

Bharat Heavy Electricals Limited
ELECTRONICS DIVISION
MYSORE ROAD, BANGALORE - 560026

Phone: 080-26998375/9263
PES / Site Services. DEPT

NOTICE INVITING TENDERS

1. TENDER NUMBER : **PES/RCF/2020, DATE: 28-01-2020**
2. NAME OF WORK : Handling and Installation of equipment including complete wiring work in 3 Phase MEMU coaches at RCF, KAPURTHALA.
3. COMPLETION TIME : **24 MONTHS**
4. ESTIMATED COST : **Rs. 1023.82 Lakhs (excluding GST)**
5. EARNEST MONEY DEPOSIT : **Rs. 13,69,900/-**
6. LAST DATE AND TIME FOR THE SUBMISSION OF DULY FILLED IN TENDER DOCUMENT : **BEFORE 1.00 PM ON 19-02-2020**
7. PLACE OF SUBMISSION OF TENDER DOCUMENT : AT RECEPTION TENDER BOX NO.04/ CE
BHEL / ELECTRONICS DIVISION
MYSORE ROAD, BANGALORE – 560026
8. DATE AND TIME FOR TECHNICAL BID OPENING : **AT 1:15 P.M ON 19-02-2020**

NOTE: The Tenderer shall return the duly filled in Tender document after affixing signatures on all pages and submit.

TO,
ISSUING OFFICER/TRACTION SERVICES
BHEL – ELECTRONIC DIVISION
MYSORE ROAD, BANGALORE – 560026

Bharat Heavy Electricals Ltd

Electronics Division
Mysore Road, Bangalore – 560026

Tender Document for the work of

Handling and Installation of equipment including complete wiring work in 3 Phase MEMU coaches at RCF, KAPURTHALA

TECHNICAL BID

DATE OF OPENING: 19-02-2020

Part – I	Techno-Commercial Bid	52 Pages
Part – II	Price Bid	01 Page
	BHEL General Conditions of Contract	33 Pages

Note: 1) Part – I: To be submitted in a separate sealed cover.

2) Part – II: To be submitted in a separate sealed cover.

3) **Earnest Money Deposit of Rs. 13,69,900/- in favour of BHEL-EDN as per Mode provided in SI. No. C.2, Part – I (Techno-Commercial Bid)**

Or

If EMD exemption is claimed under MSME/NSIC, relevant valid certificate should be submitted in a separate sealed cover suitably super scribed.

Tenders will be liable for rejection if the above is not submitted.

4) Part-I, Part-II & EMD sealed covers to be put in outer Envelope and super scribing the Name of work and Name & Address of the Tenderer.

DEPT: POWER ELECTRONIC SYSTEMS DEPT.

ENQUIRY NO. PES/RCF/2020

DATE: 28-01-2020

PART-I
TECHNO-COMMERCIAL BID

A. INFORMATION PART

01. NAME OF THE CONTRACTOR :

02. ADDRESS

(A) OFFICE :

.....

TEL.PH NO/E-MAIL :

(B) RESIDENCE :

TEL.PH NO :

03. CONSTITUTION OF FIRM : INDIVIDUAL/ SOLE PROPRIETORSHIP CONCERN/
PARTNERSHIP FIRM/ PUBLIC LTD. COMPANY/
PRIVATE LTD. COMPANY

04. QUALIFICATION :

05. STAFF STRENGTH

(A) TECHNICAL :

(B) GENERAL :

06. PLANT/EQUIPMENTS :

B. ESSENTIAL CRITERIAS (For Techno-Commercial Acceptance)

S.N.	Particulars	To be filled by Bidder
1	<p>Experience of having successfully completed at-least one similar single work, each year, for last two years</p> <p>(Complete wiring works including installation of at least any five of the equipment viz. control/power panels, Alternators/D-engines, lights/fans, IV couplers, RMPUs/AHUs, emergency batteries, transformers, traction motors, converters etc. pertaining to all types of coaches of ACEMU/MEMU/DEMU/DETC/SPART/LHB power cars)</p> <p>(Copy of performance report alongwith WO/PO copy from the organization where the work is executed is to be enclosed. Submission of only WO/PO copy is not adequate)</p>	
2	<p>Turnover of more than 90 lakhs in the last three years. (Tenderer should mandatorily submit copies of IT Returns, Balance Sheet, Profit & Loss statement certified by qualified Auditors/Chartered Accountant)</p>	Yes/ No
2.1	Turnover - Previous year	Rs.
2.2	Turnover - 1 year before previous year	Rs.
2.3	Turn over- 2 years before previous year	Rs.
3	<p>Solvency shall be not less than Rs. 28.00 Lakhs (Latest Certificate from the Bank shall be produced not older than one (1) year from the date of opening of tender. (Preferrably in the Format as per Annexure – V)</p>	Furnished/ Not Furnished
4	Whether Acceptable for Reverse Auction	Yes/ No
5	<p>Tenderer should be registered with Labour (Central/State), ESI & PF Authority. (Tenderer should enclose copies of LIN No. and ESI/PF registration certificates)</p>	Yes/ No

Note: Bidders not meeting the above criteria are liable for rejection.

C. OTHER CONDITIONS

01. (A) SCOPE OF WORK : UNDERSTOOD / NOT UNDERSTOOD

(B) ACCEPT TO EXECUTE IN TOTAL : YES / NO

02. EMD PARTICULARS

(A) SBI COLLECT :

(B) EFT IN BHEL A/C :

(C) BANKERS CHEQUE/ PAY
ORDER /DEMAND DRAFT :

03. BHEL'S PAYMENT TERMS : ACCEPTABLE / NOT ACCEPTABLE

04. WHETHER AGREEABLE TO MAKE : YES/NO
NECESSARY STATUTORY PAYMENTS
AS PER BHEL EDN TERMS

05. ELECTRONIC FUNDS TRANSFER (EFT)
(FORM ENCLOSED IN ANNEXURE - III) : PLEASE FILL UP THE FORM (MANDATORY)

06. SECURITY DEPOSIT AS PER BHEL TERMS : ACCEPTABLE / NOT ACCEPTABLE

07. DECLARARTION OF ACCEPTANCE TO
TERMS & CONDITIONS
(FORM ENCLOSED IN ANNEXURE – IV) : PLEASE FILL UP THE FORM (MANDATORY)

ELIGIBILITY CRITERIA

1. Should have completed at-least one similar single work, each year, for last two years (from the tender opening date).(EXPERIENCE CERTIFICATE – Annexure VI)

The meaning of single similar work experience is as below:

Complete wiring works including installation of at least any five of the equipment viz. control/power panels, Alternators/D-engines, lights/fans, IV couplers, RMPUs/AHUs, emergency batteries, transformers, traction motors, converters etc. pertaining to all types of coaches of ACEMU/MEMU/DEMU/DETC/SPART/LHB power cars.

With respect to Railways, the credentials/ experience certificate should have been issued by at least a JA Grade Officer. With respect to other Government Departments and Public Sector Undertakings (PSUs), the certificate issued at the level of Executive Engineer and above can be taken as valid. Certificates issued by private individuals for the completion of the work will not be considered.

However, if vendor have executed the work through sub-contractor of main contractor to whom Purchase order is placed by Railways, then vendor has to provide the documentary proof (like PO copy from main contractor, authorization letter from main contractor to execute the work and proof of payment etc) that they have executed the works.

2. Turnover of more than 90 lakhs in the last three years

PROGRAMME OF WORK:

Immediately on issue of letter of acceptance of this tender, the Contractor should submit a programme of work showing the activities sub-work wise for completing the whole work within the stipulated period of completion with monthly milestones in consultation with the Executive Engineer-in-charge of the work as per the Mile-stone statement furnished in the scope of work/enclosed to this Letter of Acceptance, or as per the agreed programme. Acceptance or otherwise of a revised programme submitted by the contractor to the BHEL is purely the discretion of the Engineer and the contractor shall have no claims whatsoever in this regard.

