be the final executed value exclusive Extra Works executed on Manday rate basis, Supplementary / Additional Items and PVC.

In case of LD recovery, the applicable GST shall also be recovered from vendor.

3.4 **Terms of Payment**:

A minimum time of 30 days will be required for processing the bills and release of payment after the bills are presented to BHEL.

3.4.1 All payments are subjects to income tax TDS as per Central Government Laws. No request for advance payment will be entertained by BHEL.

3.5 **Inspection and Completion**:

The work being carried out by the contractor will be supervised and inspected by our Site Engineers under the overall supervision of BHEL Resident Engineer.

3.6 The work will be deemed as complete when it is finally accepted by BHEL Resident Engineer and job completion certificate is issued. No extra payment will be made for any rework carried out by the contractor to rectify any defective work.

3.6.1 The contractor shall not be entitled for labour idling charges under any circumstances.

3.6.2 Tools, Tackles, Test Equipments & Consumables:

All tools and tackles and consumables required for day-to-day work like gas and gas cutting sets with accessories, AC/DC welding sets, TIG welding kits, welding cables, electrodes, all necessary power connection at his own cost. However, in case of emergency, BHEL may supply certain items if available, to contractor at actual cost plus handling charges, these will be deducted from contractors' running bills, testing equipment for conducting various tests, during the progress of overhauling / re- commissioning shall have to be provided by the contractor. Spare parts going into permanent installation shall only be provided by BHEL.

3.7 **Accommodation for site staff and store space:**

3.7.1 Contractor has to arrange for the stores and office at site; space for the same shall be made available as per the availability at site. The contractor shall be responsible to provide all necessary facilities like residential accommodation with sanitary facilities, transport, electricity, water, medical bonus etc. as required under various labour laws and statutory rules and regulations framed thereunder to the personnel employed by him.

3.8 **Responsibilities of the contractor**:

3.8.1 Supervisory staff and labour:

The contractor shall employ, specially skilled labour, supervisor and engineers thoroughly conversant with particular type of work to ensure quality work. BHEL reserves the right to decide on the suitability of the workers and other staff employed by the contractor. BHEL reserves the right to insist on removal of any employees of the contractor at any time if they find him unsuitable and the contractor should forthwith remove him.

3.8.2 Planning and Execution:

Contractor shall submit a job planning in form of Bar Chart or PERT Chart. A List of manpower category wise, indicating individuals responsibility job activity wise, shall have to be submitted. Daily programme of job shall be displayed on board near work site on day in advance. A daily progress report along with Manpower utilities has to be submitted and backlog of the work, if any, shall be covered up in consultation with BHEL Resident Engineer.

3.8.3 Safety and Accident Coverage

Contractor shall ensure safety of all his employees at site of work. All employees shall be covered by insurance (workmen compensation) against accident, failing which proper action will be taken against the contractor. Contractor shall ensure proper safety of the equipments under overhauling by deputing personnel to guard the equipments round the clock. Open oil spaces, steam spaces shall be covered properly against ingress of foreign materials while working.

RESPONSIBLITIES OF THE CONTRACTOR IN RESPECT OF SAFETY OF MAN, EQUIPMENT, MATERIAL AND ENVIRONMENT

3.8.3.1 Before commencing the work, contractor shall submit a 'SAFETY PLAN" to the authorised BHEL official. The 'Safety Plan' shall indicate in detail the measures that would be taken by the contractor to ensure safety of men, equipment, material and environment during execution of the work. The plan shall take care to satisfy all requirements specified here under. The contractor shall submit safety plan along with his offer.

During negotiations before placing of work order and during execution of the contract, BHEL shall have right to review and suggest modifications in the safety Plan. Contractor shall abide by BHEL decision in this respect.

3.8.3.2 The contractor shall take all necessary safety precautions and arrange for appropriate appliances as per direction of BHEL or it's authorised officials to prevent loss of human lives, injuries to personnel engaged, and damage to property and environment.

3.8.3.3 The contractor shall provide to it's work force and ensure the use of the following personal protective equipment as found necessary and as directed by the authorised BHEL officials:

a. Safety Helmets conforming to IS-2925 : 1984
b. Safety Belts confirming to IS – 3521 : 1983
c. Safety shoes conforming to IS-1989 : 1978
d. Eye & Face Protection devices conforming to IS-8520 : 1987 and IS-8940 : 1978
e. Hand & body protection devices conforming to : IS – 2573: 1975
IS – 6994: 1973
IS – 8807: 1973
IS – 8513: 1977

3.8.3.4 All tools tackles, lifting appliances, material handling equipment scaffolds, cradles, safety nets, ladders, equipment etc. used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained before putting them to use and from time to time as instructed by authorised BHEL official who shall have the right to ban the use of any item.

3.8.3.5 All electrical equipment, connections and wiring for construction power, its distribution and use shall conform to the requirements of Indian Electricity Act & Rules. Only electricians licensed by the appropriate statutory authority shall be employed by the contractor to carry out all types of electrical works. All electrical appliance including portable electrical tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed.

3.8.3.6 The contractor shall not use any hand – lamp energised by electric power with supply voltage of more than 24 volts DC. For work in confined spaces, lighting shall be arranged with power source not more than 24 volts.

3.8.3.7 The contractor shall adopt all fire safety measures as laid down in the "Code for Fire Safety at Construction Sites' issued by the safety Department of the Construction Management (HQ) of BHEL and as per directions of the authorised BHEL official. A copy of the above referred

"Code for Fire Safety at Construction Sites" shall be made available by BHEL to the contractor for reference, on demand by the contractor, during tendering stage itself.

3.8.3.8 Where it become necessary to provide and / or store petroleum products, explosives, chemicals, and liquid or gaseous fuel or any other substance that may cause fire or explosion, the contractor shall be responsible for carrying out such provisions and / or storage in accordance with the rules and regulations laid down in the relevant government acts, such as Petroleum Act, Explosives Act, Petroleum & Carbides of Calcium Manual of the Chief Controller of Explosives, Govt. of India, etc. Prior approval of the authorised BHEL official at the site shall also be taken by the contractor in all such matters.

3.8.3.9 The contractor shall arrange at his cost (wherever not specified) appropriate illumination at all work spots for safe working, when natural daylight may not be adequate for clear visibility.

3.8.3.10 The contractor shall be held responsible for any violation of statutory regulations (local, state or central) and BHEL instructions, that may endanger safety of men, equipment, material and environment in his scope of work or another contractor's or agency's Cost of damage if any, to life and property arising out of such violation of statutory regulations and BHEL instructions shall be borne by the contractor.

3.8.3.11 In case of a fatal or disabling injury, accident to any person at construction site due to lapses by the contractor, the victim and / or his / her dependents shall be compensated by the contractor as per statutory requirements. However, if considered necessary, BHEL shall have the right to impose appropriate financial penalty on the contractor and recover the same from payments due to the contractor for suitably compensating the victim and / or his/her dependents. Before imposing any such penalty, appropriate enquiry shall be held by BHEL giving opportunity to the contractor to present his case.

3.8.3.12 In case of any damage to property due to lapses by the contractor, BHEL shall have the right to recover cost of such damages from payments due to the contractor after holding an appropriate enquiry.

3.8.3.13 In case of any delay in the completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have right to recover cost of such delay from payments due to the contractor, after notifying the contractor suitably and giving him opportunity to present his case.