The contractor shall also submit the methodology they/he prefer to use for tackling the important and large items and milestone statement.

ISSUE OF COMPLETION CERTIFICATE:

As soon as the work has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Engineer shall issue a certificate of completion duly indicating the date of completion in respect of the work and the period of maintenance of the work shall commence from the date of completion mentioned in such certificate. The Engineer may also issue such a certificate indicating date of completion with respect to

any part of the work (before the completion of the whole of work), which has been both completed to the satisfaction of the Engineer and occupied or used by the Railway. When any such certificate is given in respect of part of a work, such part shall be considered as completed and the period of maintenance of such part shall commence from the date of completion mentioned in the completion certificate issued for that part of the work.

STUDY OF DRAWINGS AND LOCAL CONDITIONS:

The Tenderer shall follow the standard general arrangement drawings and other drawings and specifications relating to the equipment / components and fittings specified in the Tender Papers or issued at the time of execution of work. Copies of the above standard drawings are available for inspection at BHEL. If the Tenderer so desires he may purchase full sets of drawings and specifications from the Office of the AGM, BHEL, or his successor / nominee (whose address will be intimated in due course) on payment.

The Engineering descriptions in the approved drawings normally govern the executions. However, for effecting payment, the description of items in the schedule is final and governing the contract. If there is any variation between the description in the tender and the detailed plans, the Engineer-in-Charge will operate the correct description and his decision is final and binding on the tenderer/contractor

The Tenderer/Contractor is required to inspect the sites of works and acquaint himself with the site conditions, availability of approaches for transporting of men and materials, land, space and other factors relating to the works, availability of labour, electricity and water, etc., before quoting his rates. The extent of lead and lift involved in the execution of works and any difficulties involved in the execution of work should also be examined before formulating the rates for complete items of works described in the schedule. The Tender submitted will be deemed to have been made after such inspection. Subsequent claims on non-availability of approach, land/space etc. shall not be entertained.

Additional Documents required to be submitted

- 1) Copy of PAN/GIR No. Registration Certificate issued by Income Tax Authority
- 2) Copy of ESI/PF Registration Certificate
- 3) Copy of GST Registration Certificate
- 4) Income Tax Returns for last Three years
- 5) Overdraft facilities available with the agencies
- 6) Balance Sheet and Profit & Loss Account for the last Three years
- 7) Annual Turnover for the last Three years duly certified by auditor
- 8) Work on hand (Required for bid capacity).
- 9) Registration with BHEL/Dept. of Labour/any other Govt. Institutions, if any

Special Conditions of Tender:

- 1) Bidders should have their Business office/Branch office at Bangalore with adequate Administrative/Technical staff for regular interactions/monitoring of work.
- 2) Bidders should require study the prevailing market trend of labours/other relevant statutory requirements before quoting and submit their competitive price.
- 3) Tenderers should not disclose any price bid details/discounts in the techno-commercial bids

Bharat Heavy Electricals Limited
ELECTRONICS DIVISION
MYSORE ROAD- BANGALORE-26

1. INSTRUCTIONS TO TENDERERS

1.1 Sealed Tender for the above noted work are hereby invited from contractors experienced in works of similar kind and magnitude.

1.2 **Tender shall be submitted in two parts, i.e. (I) Techno-Commercial bid and (II) Price Bid. Techno-Commercial bid** shall be submitted confirming acceptance to all the clauses indicated in this Tender along with EMD and enclosures as required by the Tender and any other which the Tenderer wish to submit. Tenderers shall also sign each and every page of the Tender document attached thereto before submitting Tender.

Price Bid duly filled & signed with seal, must be put in another separate sealed envelope superscribed with Tender reference and 'Price Bid'. Price bid envelope must contain only the rates and amount to be quoted in figures and words in format enclosed in Price schedule: Part-II which is enclosed hereto.

1.3 **Tenders should be addressed to the Issuing Officer, Electronics Division, Bharat Heavy Electricals Limited, Mysore Road, Bangalore – 560026. Sealed envelope of both (I) Techno-Commercial bid and (II) Price bid along with EMD must be put in a single sealed envelope duly superscribing the Name of work, Tender reference and due date. The full name and address of the Tenderer should be indicated on the sealed cover.**

1.4 **The bidders are required to submit / drop duly filled in tender document within the specified date and time in the FS&T tender box (Box No.7) kept in Reception Area of BHEL – Electronics Division, Mysore road, Bangalore – 560 026. Tenders received after the due date & time of opening of tenders will not be accepted. All the tenderers may witness the opening of the bids with due authorization of the person witnessing from the authorized signatory of the tenderer.**

1.5 The local address of the Contractors, the name of the person to whom all the correspondence is to be addressed should be indicated, mobile number (both Office & Residence), e-mail address and fax numbers.

1.6 **The tender documents are available in the BHEL web site: www.bhel.com / Central Public Procurement Portal: eprocure.gov.in under heading Tender Notifications. Corrigendum if any including extension of due date, clarification etc., will be published in BHEL web site only.**

1.7 **All entries in the tender documents should be in one ink. Eraser and overwriting are not permitted. All cancellation and insertion should be duly signed by tenderer concerned with the proper indication of the name designation and address of the person signing and affixing his seal.**

1.8 Tenderers shall fill in all the required particulars in the blank space provided for this purpose in the tender documents and also sign in each and every page of the tender document before submitting the tender. All the entries in the Techno-commercial bid & Price bid should be clearly written in ink or typed and corrections if any are to be duly authenticated by the bidder.

a) If there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of BHEL there is an obvious misplacement of

the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.

- b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above
- d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of BHEL, the bid is liable to be ignored.

1.9 Before quoting the rates, the tenderer shall thoroughly go through all terms and conditions.

1.10 Unit rate should be quoted in figures as well as in words in Indian Currency only i.e. Rupees and Paisa with reference to each item and for the items shown in the attached Price schedule: Part-II. These rates shall be for the finished work at site. **The rates shall include payment of any additional incentive to the workmen deployed in the contract and also expenses towards PF & ESI contributions and Bonus (as per Bonus act) except GST.** Amount of each item and total on each sheet as also the grand total amount of the whole contract shall be filled by the tenderers.

1.11 In case the rate quoted in figures differ from those quoted in words, the lower of the rates will be taken as the tendered rate and shall be binding on the tenderers. The lowest price bid (L1) shall be arrived based on the total amount for all the activities under the Price schedule: Part-II.

1.12 In case of arithmetical errors between Rate and Amount or any summation error, Rate (which will also be written in words) will be considered as the basis for computing the Total Offered Value/Total Cost to BHEL.

1.13 The rates to be quoted by the Tenderer shall be firm and shall cover and include all statutory levies and contribution such as ESI, PF etc payable by the contractor for the workers he may deploy to carry out the job. [Under various enactments passed by Parliament or by the State legislature and Rules framed thereunder]. The rates shall further be deemed to include statutory levies arising from such acts, Central or State, which may come into force, subsequent to submission of Tender. The tenderer shall note that no claim for enhancement of rates on the ground that existing statutory levies have been increased or those new statutory levies have come into effect after submission of Tender, or on any other ground, will be entertained.

1.14 **Evaluation shall be on the basis of delivered cost i.e. "Total Cost to BHEL". Total Cost to BHEL shall include Total Basic cost, ESI/PF contributions, Bonus, Uniform & Safety items, GST and any other cost indicated by vendor for execution of the contract. GST to be quoted separately in Part-II: Price Bid.**

1.15 **Unpriced Price Bid - A copy of signed/sealed price bid without indicating the prices should be enclosed alongwith techno-commercial bid.**

1.16 **Goods & Services Tax (GST): (If applicable)**

a. BHEL EDN GSTIN is 29AAACB4146P1ZB. All invoices to contain BHEL GSTIN No.