3.8.3.14 If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given a reasonable opportunity to do so, and/or if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to

carry out instructions regarding safety issued by the authorised BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor after giving a notice of not less than seven days indicating the steps that would be taken by BHEL.

3.8.3.15 The contractor shall submit report of the accidents, fires and property damage, dangerous occurrences, to the authorised BHEL official immediately after such occurrence, but in any case not later than twelve hours of the occurrence. Such reports shall be furnished in the manner prescribed by BHEL. In addition, periodic reports on safety shall also be submitted by the contractor to the authorised BHEL official from time to time as prescribed.

3.8.3.16 Before commencing the work, the contractor shall appoint / nominate a responsible officer to supervise implementation of all safety measures and liaison with his counterpart of BHEL.

3.8.3.17 If safety record of the contractor in execution of the awarded job is to the satisfaction of safety Department of BHEL, issue of an appropriate certificate to recognise the safety performance of the contractor may be considered by BHEL after completion of the jobs.

3.9 **Housekeeping and preservation**:

3.9.1 Work floor/area shall be cleaned every day and be kept absolutely clean. A regular cleaning gang may be engaged for the purpose. All dismantled components of the equipments under overhauling should be tag marked and stored properly according to type of components, namely all loose/small parts shall be kept in boxes bearing and matching components shall be kept on wooden planks. A list of such components shall be maintained to identify / locate be preserved properly against probable damages. No floor shall be damaged while working and necessary steps shall be taken by the contractor for repair in case of any damage.

3.9.2 <u>Tools stores and Consumables</u>:

Tools & tackles, other than special tools and tackles supplied along with the equipments, shall be arranged and kept properly by the contractor. A register must be maintained and updated regularly. All consumables, other than those going permanently into the equipment, shall be stored by the contractor for daily use. Regular check shall be made at end of each day's work and exhausted consumables shall be replenished immediately. The store may be visited by BHEL Engineers without notice for verification.

3.9.3 The contractor shall make all necessary arrangement to receive spares from BHEL/Customer's stores, as and when required. The unused and scrap materials shall be returned to BHEL / Customer's stores on completion of the work. A detailed account shall be submitted by the

contractor to this effect at the end of the work certifying no dues remained against them duly signed by Resident Engineer BHEL/Customer.

3.9.4 General:

3.9.4.1 Standard printed conditions if enclosed with the offer by the tenderers will not be accepted and only those in main body of the offer will be considered for acceptance.

3.9.4.2 The tenders are likely to be rejected if the tendered is not acceptable to the customer.

3.9.4.3 It will be the responsibility of the contractor to carry out trial run of all the equipments overhauled and confirm the satisfactory operation of equipment. The contractor's personnel shall also be present at time of final commissioning and attend to any defects that shall occur during this time.

SPECIFIC TERMS AND CONDITIONS FOR SERVICES JOB

A. TENDERING

1. Each and every page of tender documents should be signed by the tenderer providing his / their seal and date as taken of their full acceptance of the scope of work, terms and conditions etc., and should be returned along with the tender offers. In case of e-tendering document digitally signing on cover page is also acceptable.
2. The tenders should be quoted in English language and international numbers.
3. All entries in the tender shall be typed in ink legibly written without ambiguity.
4. Qualifications of Tenderers: for open tenders only, the tenderers who have previous experience in the similar nature of work as detailed in this tender specifications are expected to quote duly detailing their relevant experience / credentials along with the offer. Offers of other than the above are not likely to be considered. (List of similar jobs done) - Enclosure – 1
5. Financial Status : A current / valid certificate from a scheduled bank to provide the financial soundness / capability of the bidder to undertake the work, is required to be submitted along with offer.- Enclosure – 2
6. Organization Chart: The organization pattern and that will be deployed by the tenderer for this work duly indicating the number of supervisors, their qualifications and experience in the line, the number of skilled and unskilled persons / etc. is required to be indicated in the offer.- Enclosure – 3
7. THE FOLLOWING DOCUMENTS SHOULD ALSO BE ENCLOSED.
   a. An attested copy of the power of attorney in case the tender is signed by an individual other than the sole proprietor.
   b. In case of an individual his full name, address, nature of business and valid trade licence.
   c. In case of partnership firm, the names of all partners and their addresses. (A copy of the partnership deed / instrument of partnership, duly attested by the Notary public shall be enclosed.)
   d. In case of companies, date and place of incorporation / registration including date of commencement certificate (for public companies). (Certified copies of Memorandum and articles of association are also to be furnished).

B. **EARNEST MONEY DEPOSIT** :

For this, please refer article 1.4 of the General and special conditions of contract (GSCC) enclosed / supplied with the form issued for empanelment.

C. **VALIDITY OF OFFER** :

The rates in the tender shall be kept open for acceptance for a minimum period of six months from the due date of opening of tenders. For details, please refer article 1.6 of GSCC enclosed.

D. **SECURITY DEPOSIT**:

As per clause no. 1.8 of GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB].

Return of Security Deposit:

If the contractor duly fulfils the contractual obligations as per contract in all respects to the entire satisfaction of BHEL, and presents an absolute "No Demand Certificate" in the prescribed form and return properties belonging to BHEL handed over, lent or hired by him for carrying out the said works the security deposit will be released to the contractor after deducting all costs or expenses or other contracts entered into with the contractor, only after the satisfactory completion of guarantee period. In no case Security Deposit can be released before settling all claims of BHEL on contractor under this contract.

No interest shall be payable by BHEL on Earnest Money / Security Deposit or any money due to the contractor from BHEL.

E. **ACCEPTANCE / REJECTION OF TENDERS**:

For this, please refer article 1.9 of GSCC enclosed. Also acceptance of customer is pre-requisite for consideration of bid, wherever applicable.

F. **ADDITIONAL SPECIFIC TERMS AND CONDITIONS** :

01. EXECUTION.

i. If the site in question is subjected to industrial relations unrest / disturbances / problems, then the successful bidder should take adequate precautionary measures against dislocation of the job on account short problems. Any liability on this account, lies entirely with the contractor.

ii. The contractor shall commence the work at site with full manpower, T&P etc. and complete as specified in the particulars of the tender. In case of any delay on the completion of work attributable to the contractor BHEL reserves full rights to cancel the contract fully or partly and to award the job in full or part to an alternate agency and recover the costs towards the same including BHEL's overheads from the contractor.

iii. In the event of termination of contract or restriction of quantum of job by our client, before or during the execution of contract, BHEL reserves the right to terminate

the contract or restrict the quantum of work of sub-contractors accordingly without paying any compensation.

iv. Manpower:
The contractor shall engage proper skilled / qualified personnel and ensure the expected quality of work. If any of their personnel has been found to be unsuitable, by BHEL / or their client, the contractor shall withdraw them and provide suitable replacement immediately, failing which BHEL reserves full rights to get the job done by alternate suitable persons at risk and cost of the contractor. The delay on this account is attributable to the contractor.