- b. The bidder shall mention his GSTIN number in all quotations and invoices submitted.
- c. The bidder shall also mention HSN (Harmonized System of Nomenclature) / SAC (Services Accounting Code) mandatorily in all quotations and invoices submitted.
- d. Invoice submitted should be in the format as specified under GST Laws viz. all details as mentioned in Invoice Rules like GSTN registration number, invoice number, quantity, rate, value, taxes with nomenclature – CGST, SGST, UGST, IGST mentioned separately, HSN Code / SAC Code etc. Invoice should be submitted in original for buyer plus duplicate copy.
- e. Payment of GST to contractor will be made only if it is matching with details uploaded by the contractor in GST Return.
- f. Contractor to give undertaking that GST return will be filed within the time limit prescribed.
- g. For invoices paid on Reverse Charge basis – “Tax payable on reverse charge basis” to be mentioned on the invoice.
- h. In case vendor delays declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law will be recoverable from vendor/contractor along with interest levied/leviable on BHEL.
- i. The changes in GST rates due to statutory amendment of GST ACT during the course of the contract will be paid as applicable.

1.17 (a) The rate quoted in the tender shall remain valid for a period of ‘THREE MONTHS’ from the date of Opening tender.

(b) Tenderer shall not increase quoted rates, once the tenderer has submitted offers/quotation/price and during execution of contract in case tender is accepted.

(c) Successful bidder should execute the work strictly in accordance with Tender schedule quoted rates as accepted by BHEL.

(d) **Price Variation clause is not applicable in this contract.**

1.18 **Before submission of Tender, the Tenderers are necessarily advised to inspect the site of work and its environment and be well acquainted with the actual working and other prevailing conditions including various best practices adopted by BHEL with respect to position of the materials and labour.** Pre bid meeting deliberating aspects involved in Job contract can be arranged on request to ensure proper understanding by the Tenderers who wish to participate. They should be well versed with BHEL General Conditions of Contract, Instructions to Tenderers, specifications and all other documents, which form part of the Agreement to be entered into subsequent to award of work. However, it is informed that in case of inconsistencies in any clauses of GCC and this document, the relevant clause of this document shall prevail over the other. The Tenderer shall specifically note that it is Tenderer’s responsibility to provide any item, which is not specifically mentioned in this specification, but which is necessary to complete the work.

1.19 Details and quantities of each item of work shown in the Tender schedule attached hereto are only approximate. They are given as a guideline for the purpose of Tendering only and are liable to variations and alterations at the discretion of the competent authority without entitling the contractor to any compensation throughout the contract period.

1.20 **Replacement of failed items during testing/commissioning/field trial is in the scope of contractor. It has to be done on priority to enable commissioning faster. No additional payment will be made for the same.**

1.21 In the event of the tender being submitted by a firm the tender must be signed separately and legibly by each partner or member of the firm or in their absence, by the person holding the power of Attorney on behalf of firm concerned. In the later case, a copy of the power of Attorney duly attested by the Gazetted Officer must accompany the tender.

1.22 If in any case, the date of Tender Opening falls on holiday, the Tender will be opened on the next working day.

1.23 **Earnest Money Deposit (EMD)**

Every tender must be accompanied by Earnest Money Deposit. This earnest money will be refunded to the unsuccessful tenderer after finalization of the award of work. In the case of successful tenderer, the earnest money will be retained as a part of Security Deposit for satisfactory completion of the work in accordance with Clause-16 of BHEL General Conditions of the Contract. Tenders without Earnest Money Deposit receipt are liable to be rejected.

Exemption of EMD can be availed by genuine MSE vendors as per guidelines of MSMED act 2006 and public procurement policy for MSME, 2012 by ministry of MSME, government of India. **MSE suppliers can avail the entitled benefits** only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (Five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (**Format enclosed at Annexure - I** where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefits shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer.

1.24 The Earnest money deposit may be furnished in any of the following forms:

a) SBI Collect (before tender opening)

The link to make EMD payment is given below.

<https://www.onlinesbi.com/sbicollect/icollecthome.htm>

Onlinesbi.com-> State Bank Collect -> Karnataka ->Public Sector Undertaking
-> Bharat Heavy Electricals Ltd. -> Others select payment nature and proceed as per the screen.

b) Electronic Fund Transfer credited in BHEL account (before tender opening)

c) Banker's Cheque/Pay Order/Demand Draft in favour of BHEL-EDN, Bangalore – 560026 (along with offer).

1.25 For reimbursement of Earnest Money Deposit, the tenderer should fill the enclosed EFT form, obtain the Banker's signature and enclose a photocopy of cancelled cheque leaf.

1.26 Unless the bidder whose tender is accepted signs contract agreement within fifteen days (15 days) of the date of the order directing to do so, the amount of Earnest Money already deposited by bidder will be forfeited and acceptance of the tender withdrawn.

1.27 **Forfeiture of EMD**

EMD by the Tenderer 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 any modification in his tender which is not acceptable to BHEL.

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

1.28 EMD given by all unsuccessful tenderers shall be refunded normally within fifteen days of award of work

1.29 The EMD does not carry any interest.

1.30 **Security Deposit**

Upon acceptance of the tender, the successful tenderer shall remit the security deposit with Bharat Heavy Electricals Ltd within the time as specified in the Letter of Intent. **The total amount of Security Deposit will be 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

The balance amount to make up the required Security Deposit of 5% of the contract value may be accepted in 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 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. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
 - v) Securities available from Post Offices such as National Saving Certificates, Kisan Vikas Patras etc., (Certificate should be held in the name of contractor furnishing the security and duly endorsed/hypothecated/pledged, as applicable in favour of BHEL).
- (Note: BHEL will not be liable or responsible in any manner for the collection of interest).

Collection of Security Deposit

At least 50% of the 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 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 payments/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 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)

Security Deposit shall be released to the contractor upon fulfilment of contractual obligations as per terms of the contract. The Security Deposit shall not carry any interest.

Refund of Security Deposit

The Security deposit will be refunded to the contractor by BHEL after adjusting any sums due to BHEL from the Contractor or under any other contract with this Division or any other sister division of BHEL, upon the fulfilment of the contract and the Contractor furnishing No Demand and No Due Certificate from ESIC, EPFO to the effect that there is no claim or demand in respect of the contract executed.

- 1.31 The BHARAT HEAVY ELECTRICALS LIMITED reserve the right to reject any or all the tenders received or accept any tender or part thereof without assigning reason thereof. In the case of acceptance of a part of tender, the time for completion may also be reduced to the extent considered necessary by the accepting authority.
- 1.32 Conditional and Unsigned tenders, tenders which are incomplete or otherwise considered defective, tenders which are not in accordance with the tender conditions laid down by the accepting officer and tenders not submitted in the prescribed forms are liable to be rejected.
- 1.33 The Contractors responsibility under this contract shall commence from date of receipt of the order or acceptance of tender.
- 1.34 If proprietor or partner of a firm expires after the submission of tender or after the acceptance of tender, BHEL reserves the right to cancel the contract if the character of the firm undergoes a substantial change.
- 1.35 THE BHARAT HEAVY ELECTRICALS LIMITED will not be bound by any power of Attorney granted by the tenderer or changes in the composition of firm made subsequent to signing of the contract. They may however recognize such power of Attorney and changes after obtaining proper legal advice.
- 1.36 If the tenderer deliberately gives wrong information on tender regarding past unsatisfactory performance with BHEL sister units, BHEL reserves the right to reject such tender at any stage including contract execution period.
- 1.37 Words imparting the singular number shall also be deemed to include the plural number and vice-versa where the context so requires.
- 1.38 The General and Special Conditions are complementary to each other and where they are in conflict, the special condition shall prevail.
- 1.39 The expenses for completing the stamping agreement shall be paid by the contractor.
- 1.40 Any covering letter and comments of the tenderer should be submitted along with the offer.
- 1.41 Should a tenderer or a contractor has a relative or in the case of firm or company, any of its shareholders relative is employed in Bharat Heavy Electricals Limited, the authority inviting tenders shall be informed of this fact at the time of submission of the tender, failing which tender may be disqualified or if such fact subsequently comes to light.
- 1.42 The ‘INSTRUCTIONS TO TENDERER / RELEVANT CLAUSES IN THIS NIT ’ & ‘GENERAL CONDITIONS OF CONTRACT OF BHEL’ shall be deemed to form an integral part of the Contract agreement for the work to be entered into. The Contractor has to scrutinize the same, and when submitting his tender, indicate his acceptance of both. In cases of variation between the two in any matter, the conditions in the ‘INSTRUCTIONS TO TENDERER / RELEVANT CLAUSES IN THIS NIT ’ shall prevail.
- 1.43 **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. Fraud prevention policy and list of Nodal officers shall be hosted on BHEL website, vendor portals of Units/Regions Internet.**
- 1.44 **Reverse Auction (RA)**

“BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit ‘Process compliance form’ (to the designated service provider) as well as

‘Online sealed bid’ in the Reverse Auction. Non-submission of ‘Process compliance form’ or ‘Online sealed bid’ by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).”