v. TOOLS (TACKLES & PLANTS): All tools, tackles and plants including precision measuring instruments, lifting devices shall have to be arranged by the contractor. (List of recommended T&P, for guidance, is provided in the tender enquiry). All lifting tackles and pulling devices to be used must bear valid / latest test certificates for their suitability.
Also certificates of test / calibration with date of validity for various measuring / test instruments have to be submitted by the tenderer preferably along with the offer itself, or else the same is required to be produced at site before start of job failing which the LOI / W.O. is liable to be cancelled without any compensation.
Successful bidder shall provide valid calibration certificates for IMTEs, fitness certificates for T&Ps and Construction Equipment (e.g. wire ropes, hand operated chain pulley blocks, pulling and lifting machines, electric welding generators, arc welding transformers etc.). Calibration of IMTEs is to be arranged from the accredited agencies. Calibration certificates should have the traceability as per national/international standards. At work site the IMTEs, T&Ps and Construction Equipment shall be checked/tested/inspected by BHEL engineers. The procedure for fitness testing and storage preservation and maintenance of Construction Equipment and T&Ps shall be as per BHEL standards available with BHEL site engineers.

vi. CONSUMABLES: All consumables required (list for guidance is given in the tender enquiry) for the job shall be arranged by the contractor at his cost. However, any spares / components / consumables / materials going

permanently into the clients equipment shall be provided to the contractor.

vii. Successful bidder has to arrange proper storing facilities at site with traceabilities for IMTEs, T&Ps, construction equipments and consumables used during job execution.

viii. All the T&Ps, consumables etc. must be mobilized at site at least three days prior to actual start of the job. They must be in accordance with those recommended in the Tender Enquiry and must be got verified to that effect. Formal clearance in writing must be obtained from BHEL's resident engineer before the contractor starts the job.

T&P found defective / improper / insufficient or not having valid test / calibration certificate should be made good immediately.

If the contractor fails to mobilize recommended T&P and manpower within the stipulated period, the order on the contractor is liable to be cancelled without paying any compensation on to him.

ix. Storage: The contractor shall be responsible for proper storing of all dismantled components, spares, T&P etc., identify them properly and preserve them throughout the execution of the job. Any loss or damage of the components caused due to the lapses attributable to the contractor or his personnel shall be chargeable to the contractor.

x. Transportation of Spares / materials / consumables :

Any material / components / spares required for the work must be collected by the vendor and carried safely to the work site from the point of issue in our clients premises, through his own resources and cost.

Similarly, excess materials / spares etc. must be returned to the client's stores /any other place, within the client's premises, indicated by site-in-charge of BHEL.

Any debris, rubbish at the work spot must be cleared very day by the contractor using his own resources and cost, and disposed off at a placement for, as to be informed to him.

xi. Space / Accommodation :

The contractor will be allowed to have his site office, stores etc. by erecting temporary partitions / chambers / sheds etc. at the work spot according to the availability of space, which will have to be vacated and dismantled at the end of the jobs to restore the space to the client. The contractor

should make his own arrangements for the security / watch and ward.

No residential accommodation / spare can be provided by BHEL to the contractor for any residential accommodation of his personnel. Contractor has to make arrangements/accommodation at site at his cost.

xii. The contractor shall ensure responsible execution of the job and proper behavior of their personnel and observance of all the rules and regulations of our clients.

xiii. Safety :

a. Standard safety norms/ regulations shall be conserved by the contractor during the execution of the job. The contractor should provide the necessary / stipulated safety devices to his personnel deputed to the site, such as grinding / welding goggles, masks, safety belts, helmets etc. No worker will be permitted to work without necessary safety appliances. That Delay of work due to these lapses are attributable to the contractor.

b. All norms related to Health, Safety & Environmental (HSE) norms conforming to ISO-14001 & OHSAS-18001 shall be followed by successful bidder. Bidders may contact PSSR-SAS office for getting detailed norms to be followed by bidder at Site

c. The contractor shall comprehensively insure all his site personnel against any hazard / accident and submit a copy of the insurance certificate covering all his site personnel to our resident engineer before commencement of work.

d. In case of any accident / hazard, the contractor shall arrange for medical attendance immediately shall compensate the personnel concerned in accordance with the workmen's compensations act in force and shall keep BHEL indemnified against any provisions of the act.

e. The successful bidder is to arrange a full set of First Aid kit for attending to manpower deployed by him at site as per requirement.

f. Successful bidder should follow all safety norms at work site. The Doc. No. HSEP:14 Rev.01 Dtd.20.01.2020 and subsequent

revisions/amendments in this regard is available with BHEL engineer at site.

02. STATUTORY COMPLIANCE :

i. The contractor shall comply with all state and central laws, statutory rules regulations etc. such as :
The payment of wages act, minimum wages act, workmen's compensation act., industrial disputes act, employees provident funds act / scheme, Employees' state insurance scheme, contract labour (Regulation & abolition) act, 1970 etc. and all other acts, rules & regulations for employment of labour as may have been and as may be enacted by the Government during the tenure of the contract and having force or jurisdiction at site. The contractor shall give to the local government body, police, labour authorities and other relevant authorities and all such intimation and notices as may be required by law and appraise BHEL site- in-charge of such compliance.

ii. The contractor shall pay all taxes, fees, licence charges, deposits, duties, fines, royalty commissions or other charges which may be leviable on account of any of his operations in executing the contract. In case, BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from the contractor either from his bills or other issue as deemed fit.

iii. The contractor shall obtain requisite licence from appropriate authority of the ministry of labour under the provision of the contract labour (Regulation and abolition) Act as soon as the work is avoided to him and indemnify BHEL against the application of any provisions of the act.

iv. The contractor shall be responsible for provision of welfare and health of his employees / workmen, more particularly described in the contract labour (Regulation & abolition) act / rules, and safety precautions etc., as may be required for satisfactory execution of the contract.

v. The contractor shall fulfil all his obligations in respect of canteens, rest rooms, accommodation including proper medical facilities etc. for the personnel employed by him, more particularly described in the contract labour (regulation & abolition) act / rules.

vi. The contractor will be directly responsible for payment of wages to his workmen more specifically described in the

contract labour (regulation and abolition) act / rules. A pay roll sheet showing all the wage payments representative should be furnished to BHEL site office for record purpose. BHEL site in-charge may be intimated the date of disbursement of wages to the workmen engaged for the work; so that his representative can witness the same. The contractor shall indemnify BHEL against any statutory liability on account of dues to his workmen.

vii. The bidders should be having appropriate licence from the local Boiler Inspectorate if the job involves welding of pressure parts. Also they should be having alloy steel / carbon steel high pressure welders (for TIG and submerged arc welding approved by the local Boiler Inspectorate for welding the pressure parts. The bidders should clearly indicate the same in the offer.

03. TERMS OF PAYMENT:

i. No advance shall be payable to the contractor unless specifically spelt out in the tender enquiry.

ii. A minimum time of 30 days will be required for the processing of bills (received with all required documents) presented and for their payment.

iii. Payment terms are as follows

a. Up to 90% of the contract value shall be payable against submission of up to three progressive running bills. Each of the billed amount shall correspond to the quantum of job actually completed and to that effect the claim can be preferred based on percentage allotments (to be given in the work order) made. This, however, has to be certified by the resident manager / engineer of the site.

The Following documents are to be submitted with 1st RAB provided the value of such bill should not exceed 40% of CV.

1. Workmen compensation Insurance (should be taken for the full period of the contract. In case any defects attended during defect liability period Insurance should be taken during such period.)
2. Joint protocol / letter of commencement of work.
3. Labour License application copy (Labour license shall be applied online as per customer requirement)

However, if the value of 1st RA Bill exceeds 40% of CV, all the documents specified for 2nd & 3rd RA Bill (as mentioned below)

shall be required in addition to Joint Protocol/Letter of commencement of work.

The Following documents are to be submitted with 2nd and 3rd RAB

1. Workmen compensation Insurance/ESI, PF, Third party liability policy (as per customer requirement) & Wage register/Bank statement of workmen payment verified by EIC for the completed months of execution period.
2. Labour license (Labour license shall be applied online as per customer requirement)
3. Duly filled pro-forma of Form 36B.
4. HR Pro-forma to be submitted along with bill.
5. Test reports (like NDT, Electrical etc., as applicable) (03 hard copies each)

b. Final bill shall be payable after successful synchronization / commissioning Value of such final bill shall be total executed contract value less previous RAB(s) values.

The following documents are to submitted with final bill.

1. Workmen compensation Insurance/ ESI, PF, Third party liability policy (as per customer requirement) & Wage register/Bank statement of workmen payment verified by EIC for the balance period of execution, if applicable.
2. HR Pro-forma to be submitted along with bill.

Note: BHEL at its discretion may further split up the percentage break up given in billing schedule and effect payment to suit site condition, cash flow requirement etc. according to progress of work.

iv. PERFORMANCE SECURITY DEPOSIT (PSD)

Performance security deposit shall be 10% of executed contract value including extra works if any, and the vendor may submit the same in the form of (a) or (b) below.

(a) CASH (DD/Online payment), 10% of the full contract Value towards Performance security deposit, before commencing the contract. (PSD for extra works if any, shall be deposited by the vendor separately)

(or)

(b) Recover 10% from Each Running/Final/Extra works bill towards Performance security deposit.

v. Refund of Performance Security deposit:

Performance security deposit shall be refunded on submission of duly signed (for certification of contractor portion only) REFUND OF PERFORMANCE SECURITY DEPOSIT (format attached –Format No. PS:SR:SCT:PSD:REFUND:001) along with covering letter with the following documents.

a. Certification to the effect that "No further claim" will be made against this contract.

b. Submission of a "NO DUES" certificate from our principal customer regarding returning of materials, T&P, tackles, fixtures etc. if any supplied to the successful bidder by the principal customer through BHEL during the execution of work to the effect that all the items have been received intact or as part or after fabrication.

c. PSD shall be refunded only after internal clearances from different departments like Commercial, HR, Sub-contracting & Services.

vi. The bidder should be financially sound to maintain the site establishment with regard to timely payment of wages to his workmen, arrangements of other inputs viz. T&P consumables etc.

vii. Non-receipt of progressive payment from BHEL due to any reasons should not be a constraint for the smooth execution of the job at site.

viii. The bidder should make all out efforts to provide all inputs in consultation with BHEL engineers at site for completing the job in the specified time frame.

ix. No overrun/escalation / idle charges are payable against any services job under any circumstances. (in exceptional cases such claims may be considered provided BHEL's customer admits of such payment).

x. Extra work rate being admitted off by BHEL for other similar contracts have been stated on the page no.46 of this annexure.

For any additional work not envisaged in the scope of work or quantities exceeding the stated quantities, these rates shall be applicable.

xi. All claims for extra works should be settled before claiming the final (10%) bill. The contractor should prefer the final claim with the certificate that 'no other claim is due from BHEL against this contract', without which final bill cannot be processed for payment.

xii. For reduction / deletion / withdrawal in the scope of work proportionate deduction in contract value will be made.

04. PERFORMANCE:

i. As soon as job is awarded, the contractor has to submit a barchart to the resident engineer nominated showing the detailed schedule for all activities. This schedule will be reviewed by the resident engineer from time to time to enable the contractor to recast the barchart matching the planned completion of the job.

ii. It shall be the responsibility of the contractor's supervisor to distribute the work among his workmen deployed at site and get day to day activities executed as per BHEL's requirement. BHEL's engineers / supervisors will check the correctness of the job done and will also give the daily programme of work to the contractors supervisor. The contractor has to ensure completion of daily programme and if there is any spill over, the same has to be completed by putting in same additional resources. (Technical guidance wherever required will be provided by BHEL).

iii. The scope of work mentioned in this tender enquiry gives the broad outline of the actual work involved and it not is possible to mention all minute details of the work. For proper evaluation, the bidders may seek clarifications from this office. Or else, they may visit site and study the job content before submitting offers and be well informed and acquainted with the actual working and other prevalent conditions of the site, facilities available etc. No claim will be entertained later on the ground of lack of knowledge.

iv. The bidders have to furnish the bio-data and experience details of the site-in-charge, other key workmen, supervisors, safety officers, senior technicians etc. to be deployed. In case of award of contract, the key members of the contractor's team may be interviewed at site by BHEL's resident engineer to ascertain their suitability. Replacement of non-acceptable personnel will have to be arranged by the contractor immediately at his own cost.

v. Penalty for the delay in job completion will be 0.5% per day of delay, limiting to maximum 10% of the contract value, to be imposed on the contractor in case the delay in work completion is attributable to the lapses on the part of the contractor. In case of LD recovery, the applicable GST shall also be recovered from vendor.

vi. Performance Guarantee: Even though the work will be carried out under supervision of BHEL Engineers, the contractor shall guarantee against defects attributable to faulty workmanship or procedure adopted in the overhaul for items covered in the contract for a period of Six months from the date of re-commissioning of the set after the overhaul. The guarantee should cover all defects notified during this period and shall have to be attended free of cost immediately or at the time our clients are able to give shutdown of the set for the required period, when necessary. In case of failure of contractor to attend to the defect as and when required in time, BHEL shall arrange to attend the defects and the charges shall be levied to the contractor's account and shall be recoverable from the security deposit / progressive payments.

05. MISCELLANEOUS :

i. The bidders shall submit a list of jobs being carried out by them or expected to be taken up by them during the period as called for in the participation of the tender. Enclosure – 6.

ii. The contractor has to engage a cleaning gang at site to ensure continuous cleaning of the floor at work site to protect the parts and to give safe access at the work site.

iii. Obtaining licenses / permits / road permits in connection with the fulfillment of the contractual obligations is entirely the contractors responsibility. However, wherever applicable BHEL can only offer support to the extent possible.

iv. For all matters bearing on the execution of the job at site, the decisions of the resident engineer are final and binding upon the contractor.

v. The contractor has to retain suitable minimum work force at site till successful completion of commissioning activities/handing over of unit to attend any small/ miscellaneous problems, as leakage etc.

vi. The contractor has to mobilize on a short notice to attend any troubles encountered in the equipment worked on, during warranty period of six months.

vii. After dismantling and during execution of the job, successful bidder has to suitably tag the components and sub-assemblies for traceability and store properly before

final assembly. This is as per BHEL standards available with BHEL site engineers.

viii. Process control of Special Processes like Welding and Heat Treatment shall be carried by successful bidder as per BHEL standards available with BHEL site engineers.

ix. Proper segregation, identification, tagging and up-keep of all dismantled items at work site during job execution have to be done by successful bidder.

x. Successful bidder is to obtain necessary "No Dues" certificates before de- mobilisation from site.

xi. Any NDT within the scope shall be as per Non-Destructive Examination manual (BHEL standards available with BHEL site engineer).

xii. Unless otherwise mentioned specifically in this tender elsewhere, the storage & preservation of components, sub-assemblies, IMTEs, T&Ps, Construction Equipments etc, maintenance of stores, watch and ward of stores and BHEL site office is in the scope of the successful bidder.

xiii. The successful bidder is to arrange extra illumination at work site to augment the existing site illumination if required to enable round-the-clock safe working.