As a reminder to the bidders, system will flash following message (in RED color) during the course of ‘online sealed bid’:“Bidders to submit online sealed bid less than or equal to their envelope sealed bid already submitted to BHEL” (**Ref: Terms & Conditions in Annexure – II**).

2. CONTRACTOR’S OBLIGATIONS

Contractor shall deploy the required nos. of workmen for execution of the work awarded to him and he or his authorized representative will be solely entitled to instruct such workers about the manner in which the awarded work is to be carried out as per the prescribed specifications and as directed by Engineer-in-charge. The contractor shall be fully responsible for the work awarded to him and fulfil following obligations.

- 2.1 Contractor shall depute his workmen as per the details given in scope of work. The work shall be executed as per work instructions and to the satisfaction of Engineer-in-charge.
- 2.2 Contractor shall ensure that the employees deployed in the premises of RCF are physically and mentally fit and do not have any criminal records. Such employees should possess requisite skill, proficiency, experience etc. to carry out the work.
- 2.3 Contractor shall maintain appropriate records of his employees deployed to carry out the work.
- 2.4 Contractor shall provide employment card/identity card with photograph duly verified and attested by the contractor to his employees deployed to execute the work. Contractor shall also indicate the name of the proprietary/partnership firm/company, place of work, contact number and duration of validity of the card etc. in such identity card.
- 2.5 Contractor will be fully responsible for the good conduct of his employees deployed to execute the work. In case of any misconduct/misbehavior by any employee, the contractor will replace such employee(s) immediately.
- 2.6 Contractor will ensure that the work is executed through his employees on his rolls only and under no circumstances the contractor will deploy any casual employees to carry out the work; nor shall sub-contract the work without prior written permission from BHEL.
- 2.7 Contractor will keep watch on his employees and he will be liable for any pilferage /loss to BHEL due to Acts of omission and commission by his employees. Similarly, for any compensation to outsiders and his employees on account of any act of omission and commission by the employees deployed by the contractor shall lie exclusively with contractor.
- 2.8 The contractor shall be responsible for enforcing all safety regulations as applicable inside the factory at RCF, while undertaking the work tendered. Tthe contractor shall be responsible for issue and wearing of the safety equipment’s/gadgets.

- 2.9 In the event of termination of contract for any reason whatsoever, the contractor shall withdraw all his employees and his equipments deployed for this work, if any from the establishment of RCF.
- 2.10 Contractor shall take necessary insurance policy for his workmen to cover workmen's compensation and accidental cover as may be applicable. Provided if the contractor has or proposes to obtain ESI registration prior to the commencement of the contract, this insurance policy will not be insisted upon.
- 2.11 BHEL will provide materials for repairs and maintenance wherever applicable and agreeable. However, it will be the responsibility of the contractor to inform concerned Engineer-in-charge to ensure the materials/equipments for assigned jobs.
- 2.12 The age of the contract workers deployed at BHEL EDN should be between 18 to 60 years.

3. CONTRACTOR'S STATUTORY LIABILITY

- 3.1 The Contractor shall comply with the provisions of all the applicable Central or State laws/Rules in general and in particular to the Code on Wages 2019, Factories Act 1948, Child Labour (Prohibition & Regulation) Act 1986, Employer's Liability Act 1938, Employees Provident Fund & Miscellaneous Provisions Act 1952, Employees State Insurance Act 1948, Industrial Disputes Act 1947, Employee's Compensation Act 1923, Payment of Gratuity Act 1972, the Contract Labour [Regulation & Abolition] Act 1970, Income Tax Act 1961, Maternity Benefit Act 1961, Arbitration and Conciliation Act 1996, Goods & Services Tax Act 2017, Prevention of sexual harassment at workplace Act 2013, Guidelines/notification related to Safai Karmachari Act (as applicable) and other relevant laws/Rules applicable. The contractor shall also comply with applicable Acts/Rules, provisions, regulations, notifications and amendments made thereunder by concerned authorities from time to time.
- 3.2 Contractor shall comply with all statutory requirements, Rules, Regulations and Notifications issued from time to time by the concerned authorities in relation to employment of his employees.
- 3.3 **Contractor shall ensure payment of statutory minimum wages prescribed by the Punjab state government notified minimum wage, to his workers deployed in the work from time to time and maintain proper records of their timely disbursement in the prescribed manner. The periodic revision of this wages shall be noted by the contractor from time to time and the payment to his workers shall at no point of time be less than these minimum wages.**
- 3.4 **Any periodic change in Minimum wages and statutory compliance as notified by appropriate Govt. agencies or thereof during the contract period shall be borne by the contractor.**
- 3.5 Contractor shall provide PF pass book to his employees and ensure payment of PF, EDLI, pension dues under EPF & MP Act 1952 to the RPFC.
- 3.6 Contractor shall ensure payment of ESI contribution under ESI Act 1948 and provide ESI membership No. card of each employee.
- 3.7 **If monthly wages of any person (excluding remuneration for overtime work) exceed wages prescribed in sub clause (b) of clause (9) of Section 2 of the ESI Act for eligibility (presently INR 21,000/-) at any time before the beginning of the contribution period, he will not be covered under ESIC and the contractor shall mandatorily obtain Workmen Compensation policy in line with the Workmen Compensation Act, 1923 for contract labour deployed by him who are not covered under ESI Act. A documentary proof for the same shall be submitted to BHEL within 15 days from commencement of work. The contractor shall also enclose a valid documentary proof for**

having Workmen Compensation policy for contract labour deployed by him who are not covered under ESI Act, along with his monthly bill.