Note: Any of the documents mentioned above can be referred before submission of tender at the office of PSSR-SAS.

06. <u>EXTRA WORK RATES CURRENTLY BEING ADMITTED BY BHEL, PS-SR SAS</u>

i. MAN-HOUR RATE FOR ELIGIBLE EXTRA WORKS: Single composite average labour man-hour rate, including overtime if any, supervision, use of tools and tackles and other site expenses and incidentals, consumables for carrying out any major rework/repairs/rectification/modification/fabrication as certified by site as may arise during the course of erection, testing, commissioning or extra works arising out of transit, storage and erection damages, payment, if found due will be at Rs.108/- per man hour.

ii. The following all inclusive rates will be applicable for modification work involving welding of high pressure butt joints only. Extra work involving other types of joints will be done on the above manpower basis.

Unit rate per equivalent joint of size OD 63.5 mm x 6.3 mm thick

Average unit rate per equivalent joint, including NDT and stress reliving.

Carbon Steel Rs.200/- (Rs. Two hundred only)

Alloy Steel Rs.250/- (Rs. Two hundred fifty only)

List of enclosure to be furnished by the bidder along with tender documents.

a) Experience certificate Enclosure 1*

b) Banker's certificate of financial soundness Enclosure 2*

c) Organisation Chart Enclosure 3.*

d) List of concurrent jobs held by the contractor / bidder. Enclosure 4.

(*Vendors registered with BHEL should submit documents in support of sl. no. d only.)

List of documents to be furnished by the contractor to the resident engineer before commencement of the jobs / during the execution.

a) Barchart (if not furnished in the offer)

b) List of T&P being mobilized. Test / Calibration certificate with date of validity for lifting / pulling devices and measuring / test instrument (if not furnished in the offer).

c) Category wise list of manpower being mobilized.

d) List of consumables being mobilized.

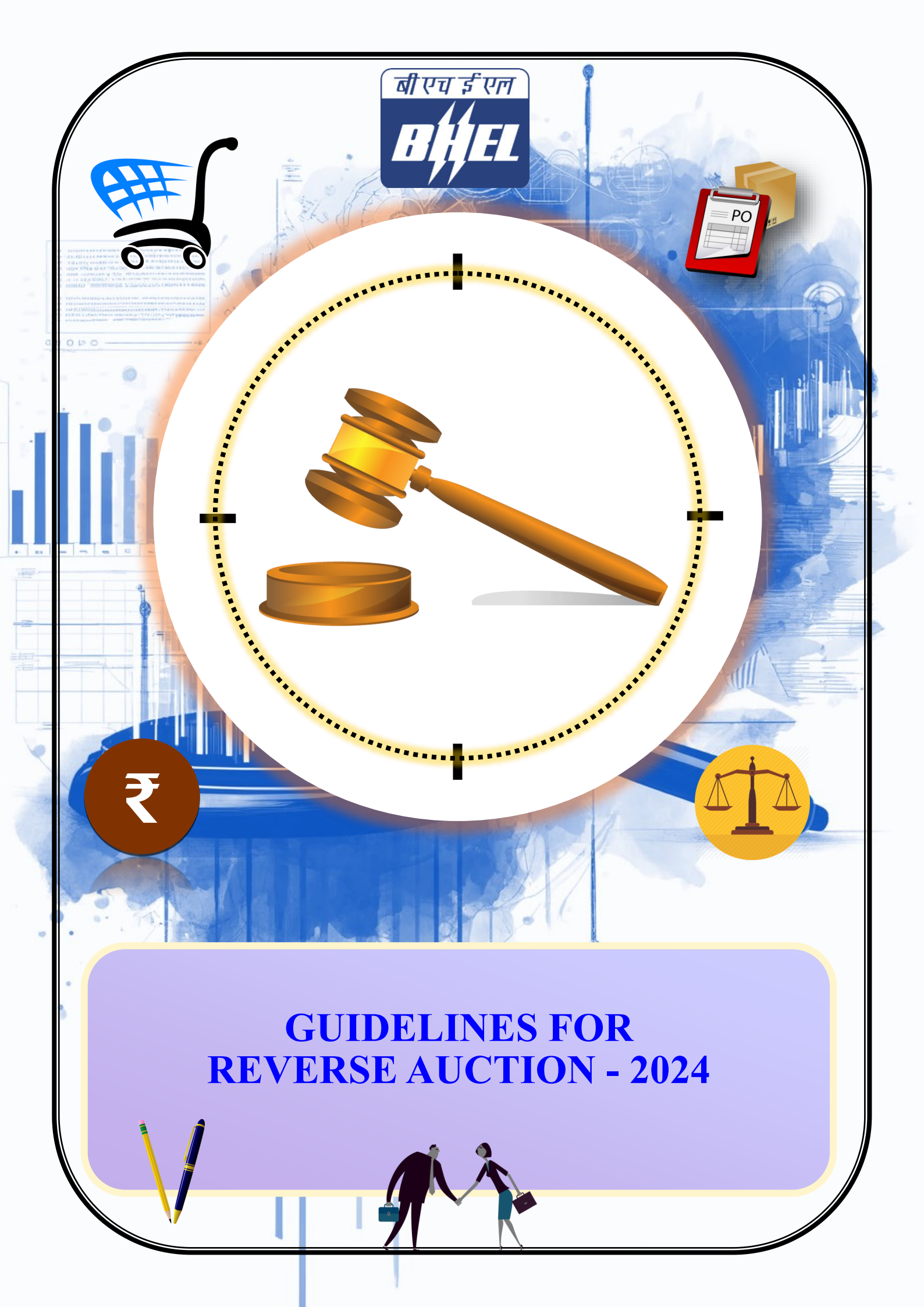
e) Licence from the department of Labour under contract Labour (Regulation & Abolition) Act / Proof of Application for Licence.

f) ESI coverage, if applicable.

g) Insurance certificate covering the site personnel.

h) Proof of remittance of provident fund to the concerned authorities, for all workmen employed for this job.

i) Third party insurance coverage.



GUIDELINES FOR REVERSE AUCTION - 2024

Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00
Dated: 05.12.2024

1. Scope

1.1. This document describes the guidelines to be followed by each Unit/ Division/ Region for conducting Reverse Auction (RA) for procurement of material/ works/ services. These guidelines will be applicable for purchases/ contracts to be awarded under Purchase/ Works policy and the RA shall follow the philosophy of English Reverse (No ties).

1.2. Based on these guidelines, Units/ Divisions/ Regions (hereinafter referred as 'units') may issue their own Departmental Procedures without changing the intent and spirit of the guidelines contained in this document. These guidelines will supersede earlier guidelines issued vide AA:SSP:RA:05 dated 08.03.2021.

1.3. English Reverse (No ties) is a type of auction where the starting price and bid decrement are announced before start of online reverse auction. The interested bidders can thereupon start bidding in an iterative process wherein the lowest bidder at any given moment can be displaced by an even lower bid of a competing bidder, within a given time frame. The bidding is with reference to the current lowest bid in the reverse auction. All bidders will see the current lowest quoted price and their rank. The term 'No ties' is used since more than one bidder cannot give an identical price, at a given instant, during the reverse auction. In other words, there shall never be a tie in the bids.

2. Intent of Reverse Auction

To derive maximum benefit in cost savings through competitive bidding.

3. Upfront declaration in NIT

3.1. Wherever it is felt that procurement may be done through Reverse Auction, the bids shall be invited in two parts/ three parts or single part bid (Price Bid) where Techno-Commercial MoU already exists. Wherever, the evaluation is done for individual line item, separate sealed price bid for each line item shall be taken.

3.2. Decision to go for RA would be taken before floating of the tender. In case it is decided to go for RA, same shall be declared upfront in NIT by inserting the following clause:

> *"BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted*

among the techno-commercially qualified bidders.

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

4. Aspects to be considered for RA

4.1. While RA can drive cost savings, they should be used judiciously, considering the broader implications beyond price alone. Therefore, RA should not be used indiscriminately or as a default mode of procurement. One may choose procurement of goods/ works/ services that are amenable to this mode of procurement.

4.2. The cases where RA would not be appropriate are as under:

a) In Engineered products having complexity in design
b) Items of strategic/ critical/ vital/ high technical complex nature, items that are in short supply in the market
c) The requirement is not of high enough value to generate competitive pressures on bidders.
d) Where the QCBS system of selection is used
e) Where opting for RA in the tender would bring down competition
f) EPC contracts and complex Works contracts
g) Where it is proposed to issue parallel orders by splitting the total order quantity among more than one supplier

4.3. RA shall not be done for selection of business partners through pre-bid/ strategic tie-ups

4.4. If it is decided to go for RA, the following may be considered:

a) Number of techno-commercially qualified bidders in previous tender for same/ similar class of item
b) Price volatility of the item(s) under consideration
c) Past purchase experience of similar item(s)
d) Tender Value of the item(s) under procurement
e) Any other aspect which may be specific to tender

Above aspects may be considered by the tender issuing authority to decide before floating of the tender, if RA is to be conducted or not for

that particular tender.

Note: Decision to go for RA or not will be on case to case basis with recorded reasons.

5. RA Committee

5.1. Purchase/ Tender committee, if already in place, shall also act as RA committee. Purchase representative will be the convener. In case Purchase/ Tender committee has not been formed, the Product Manager/ MM Head/ Department Head, shall constitute RA committee consisting of representatives *(rank as per DoP of tender/ negotiation committee)* from departments of Engineering/ Indenter/ User, Purchase and Finance. This committee will work for a specific tender. The role of RA committee shall be as below:

a) To vet the comparative statement comprising sealed price bids received, MSE status, qualification against Public Procurement (Preference to Make in India), Order 2017 (PPP-MII, Order 2017) of all techno-commercially qualified bidders, loading etc. before sending it to the service provider for RA.

b) To decide and record the 'Start-Price' and 'Bid Decrement'.

c) To observe the RA process and declare RA as successful.

6. Business rules for RA

6.1. Model Business rules (annexure I) and other annexures II to VI are attached. MM shall prepare and fill in the required details in the annexures at appropriate places like:

a) Enquiry/ Request for Quotation (RFQ) number
b) Name and Addresses of the bidders
c) Items description, quantities/ weight, Specification
d) Date and time of opening and closing of RA
e) Extension conditions
f) Loading Criteria/ Formulae
g) Foreign Exchange (FE) rates for evaluation
h) Taxes & Duties
i) Freight & Insurance
j) Bidders' training, if required, etc.

6.2. The calculation sheet e.g. excel sheet (which will help to arrive at 'Total Cost to BHEL') which is communicated to respective bidders of RA, will be prepared by MM and vetted by Finance. This calculation sheet will be finalized based on the evaluation criteria specified in the NIT and will be same based on which sealed price bids have been evaluated.

6.3. MM shall issue a mandate (annexure II) to the service provider covering business rules etc. and inform about event, calculation sheet etc. to all techno-commercially accepted bidders.

7. Role of Service Provider

(1) Acknowledge the receipt of mandate from BHEL.
(2) Contact the bidders, provide business rules and train them, as required.
(3) Get the process compliance form (annexure III) signed by all the participating bidders before RA event.
(4) Conduct the event as per the contract and business rules.
(5) Submit the Login Reports, Results, History sheet and authorized final bid from the bidders.
(6) To obtain price breakup from successful bidder and submit the same to BHEL.

8. Start Price

Start price for RA shall be lowest of sealed price bid.

Note: Wherever more than one lowest sealed price bids are identical, RA committee shall declare the start price by reducing the lowest sealed price bid by maximum of one decrement.

9. Witnessing Auction

Access to witness the RA shall be available to the concerned officials of BHEL (Indenter/ Finance Officials/ Purchase Officials), nominated by Head MM/ Purchase/ Contracts.

10. Reverse Auction Process

10.1. Reverse Auction will be conducted if two or more bidders are techno-commercially qualified.

10.2. Wherever RA is opted in a tender, the techno-commercially qualified H1 will not be allowed to participate in RA. In case more than one H1 bidder quote the same rate, the Price Offer received last, as per the time log of the Portal, shall be removed first, on the principle of last in, first out by the system.

10.3. However, H1 will be allowed to participate in RA in the following cases:

a) If number of techno-commercially qualified bidders are only 2 or 3.

b) In case Primary product of only one OEM is left in contention for participation in RA on elimination of H1.

c) For cases where there are more than 3 techno-commercially qualified bidders, if lowest bidder in sealed price bid is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE lowest bidder.

d) For cases where there are more than 3 techno-commercially qualified bidders, if lowest bidder in sealed price bid is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII lowest bidder.

10.4. Only those bidders who submit the online sealed bid within the scheduled time shall be eligible to participate further in the RA process.

10.5. The lowest bidder in sealed price bid shall be shown as current L1 automatically by the system. System shall have the provision to indicate this bid as current L1 for further bidding. This price can be displaced by an even lower bid of a competing bidder.

10.6. If the start price is lower than the lowest sealed price bid (in line with clause 8.0), on acceptance of such start price by any bidder this bid would be indicated as current L1 for further bidding. However, if no bidder accepts the start price, RA shall be treated as cancelled for the respective line item(s) and the tender shall be processed accordingly.

10.7. In case of no further bidding, RA will be deemed to have been successful with current L1 bidder. During RA, all bidders will see their rank and current L1 price on the screen. Once the RA is done, the ranking status would be based on the last quoted price of the bidder(s) irrespective of the quote received in RA or sealed price bid.

10.8. No bidder shall be allowed to lower its bid below the current L1 by more than 5 decrements at one go.

11. Processing of case after RA

11.1. Wherever the evaluation is done on total cost basis, after Reverse Auction, prices of individual line items shall be reduced on pro-rata basis.

11.2. Reasonability of rates received through RA to be ascertained as per extant Policy provisions.

12. Payment to the Service Provider

Payment shall be made as per the agreed terms of the Framework Agreement with the service provider based on the mandate issued and service provider's invoice certified by the respective MM. If the RA event is conducted as per the mandate given by BHEL and agreed procedure, payment shall be made to the service provider irrespective of the auction outcome.

13. Others

13.1. If RA is being conducted for multiple line items and L1 is to be decided for individual items, number of items in single screen be restricted to 10 (ten) to avoid scrolling by the bidders.

13.2. In case of enquiry through e-Procurement, the sealed electronic price bid (e-bid) is to be treated as sealed envelope price bid.

13.3. BHEL will inform bidders the details of service provider who will provide business rules, all necessary training and assistance before commencement of online bidding.

13.4. Bidders will be advised to read the 'Business Rules' indicating details of RA event carefully, before reverse auction event.