- 3.8 Contractor shall maintain proper records of PF, EDLI, Pension, ESI contribution, administrative charges etc. wherever applicable and shall produce proof of deductions as well as remittances. Contractor shall issue wage slips to his employees.
- 3.9 Contractor shall furnish proper Returns to the concerned statutory authorities and provide a copy of the same to BHEL. These returns shall be subject to verification whenever the statutory authorities/ inspectors visit RCF for inspection of records of the contractors.
- 3.10 Contractor shall be solely responsible for non-payment/delayed payment of wages/DA, contributions under EPF & MP Act, ESI Act etc.
- 3.11 In case, the contractor fails to make payment of wages to his employees or remittance of contribution to the concerned authorities & a claim is made against BHEL for whatsoever reason, the security deposit/other dues/running bills under the contract can be utilized by BHEL to discharge the liability of the contractor.
- 3.12 Contractor shall indemnify BHEL against all claims and losses if it suffers under various labour laws, statues or any civil or criminal law in connection with employees deployed by him.
- 3.13 The liability for any compensation on account of injury sustained by an Employee of the contractor will be exclusively that of the contractor, as BHEL is not the employer for him.
- 3.14 Contractor shall obtain necessary insurance cover at his own cost to mitigate any risk of accidents, losses, damages etc. BHEL shall not be responsible for any losses, damages to the contractor or to his employees.
- 3.15 The Engineer-in-charge shall, on a report having been made by the inspecting Officer as defined in the Contractor's Labour Regulations, have the power to deduct from the moneys due to the contractor, any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the contract or for non-observance of the said Contract Labour Regulations.
- 3.16 Contractor should ensure that the employees allowed entering BHEL premises shall be covered under independent code numbers / exemptions under EPF & MP Act 1952 and ESI Act 1948 and shall cover his employees under the said codes. **The contractor shall also indicate ESI No. and PF No. in the techno-commercial bid.**
- 3.17 **Payment of bonus under the Payment of Bonus Act, payment of gratuity under the Gratuity Act, and retrenchment compensation under ID Act will be the sole responsibility of the contractor.**
- 3.18 Over and above the daily wages rate, the contractor shall make payment to his employees deployed under this contract towards leave with wages also.
- 3.19 **Contractor shall observe provisions of Factories Act /any other Statutory Bodies in respect of working hours, holidays, rest intervals, leaves and overtime to his employees who may be deployed in RCF premises & maintenance of necessary registers, forms and statutory formats which shall be always available for inspection by BHEL/ Factories Inspector /any other Statutory Bodies factory in separate. No work shall be done on overtime, Sundays or on other declared holidays without written permission from RCF.**
- 3.20 Contractor shall be responsible for making payment of wages before expiry of 7 (seven) days from the last day of wage period and to ensure disbursement through Bank account of contract labours and subsequently obtain their signatures in the wage payment register.
- 3.21 Contractor shall obtain license under CL (R&A) Act, 1970 or amendments thereof.

4. GENERAL TERMS & CONDITIONS

Engineer-in-charge shall give overall instructions to the contractor or his authorised representative for the jobs to be carried out. BHEL will have nothing to do or be concerned with the employment of employees working for the contractor. The relationship between BHEL and the contractor will be that of independent entities and nothing herein contained will amount to joint venture, partnership or on employer-employee relationship. Supervision of work shall be done by the contractor/his authorized Supervisor exclusive for this work only.

- 4.1 The contractor shall maintain regular contact with the designated Engineer-in-charge of BHEL and will interact on matters relating to the work awarded under this contract.
- 4.2 In case the contractor does not carry out the contractual / statutory obligations or the services rendered by him are found to be unsatisfactory, BHEL shall bring the same to his notice and he will be obliged to discharge the obligations and rectify the deficiency / anomaly within the specified time in the notice and in continuation of such deficiencies/ failure to compliances limited to a maximum of 03 such notices from BHEL, failing which BHEL reserves the right to terminate the contract without assigning any reason what so ever. In such an event, no damages will be payable for short closure of the contract and the contractor shall be liable to pay BHEL for any loss or hardships it may suffer, such termination shall be for the contractor's default and any money including deposits or bills available with BHEL will be forfeited and any further claim on the contractor may be made by BHEL for recovery of any loss.
- 4.3 The decision of BHEL regarding interpretation of any terms and conditions set forth in this agreement shall be final and binding on the contractor.
- 4.4 Notwithstanding anything contained in this tender document, the contract may be terminated by BHEL without assigning any reason thereof by giving a notice of 30 days to the contractor.
- 4.5 The contractor shall commence the work immediately on receipt of the order and the contract shall remain valid for the contract period from the date of commencement of work, after issue of Work order/LOI. The parties reserve the right to extend the contract on mutually agreed terms and conditions.

5. SCOPE OF WORK

Broad scope of work:

1. Installation & commissioning, fitment, Handling, wiring and testing of all the BHEL supplied equipment inside the coach, end walls, over the roof, HT compartment, under frame and bogie.
2. Collection of the materials pertaining to the coach from custody stores of RCF and likewise Material Movement is contractor's responsibility without causing any loss or damage to the items.
3. Roof wiring, comprising of TL (train line) wiring, branch and main wiring for lights, fans, switches and speakers/display shall be completed as per the target given to facilitate roof ceiling work by BHEL/RCF.
4. All clamps, brackets, stiffener rods shall be collected and welded in the appropriate places as per the arrangement drawing with necessary chipping of the welding burrs in coach and painted with two coats of red oxide primer. Minor preparatory /modification work in the coach, to facilitate equipment mounting will have to be carried out by the contractor, if necessary.
5. Wherever cables are laid without metallic conduits/trays (e.g. curves, near terminal boards etc.) it shall be protected using flexible conduits/cable jackets. (In contractor scope). All flexible conduits shall be secured properly using clamps or tying to stiffener rods.
6. Numbering ferrules (In contractor scope) shall be used for all cables at terminal points. Heat shrinkable sleeves (In contractor scope) shall be used wherever specified in document/Drawing.
7. All cable terminations shall be done after proper crimping using appropriate crimping tools. Harting /Equivalent connectors and WAGO/Equivalent terminals shall be used wherever necessary as per the drawing. (All crimping tools in contractor scope.)
8. Earthing lugs shall be welded to the coach body wherever earthing is specified in drawing.
9. Details of works to be carried out are indicated at 2.0 (Scope of Work). However this is an indicative list only. The contractor has to refer to the relevant drawings, specifications, work instructions/procedure manuals and work accordingly.
10. Pre-Testing of all electrical equipment in the coach as per the test protocol in association with RCF/BHEL inspection. Replacement of items (Supplied by BHEL/RCF) found defective during testing will have to be carried out by the contractor.
11. Coupling & decoupling of IV coupler whenever required.
12. Attend/ Rectification of the defects noticed by the inspecting agency at every stage till dispatch.
13. Area wise works to be carried out are as per scope of work at 2.0.
14. Any work not specifically mentioned in the scope but which is essential to complete the activity (e.g. Terminal board assembly work, coupler assembly work, etc.,) relevant to the respective drawings/work/activity shall be done by the contractor.
15. Preparation of cable harness at RCF kapurthala
16. MSU mounting on Axle with required tools and consumables like Grease, Thinner, Emery Paper, Cleaning cloth etc.

Split of work:

1. BHEL is planning to assign 95 sets to L1 bidder and 48 sets to L2 bidder or others at L1 price. In case L1 price is not acceptable to L2,L3,L4....., entire work load will be handed over to L1 bidder.

2.0 Detailed scope of work:

2.1 Installation & Wiring work in Driving Motor coaches (DMC):

A) Scope of Work for HT Compartment Loading & Wiring (Item 1 of schedule of rates)

- i. Unpacking and Loading of HT room Equipment namely Traction Converter (TRC), Aux Converter (Aux), Electronic-cabinet (E-cab), cyclonic filter, traction motor filter and Aux compressor etc. with proper loading gadgets by following specific instructions.
- ii. Tightening of HT equipment with proper hardware as per the drawing and torque marked to their recommended value.
- iii. HT equipment anchoring and connections. Anchoring of HT equipment to roof or sidewall as per drawing
- iv. Laying of all power & control cables within HT Room equipment as per the drawing.
- v. Mounting of the Aux. compressor and earth connection.
- vi. While laying cables in trays proper edge protection should be done with cable jackets and PMI wherever necessary in tray points, jumps, bends, also cable bunches crossing each other at 90 Degrees are to be protected separately.
- vii. HT Room flooring clearance to be given after attending non-conformities raised by inspection.
- viii. Laying of aux. and control harness within HT equipment in roof tray to desk and auxiliary circuits like aux. comp., HT fan, LVT, CT, Panto magnet valve, Panto contactor box, governor and other equipment as per drawing.
- ix. Laying and bunching of aux. and control harness in the stiffener assembly of TC, Aux con and Ecab.
- x. Mounting of HT compartment fan assembly in the HT partitions and laying of supply cables through flexible conduit and cable jackets.
- xi. Bunching of cables to their respective location, cutting, cable marker provision, crimping and connection in the case of power cables.
- xii. Offering coach for power flash and attention of inspection bookings. Restoration cables after power flash (only those cables which should be restored).
- xiii. Offering for control flash and restoration of all aux. circuits and control circuits.
- xiv. Closing of HT equipment doors before offering for commissioning.

B) Traction Motor Bellows fixing, chain cleat fixing, etc.,(item 2 of schedule of rates)

1. Movement of relevant items forms ward/store.
2. Installation of bellows, dust guards and split pins
3. Installation of Traction motor chains cleat and connection of traction motor cables.
4. Body and bogie earth arrangements as per drawings

C) Traction motor assembly work in Driver Motor coaches (3PH AC MEMU) (Item 3 of schedule of rates)

1. Fixing of motor Suspension unit on axle to mount Traction motor.
2. Lift the bogies for ease of traction motor mounting.
3. Clean the traction motor, axles and nose suspension unit.
4. Mount the traction motors (Four per motor coach).
5. Fix the gear case assembly as per the instructions.
6. Wheeling/light run test

D) UNDERFRAME WIRING (item 4 of Schedule of rates)

1. Loading of Traction transformer with proper hardware and tightening with recommended torques and torque markings.
2. Loading of main compressor with proper hardware and tightening with recommended torques and torque markings. Filling of lubricant oil in the main compressor before commissioning.
3. A.P.C equipment fixing to the bracket provided in the bogie and welding of base frame for fixing of A.P.C connector.
4. Loading of other under-frame equipment namely phonic wheel sensor, pressure transducer etc.
5. Cable tray laying & fixing suitably.
6. Cable laying and bunching as specified in drawings.
7. Welding/tightening of EPDM at under-frame.
8. To close any unwanted holes on junction boxes after work completion.
9. To attend inspection non conformities before lowering clearance.
10. Cable head termination, Earthing of equipment with earth cables.
11. Connecting of power and control cables to their respective terminals after H.V test.
12. Closing of junction box covers, EP unit terminal box covers, air spring suspension junction box cover, transformer covers etc.

E) Scope of Work for above Roof Equipment Loading (item 5 of Schedule of rates)

1. Mounting of roof equipment like pantograph, insulators, VCB, CT, LVT, Lighting arrestors, earthing switches, braking resistance etc.
2. Laying of power cables, auxiliary cables, clamping, crimping and termination and laying of busbars between various equipment.
3. Laying of 25kV cable head from underframe to above roof, welding of clamp and provision of hardware & tightening with recommended torque including routing of HT cable in Tray in HT room.
4. Earthing of equipment and application of water sealants wherever necessary. (water sealant in supplier scope).

F) Scope of Work for Cab & Endwall Wiring (item 6 of Schedule of rates)

1. Loading and fixing of Endwall I-V couplers, Endwall panels with required hardware as per the drawing.
2. Fixing, wiring and connection of Head light, aux. head light, flasher light, head code & horn etc.
3. Loading & fixing of Driver's desk on DMC.
4. Loading and fixing of the E-cab panel in to the coach, placing the E-cab Panel on the base frame and anchoring/welding the panel on to the partition, pedestal and to the roof and clearing of any infringements.
5. Loading & fixing of Partition wall equipment i.e. Sealed switch panel, AC earthing switch, DC earthing switch DC-DC converter, etc. as per drawing and fixing with earthing arrangements and wiring, termination of cables.
6. Laying of cables for Endwall I-V couplers, Endwall panels as per the drawing/Documents.
7. Laying of other cables (control, power and signal) using necessary insulations, bunching, crimping and connections as per Drawing/Documents.
8. Collect the cable harness and cab mock-up harness from cable preparatory section.

9. Laying of control cables, power cables and Ethernet cables with necessary insulations as per drawing and laying of mock up prewired harness between desk, E-cab panel and other equipment.
10. Bunching, ferruling, crimping and connection of control cables work including soldering.
11. Driver's desk equipment to be loaded as per the drawing.
12. Laying of earth cables, bunching and connection.
13. Ethernet cable laying, bunching and connection/crimping work as per drawing.
14. Connection of all the cables with related equipment as per drawing/Document.
15. Finishing works in the endwall (cut to length of cables and cable ties).
16. Crimping and connection for desk and e-cab, Sealed switch panel etc. to be assembled.
17. Screwing of the covers on to the E-cab Panel at the time of dispatch.

G) Scope of Work for Loading Driver's Desk & Wiring

1. Pasting of insulated sheets in the cable laying area. Earth cable connection for trays. (scope of the items)
2. Preparatory work like stiffeners welding in the front wall and cab floor area for cable routing for coupler socket and E-CAB.
3. Loading of front wall coupler socket plate using appropriate torque wrenches.
4. Loading of driver desk and mounting of base frame with proper hardware and tightening with recommended torque markings and anchoring.
5. Earthing of desk to coach body, painting of welded portions.
6. Routing of coupler socket cables and roof tray flooring tray and vertical tray cables of E-Cab/Traction converter to desk TB as per drawing with proper edge protection wherever necessary.
7. Bunching of desk TB power, control and screen cables in their respective TBs.
8. Providing of cable markers, cutting, heat shrinking and crimping of cables and connections in the respective wago/equivalent studs and TBs as per drawing.
9. Crimping & connection of control cables.
10. Routing of brake controller cables from desk TB to Brake controller and its termination.

H) Wiper assembly and Provision of Hose in Driver Motor Coach

1. Drilling & Tapping of holes for fixing the unit.
2. Fixing of wiper motor.
3. Fixing of wiper blade.
4. Fixing of water hose connection for the wiper with clamping assembly.
5. Tightening of the wiper blade.
6. Earth boss welding, painting and connection work.
7. Wiring of wiper motor with necessary crimping & connection.
8. Provision of hose from tank to wiper assembly.
9. Welding and painting of metal clamps for the provision of hose for 2 units.
10. Fixing of water tank in the desk area for wiper assembly.
11. Water filling in the water tank.

I) Roof Wiring (Passenger Area): (Item 7 of schedule of rates)

1. Collection of Cable harness and Train line (TL) cables at the work site.
2. Laying of TL cables.
3. Provision of PVC bush at end wall.
4. Laying of branch harness cables.
5. Laying main cable harness and termination in roof Junction Box (JB)/Terminal box (TB).
6. Laying of Speaker, Display, Acoustic Noise Measurement(ANM), Amplifier Buzzer and Side light cables etc.
7. Laying of fans, lights and other fittings cables as given under scope of L&F.
8. Laying of cables from roof tray/conduits to end wall and near Cab partition.
9. Equipment's Earthing.

J) Loading of Switches/Lights/Fans/Speakers/Display Units In DMC:

1. LED light fitting, fan Speaker, Display, Amplifier, ANM and Side light and switches fixing etc. as per drawing.
2. Crimping of Fan, LED light fitting, Speaker, Display, Amplifier, ANM and Side light cables. Crimping & connection assembly for display unit.
3. Speaker and Display unit fixing and cable termination.
4. Earthing of Speaker, Display unit at equipment side.
5. Offering for control continuity test to inspection and attending of points if any.
6. Fan connection and closing after control HV test.
7. LED light fitting connection and provision of LED light tubes after control HV test.
8. Offering for light & fan load test to inspection and attending of points including replacement of defective units if any.
9. Checking performance of fan, LED light fitting, Speaker, Display unit and Side light etc
10. Closing of LED lights fitting covers.

K) Roof Harness Laying in Trays and Insertion of Cable Jackets (Item 08 of Schedule of rates)

1. Cable harness will be issued from the store. Arrange the trays on either side of the stand 20 meters long.
2. Grouping the cable as per drawing from NAEW/AEW to JB's and JB's to JB's.
3. DC "+ve" and "-ve" cables are to be separated and separate cable jackets to be provided as per the length of cables.
4. Place the AC cables, DC cables and screened cables separately in the partitions provided in the tray.
5. Bunch the cables neatly with cable tie and crimp the wire ends after inserting marking ferrules.
6. In case of screened cables, the outer sheath and screen to be insulated with heat shrinkable sleeve and crimped with wire end ferrule sockets.
7. Neatly arrange the cables and tie in tray with cable tie.
8. Terminate all the cables as per drawing in the JB's terminal Board.
9. Crimping of all types of earth cables/braided copper wire required for use in 3PH MEMU coaches (Driving motor Coach) as per the latest relevant drawings.(HARNESS CHART)
10. Self-checking of entire work before offering for inspection.