13.5. Model annexures are enclosed. However, to suit specific requirement of the Units changes in the annexures may be done with the approval of respective MM Head of Unit. Such changes shall specifically be communicated to the service provider before the RA event.

Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00
Dated: 05.12.2024

Business Rules for Reverse Auction

Annexure – I

This has reference to tender no ***{tender number….date***…}. BHEL shall finalise the Rates for the supply of {*item name}* through Reverse Auction mode. BHEL has made arrangement with M/s. {*Service provider},* who shall be BHEL's authorized service provider for the same. Bidders should go through the instructions given below and submit acceptance of the same.

The technical & commercial terms are as per (a) BHEL Tender Enq. No. {…} dated {...}, (b) Bidders' technical & commercial bid (in case of two part bid) and (c) subsequent correspondences between BHEL and the bidders, if any.

1. Procedure of Reverse Auctioning

i. Price bids of all techno-commercially qualified bidders shall be opened.

ii. **Reverse Auction**: The 'bid decrement' will be decided by BHEL.

iii. The lowest bidder in sealed price bid shall be shown as current L1 automatically by the system and no acceptance of that price is required. System shall have the provision to indicate this bid as current L1.

iv. Bidders by offering a minimum bid decrement or the multiples thereof can displace a standing lowest bid and become "L1" and this continues as an iterative process. However, no bidder shall be allowed to lower its bid below the current L1 by more than 5 decrements at one go.

v. After the completion of the reverse auction, the Closing Price shall be available for further processing.

vi. Wherever the evaluation is done on total cost basis, after Reverse Auction, prices of individual line items shall be reduced on pro-rata basis.

2. Schedule for reverse auction: The Reverse Auction is tentatively scheduled on *{date}: ;{start time}: ;{Close Time: }*.

3. Auction extension time: If a bidder places a bid in the last {…} minutes of closing of the Reverse Auction and if that bid gets accepted, then the auction's duration shall get extended automatically for another {…} minutes,

for the entire auction (i.e. for all the items in the auction), from the time that bid comes in. Please note that the auto-extension will take place only if a bid comes in those last {…} minutes and if that bid gets accepted as the lowest bid. If the bid does not get accepted as the lowest bid, the auto-extension will not take place even if that bid might have come in the last {…} minutes. In case, there is no bid in the last {…} minutes of closing of Reverse Auction, the auction shall get closed automatically without any extension. However, bidders are advised not to wait till the last minute or last few seconds to enter their bid during the auto-extension period to avoid complications related with internet connectivity, network problems, system crash down, power failure, etc.

The above process will continue till completion of Reverse Auction.

Complaints/ Grievances, if any, regarding denial of service or any related issue should be given in writing thru e-mail/ fax to M/s. {Service provider} with a copy to BHEL within 15 minutes prior to initial closing time of Reverse Auction.

4. **Bid price:** The Bidder has to quote the {……} Price inclusive of Packing & Forwarding charges, all the routine & type tests as per tender scope, taxes, duties, freight and insurance as specified in tender document. including loading (if indicated by BHEL due to deviations in technical/ commercial terms) for the Items specified. Details are as shown in Excel Sheet for calculation of total cost to BHEL (To be specified by Unit as per NIT conditions).

5. **Bidding currency and unit of measurement:** Bidding will be conducted in *Indian Rupees* per *Unit* of the material as per the specifications {...}

   In case of foreign currency bids, exchange rate (TT selling rate of State Bank of India) as on scheduled date of tender opening (Part-I bid) shall be considered for conversion in Indian Rupees. If the relevant day happens to be a Bank holiday, then the forex rate as on the previous bank (SBI) working day shall be taken.

6. **Validity of bids:** Price shall be valid for {… *days}* from the date of reverse auction. These shall not be subjected to any change whatsoever.

7. **Lowest bid of a bidder**: In case the bidder submits more than one bid, the lowest bid at the end of Reverse Auction will be considered as the bidder's final offer to execute the work.

8. Unique user IDs shall be used by bidders during bidding process. All bids made from the Login ID given to the bidders will be deemed to have been made by the bidders/ bidders' company.

9. **Post auction procedure**: BHEL will proceed with the Lowest Bid in the Reverse Auction for further processing.

10. Any commercial/ technical loading shall be separately intimated to respective bidders prior to RA. The excel sheet provided in this regard shall cover all these aspects. Commercial/ technical loading if any, shall be added by the respective bidder in its price during Reverse Auction. Modalities of loading & de-loading shall be separately intimated to the bidders. The responsibility for correctness of total cost to BHEL shall lie with the bidders.

11. Reverse auction shall be conducted by BHEL (through M/s {*Service Provider*}), on pre-specified date, while the bidders shall be quoting from their own offices/ place of their choice. Internet connectivity shall have to be ensured by bidders themselves.

    During the RA process if a bidder is not able to bid and requests for extension of time by FAX/ email/ phone then time extension of additional 15 minutes will be given by the service provider provided such requests come before 5 minutes of auction closing time. However, only one such request per bidder can be entertained.

    In order to ward-off contingent situation of connectivity failure bidders are requested to make all the necessary arrangements/ alternatives whatever required so that they are able to circumvent such situation and still be able to participate in the reverse auction successfully. Failure of power or loss of connectivity at the premises of bidders during the Reverse auction cannot be the cause for not participating in the reverse auction. On account of this, the time for the auction cannot be extended and neither BHEL nor M/s. {*Service provider*} is responsible for such eventualities.

12. Proxy bids: Proxy bidding feature is a pro-bidder feature to safe guard the bidder's interest of any internet failure or to avoid last minute rush. The proxy feature allows bidders to place an automated bid in the system directly in an auction and bid without having to enter a new amount each time a competing bidder submits a new offer. The bid amount that a bidder enters is the minimum that the bidder is willing to offer. Here the software bids on behalf of the bidder. This obviates the need for the bidder participating in the bidding process until the proxy bid amount is decrementally reached by other bidders. When proxy bid amount is reached, the bidder (who has submitted the proxy bid) has an option to start participating in the bidding process.

The proxy amount is the minimum amount that the bidder is willing to offer. During the course of bidding, the bidder cannot delete or change the amount of a proxy bid.

Bids are submitted in decrements (decreasing bid amounts). The application automates proxy bidding by processing proxy bids automatically, according to the decrement that the auction originator originally established when creating the auction, submitting offers to the next bid decrement each time a competing bidder bids, regardless of the fact whether the competing bids are submitted as proxy or standard bids. However, it may please be noted that if a manual bid and proxy bid are submitted at the same instant manual bid will be recognized as the L1 at that instant.

In case of more than one proxy bid, the system shall bid till it crosses the threshold value of 'each lowest proxy bid' and thereafter allow the competition to decide the final L1 price.

Proxy bids are fed into the system directly by the respective bidders. As such this information is privy only to the respective bidder(s).

13. Bidders are advised to get fully trained and clear all their doubts such as refreshing of Screen, quantity being auctioned, tender value being auctioned etc from M/s {*Service provider*}.

14. M/s. {*Service provider}*, shall arrange to demonstrate/ train the bidder or bidder's nominated person(s), without any cost to bidders. M/s. {*Service provider}*, shall also explain the bidders, all the business rules related to the

Reverse Auction. Bidders are required to submit their acceptance to the terms/ conditions/ modalities before participating in the Reverse Auction in the process compliance form as enclosed. Without this, the bidder will not be eligible to participate in the event.