L) Installation of Conduits, Cable Boxes and Other Accessories in DMC (Item 09 of Schedule of rates)

1. Installation of all rigid aluminum conduits shall be carried out as per the layout shown in the respective coach drawings.
2. Installation of all Junction Boxes/Cable boxes, Motor connection boxes and stiffeners shall be carried out as per the layout shown in the respective coach drawings.
3. Clamps and hardware required for installation of aluminum conduits shall be provided according to the location shown in the relevant drawings and in consultation with RCF/BHEL.
4. The size and type of brackets and accessories to be used shall be as per the relevant RCF/BHEL drawings.
5. Any preparatory work including cutting and dressing of sharp edges etc., shall be carried out well in advance before commencement of work.
6. The contractor shall execute any modifications/improvements in work as suggested by the Purchaser's engineer at no extra cost.
7. Conduit laying activity shall be carried out in parallel with tray laying and cable laying process which would be carried out by BHEL/RCF or BHEL/RCF nominated agency.
8. The entire installation activity shall be completed within mutually decided time line.

NOTE: Angles, mounting brackets & clamps as specified in the relevant drawings shall be provided by RCF. All necessary hardware to be provided by contractor.

2.2 Wiring in Trailer Coaches (TC) (item 10 of Schedule of rates)

A) Roof Wiring:

1. Laying of TL cables.
2. Provision of PVC bush at both end walls.
3. Laying of main/branch harness cables.
4. Roof JB bunching & connection.
5. Laying of Speaker, Display and Side light cables.
6. Loading of fans, lights, switches and other fittings as given under scope of L&F loading.
7. Laying of cables from roof tray to end wall at both sides.
8. Earthing of Speaker & Display cables at coach body side.

B) Loading of Switches/Lights/Fans/Speakers/Display Units in TC:

1. LED light fitting, fan Speaker, Display, Amplifier, ANM and Side light and switches fixing etc. as per drawing.
2. Crimping of Fan, LED light fitting, Speaker, Display, Amplifier, ANM and Side light cables. Crimping & connection assembly for display unit.
3. Speaker and Display unit fixing and cable termination.
4. Earthing of Speaker, Display unit at equipment side.
5. Offering for control continuity test to inspection and attending of points if any.
6. Fan connection and closing after control HV test.
7. LED light fitting connection and provision of LED light tubes after control HV test.
8. Offering for light & fan load test to inspection and attending of points including replacement of defective units if any.

9. Checking performance of fan, LED light fitting, Speaker, Display unit and Side light etc
10. Closing of LED lights fitting covers.

C) Endwall Wiring:

1. Loading and fixing of Endwall IV couplers, plates earthing stud and end wall panels with required hardware as per the drawing.
2. Laying of cables (control, power and signal) using necessary insulations, bunching, crimping and connections as per diagram.
3. Laying of earth cables, bunching and connection.
4. Ethernet cable laying, bunching, crimping and connection work as per drawing.
5. Finishing works in the endwall (cutting of excess length of cables and cable ties).

D) Under Frame Wiring:

1. Cables laying as per drawing
2. Welding/mounting of EPDM gland plates at underframe and painting of welded portions.
3. Earthing of equipment.
4. Connecting of cables to their respective terminals after H.V test.
5. Closing of junction box covers, E.P unit terminal box covers, air spring suspension junction box cover etc.

E) Installation of Conduits, Cable Boxes and Other Accessories in TC (Item 11 of Schedule of rates)

9. Installation of all rigid aluminum conduits shall be carried out as per the layout shown in the respective coach drawings.
10. Installation of all Junction Boxes/Cable boxes, Motor connection boxes and stiffeners shall be carried out as per the layout shown in the respective coach drawings.
11. Clamps and hardware required for installation of aluminum conduits shall be provided according to the location shown in the relevant drawings and in consultation with RCF/BHEL.
12. The size and type of brackets and accessories to be used shall be as per the relevant RCF/BHEL drawings.
13. Any preparatory work including cutting and dressing of sharp edges etc., shall be carried out well in advance before commencement of work.
14. The contractor shall execute any modifications/improvements in work as suggested by the Purchaser's engineer at no extra cost.
15. Conduit laying activity shall be carried out in parallel with tray laying and cable laying process which would be carried out by BHEL/RCF or BHEL/RCF nominated agency.
16. The entire installation activity shall be completed within mutually decided time line.

2.3 Harness preparation details work activity.

1. Cutting of harness as per size specification
2. Cable harness marking as per specification
3. Ferruling of harness as per specification
4. Bunching of harness cable as per specification
5. Layout of cable in conduit and cable jacket as per specification
6. One side crimping termination if required.

7. Rapping of power and control harness in bundle.
8. Packing of complete set of harness in one box.

SPECIAL NOTE:

1. Apart from the works detailed above, provision of additional safety/passenger amenity items may have to be carried out by the contractor free of cost in case the Railways decide to introduce the same at later stage.
2. For adherence to safety and other improvements, QA/RCF or his representative is authorized to issue necessary instructions from time to time. This should be immediately effected in the coach on hand.
3. Replacement of the non-functioning/failed equipment/cables erected by the firm shall be undertaken at no extra cost, if found necessary,
4. Any minor modification work required to be carried out in the coach to facilitate the installation/wiring work will be under the contractor's scope.
5. The contractor has to refer the relevant drawings for the assemblies and sub-assemblies and quantity per coach and number of such assemblies/coach and raise demand note for the material.
6. The contractor shall maintain the account of all RCF/BHEL supplied materials. Similarly, all packing materials and generated scrap shall be collected and moved to the nominated dump area.
7. Wiring lay out, wiring to the points, fitment of equipment, hardware to be used shall be strictly based on the reference drawing given or as per the instructions of BHEL/Railway representative.
8. Checking the intactness of the wiring and safe fitment of the equipment shall be based on the check list given by BHEL/RCF. Contractor's supervisor signed check list for individual coach shall be handed over to electrical inspection.
9. No bare cable shall be visible. Where ever metal conduit or PMA conduit cannot be used, PVC/cable jacket shall be used.
10. Equipment details required for rolling stock certificate shall be handed over to inspection.
11. Defective items removed from coach shall be handed over to designated shop.
12. Supervisor-in-charge should attend the daily production meetings specified by BHEL/RCF Officials.
13. Status of work in each and every Coach allotted to the contractor should be maintained in a file/register for immediate reference.
14. Drawings to be collected well in advance and studied. Necessary work diagrams to be prepared before taking up the work.
15. Feeder shop requirements to be forecasted before intake of the coach in assembly line.
16. Defective material position in hand to be advised to the concerned supervisor of BHEL/RCF every week.
17. Design discrepancy to be advised to the concerned BHEL site in charge /Dy. CEE/Elec, RCF in writing.
18. In order to meet the daily targets, contractors need to plan their work well in advance and all materials required for the work may be drawn the previous day itself.
19. Stock position of all materials to be maintained in a register in the format given by BHEL/RCF (Bill of material per basic unit) The contractors shall return the defective

- items to stores through supervisor in-charge as per extant procedure on weekly basis so as to avoid short fall of materials towards the end of batch order.
20. The contractors shall strictly prohibit the use of smart phones by their staff inside the premises of the factory and shall provide them with only basic phones for communication. Only supervisors are permitted to carry smart phones.
 21. Contractor staff should carry with them the safety pocket diary consisting the importance of safety in working and other aspects of safety.
 22. Everyday staff position to be reported to BHEL site in charge /Dy. CEE/Elec, RCF.
 23. Protection and securing of cables, jackets, PMA conduits should be carried out wherever necessary.
 24. The inspection points shall be analysed for repeated points and thereby scope for continuous improvement shall be ensured.
 25. If needed, re-charging of battery shall be carried out by contractor using charging facility provided by RCF with their consultation.
 26. The BHEL/RCF shall have the power to direct the contractor to engage sufficient number of expert supervisors, if it is considered that the contractor's supervising arrangements is insufficient for successful completion of the work. Repeated failure to comply with the above directive also will result in the contract being terminated apart from levy of penalty.
 27. Only qualified welders shall be engaged by the contractor.
 28. Contractor to ensure insurance for their workers working in RCF premises (EDN to modify this clause as per BHEL norms).
 29. Contractor has to provide an unskilled manpower for exclusive use of BHEL for a period of the contract of 3-Phase MEMU.