15. Successful bidder shall be required to submit the final prices (L1) in prescribed format (Annexure – VI) for price breakup, quoted during the Reverse Auction, duly signed and stamped as token of acceptance without any new condition (other than those already agreed to before start of auction), after the completion of auction to M/s. {*Service provider*} besides BHEL within two working days of Auction without fail.

16. Any variation between the final bid value and that in the confirmatory signed price breakup document will be considered as tampering the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings (as available on www.bhel.com).

17. Bidders' bid will be taken as an offer to execute the work/ supplies the item as per enquiry no. *{…}* dt. *{…}*. Bids once made by the bidder, cannot be cancelled/ withdrawn and bidder shall be bound to execute the work as mentioned above at bidder's final bid price. Should bidder back out and not execute the contract as per the rates quoted, BHEL shall take action as per extant guidelines for suspension of business dealings (as available on www.bhel.com).

18. Bidders shall be able to view the following on their screen along with the necessary fields during Reverse Auction:

a. Leading (Running Lowest) Bid in the Auction (only total price of package)
b. Bid Placed by the bidder
c. Start Price
d. Decrement value
e. Rank of their own bid during bidding as well as at the close of auction.

19. BHEL's decision on award of contract shall be final and binding on all the Bidders.

20. BHEL reserves the right to extend, reschedule or cancel the Reverse Auction process at any time, before ordering, without assigning any reason, with

intimation to bidders.

21. BHEL shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause. In such cases, the decision of BHEL shall be binding on the bidders.

22. Other terms and conditions shall be as per bidder's techno-commercial offers and other correspondences, if any, till date.

23. If there is any clash between this business document and the FAQ available, if any, in the website of M/s. {*Service provider}*, the terms & conditions given in this business document will supersede the information contained in the FAQs. Any changes made by BHEL/ service provider (due to unforeseen contingencies) after the first posting shall be deemed to have been accepted if the bidder continues to access the portal after that time.

24. Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action *as per extant BHEL guidelines for suspension of business dealings (as available on www.bhel.com)*, shall be initiated by BHEL.

Doc. No. AA:SSP:RA:00
Dated: 05.12.2024

Mandate to Service Provider

Annexure – II

Ref : **Date :**

To,
M/s. {*Service provider}*
Sub: Providing of Services for Reverse Auction.
Ref: No {…} date {…}
Dear Sir,

Please conduct Reverse Auction as per the following details:

- **Scope:** Auction event management with training of BHEL and its bidders.
- Seek process compliance form from all the bidders provided by BHEL before start of RA event. In case of postponement of event to some other date, ensure acknowledgement from each bidder.
- Price: Rs. {……}/- . No other duties, Taxes, levies etc. except service tax @ {……}% shall be payable for conducting reverse auction. This price is firm.
- Payment Terms: 100% payment after successful completion of Auction.
- Completion of Auction Process: The auction process shall be deemed to have been successfully completed on receipt and acceptance of final report including hard copy/ email of the final bid with price break up, duly signed by the successful bidder who has participated in the reverse auction. The bill shall be submitted along with the completion report to the undersigned.
- Business Rules of the Reverse Auction are as per *Annexure – I*.
- The list of bidders with their contact details is given in *Annexure – IV*. and the details of the item (s) to be Reverse Auctioned are as per *Annexure – V*.
- Please acknowledge receipt of this letter order and also confirm that final report (duly signed and stamped by M/s. {*Service provider}*) including hard copy/ email of the final bid with breakup of prices duly signed by the successful bidder (duly endorsed by M/s. {*Service provider}*) shall be submitted within **four** working days of conclusion of auction.

Yours sincerely,

(for and on behalf of BHEL)

Doc. No. AA:SSP:RA:00
Dated: 05.12.2024

Mandate to Service Provider

Annexure – II

Note:

If the event has been conducted as per mandate, you shall be paid irrespective of RA outcome.

Buyer Name	- *Name of BHEL Unit* - *Full postal address* - *Fax:* - *Phone:* - *Email:* - *Contact person name:* - *Phone:* -
Auction to be conducted by	- *Name of Service provider* - *Full postal address* - *Fax:* - *Phone:* - *Email:* - *Contact person name:* - *Phone:* -
Date of Auction	- *Date of Auction* - *Reverse auction time:* - *Auction website:*
Documents Attached: **(To be sent to the bidders)**	1) Business rules for Reverse Auction (*Annexure-I*) 2) Process Compliance Form (*Annexure-III)* 3) Details of item (s) to be Reverse Auctioned (*Annexure-V*) 4) Post RA Price confirmation by bidder (*Annexure-VI)*

Process Compliance Form

Annexure – III

(The bidders are required to print this on their company's letterhead and sign, stamp before RA)

To
- M/s. {*Service provider*
- *Postal address}*

Sub: Agreement to the Process related Terms and Conditions

Dear Sir,

This has reference to the Terms & Conditions for the Reverse Auction mentioned in the RFQ document for {Items} against BHEL enquiry/ RFQ no.{……} dt. {…….} This letter is to confirm that:

1) The undersigned is authorized official/ representative of the company to participate in RA and to sign the related documents.
2) We have studied the Reverse Auction guidelines (as available on www.bhel.com), and the Business rules governing the Reverse Auction as mentioned in your letter and confirm our agreement to them.
3) We also confirm that we have taken the training on the auction tool and have understood the functionality of the same thoroughly.
4) We also confirm that, in case we become L1 bidder, we will FAX/ email the price confirmation & break up of our quoted price as per *Annexure - VI* within **two** working days (of BHEL) after completion of RA event, besides sending the same by registered post/ courier both to M/s. BHEL and M/s. {*Service provider.}*

We, hereby confirm that we will honor the Bids placed by us during the auction process.

With regards
Signature with company seal
Name –
Company / Organization
Designation within Company / Organization
Address of Company / Organization

- **Sign this document and FAX/ email it to M/s *{Service provider}* at *{……}* prior to start of the Event.**

List of bidders and their address/ contact person details

Annexure – IV

Sl. No.	Address	Contact Person
1	- *Name of bidder* - *Full postal address* - *Fax:* - *Phone:* - *Email:*	- *Contact person name:* - *Phone:* - *Email:*
2		
3		
..		
..		

Details of item (s) for Reverse Auction

Annexure – V

1. ***{Details of items including quantity, specification, Enquiry no. & date***

   1.
   2.
   ..

   ..
   ..
   }

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RA price confirmation and breakup
(To be submitted by L1 bidder after completion of RA)

Annexure – VI

To
- M/s. *Service provider*
- *Postal address*

CC: M/s BHEL
{Unit-
Address-}

Sub: **Final price quoted during Reverse Auction and price breakup**

Dear Sir,

We confirm that we have quoted.

Rs.{____in value & in words_____} for item(s) covered under tender enquiry No. {...} dt.{…}

Total price of the items covered under above cited enquiries is inclusive of *{Packing & forwarding, GST, E.D., C.S.T., freight and insurance charges up to {……} District,{……..} State and Type Test Charges etc., (exclusive of service tax), other as per NIT}*

as our final landed prices as quoted during the Reverse Auction conducted today {*date*} which will be valid for a period of {___ **in nos. & in words** ___} days.

The price break-up is as given below.

========
Total - Rs. **in value & in words**
========

Yours sincerely,

For _____

Name:
Company:
Date:
Seal:

GUIDELINES FOR REVERSE AUCTION - 2024