2.4 INSPECTION OF WORKS IN THE COACH

1. All works connected with this tender shall be inspected by QA/RCF or his nominee with reference to the approved drawings/specifications. The contractor shall provide all assistance including labour / tools to carry out the final inspection and shall arrange to produce any test report demanded by the Inspection Engineer.
2. Any improvement to wiring, installation, material handling etc., if found necessary, shall be undertaken by the contractor and the works completed to the fullest satisfaction of the Inspection Engineer.
3. Contractor is prohibited from conducting live line testing (110V & above) of coach without associating BHEL/RCF inspection wing. Similarly, attention of defects noticed while testing shall be carried out after obtaining permission from the concerned authority.

Tentative List of Drawings for Reference

Driver Motor coach

- 1) - Arrangement of Roof wiring
- 2) - Arrangement of U/F wiring
- 3) - Layout of switch installation
- 4) - Arrangement of coupler socket E/W
- 5) - Arrangement of E/W wiring.
- 6) - Arrangement of Driver desk & CAB
- 7) - Arrangement of equipment over roof
- 8) - Arrangement of HT compartment
- 9) - Layout of TL Conduits
- 10) - Installation of U/f equipment
- 11) - Arrangement of Cable Trays.

Trailer coach

- 1) - Arrangement of U/f wiring
- 2) - Arrangement of roof wiring.
- 3) - Arrangement of coupler socket E/W
- 4) - Arrangement of wiring on E/W
- 5) - Layout of switch installation
- 6) - Arrangement of TL conduits
- 7) - Harness chart for Roof
- 8) - Harness chart for endwall

Note: This is only a tentative list of drawings to give the tenderer some idea about quantum of work. The exact drawings specific to the type of coach will be issued (free of cost) only at the time of commencement work.

List of material provided by Contractor:

SL no	Item description	Tentative Qty	Spec no/ technical requirement
1	Flexible/ pma conduits , cable ties	As per drawing	
2	cable jackets		
3	Numbering ferrules/ marker		
4	Heat shrinkable sleeves		
5	necessary hardware (fasteners, stiffeners etc)		
6	water sealants		
7	insulated sheets		
8	Lugs , earthing braids, copper bus bars for roof equipment, earthing bus bar under frame.		
9	Tools like crimping tools, cable cutter, and other cutting tools, heat guns , welding machine with consumable, drilling machine, spanners and general purpose tools.		
10	Junction box U/F		
11	Cable trays	As per drawing	Material of cable tray should be SS 304
12	Primer and paint		To use at few places like welding spots etc.
13	Insulation tapes, cotton tapes		
14	Small man driven trollies to handle materials at installation place		
15	Lifting jacks for transformer mounting		
16	Multi meters , meggers, etc		

Notes- If anything necessarily required for installation and commissioning shall be arranged by contractor.

COMPLETION PERIOD:

The successful tenderer shall be ready to commence the work within 15 days from the date of award of contract or date of advice to commence the work. Delay in commencement of work beyond the specified time will lead to penal measures as per clause of Contract.

(A)SCHEDULE OF ACTIVITIES FOR DRIVER MOTOR COACH(DMC)

Stage no.	Activity	Completion time for 3PH MEMU DMC
Stage 0	Intake	D
Stage 1	HT Room power harness laying	D + 1 day
Stage 2	HT Equipment loading & stiffener welding	D + 1 day
Stage 3	Hi-Dip	H
Stage 4	Endwall panel loading, Driver desk loading, coupler fixing, Roof harness pre wired tray fitment	D + 2 days
Stage 5	Roof wiring & clearance Endwall clearance	D + 3 days/D+4 Days
Stage 6	Transformer mounting, UF power harness laying, HT cable laying	H+ 1 day
Stage 7	HT room power cable crimping, HT mockup harness laying	D + 7 days
Stage 8	Offering for Power HV	H+8 days
Stage 9	Lights, Fans, Switches & PIS display fitment	D + 7 days
Stage 10	Cab clearance for flooring	D + 9 days
Stage 11	Offering Control continuity Control cables & L&F restoration ,Speaker fitment & performance test	D + 11 days
Stage 12	Offering for pre-commissioning,	D +12 Days
Stage 13	Pre-commissioning points attention & handing over for commissioning	D +13 Days

(B)SCHEDULE OF ACTIVITIES FOR TRAILERS COACH OF 3PH MEMU

Stage no.	Activity	Completion time for 3PH MEMU TC
Stage 0	Intake	D
Stage 1	Under frame equipment mounting & harness laying	D + 2 days
Stage 2	Roof ceiling clearance	D + 3 days
Stage 3	Endwall clearance	D + 4 days
Stage 4	Lights, fans & other equipment fittings	D + 5 days
Stage 5	Control continuity	D + 6 days

Note:

- I. For Prototype rake, the above schedule may vary as per actual requirement of work.
- II. The contractor should adhere to the above schedule in normal conditions.
- III. In case of delay due to mechanical dependent works/unforeseen circumstances attributable to Railways, BHEL/Railway representative can relax the above schedule.
- IV. In case of heavy demand/urgent situation, BHEL/Railway representative may reduce time frame given in the above schedule accordingly.
- V. If the contractor fails to abide by the above schedule and coaches are delayed on account of contractor, a penalty of Rs. 2,000/- per day per coach shall be levied for the first two days and Rs. 4,000/- per day per coach thereafter. Repeated delays in the schedule of activities in the coaches on the part of the contractor will be viewed strictly and contract will be determined as per the conditions of contract.
- VI. Monthly targets will be advised to the contractor in the beginning of the month. The contractor shall mobilize the manpower, machinery and necessary tools & plants accordingly to meet the targets.
- VII. BHEL's decision in the above matter will be final and binding on the contractor.

Date:

Signature of Tenderer/Contractor

Address:

TENDERER

ISSUING OFFICER

SCHEDULE OF RATES FOR WORKING OUT

TENDER NO:

Name of Work: -Handling & installation of equipment including complete wiring work in 3PH MEMU coaches at RCF Kapurthala.

Unit of measurement: Contract work is defined for 143 basic units. Each unit comprises of 1 DMC and 3 TCs. Contract shall be awarded in multiples of one basic unit. Work in each basic unit

Sl no	Description of Work	unit	Qty
1	Loading & Wiring work in HT area of DMC of 3PH MEMU including Installation of Equipment and termination. Movement of relevant items from Stores/feeder Shop to assembly line.	DMC	1
2	Traction motor bellow fixing, Traction motor chain cleat fixing and connection, body and bogie earth arrangement, Inter connection of couplers and socket for formation and movement of relevant items from stores /ward	DMC	1
3	Traction motors assembly in DMC of 3PH MEMU. Movement of relevant items from Stores/feeder Shop to assembly line.	DMC	1
4	Loading & Wiring work in underframe of DMC of 3 PH MEMU including Installation of equipment and termination. Movement of relevant Items from Stores/feeder Shop to assembly line	DMC	1
5	Loading & Wiring work in Above roof area of DMC of 3PH MEMU including Installation of equipment and termination. Movement of relevant items from stores/feeder Shop to assembly line	DMC	1

TENDERER

ISSUING OFFICER

6	Loading & Wiring work in Cab & Endwall area of DMC of 3PH MEMU including Installation of equipment and termination. Movement of relevant items from Stores/feeder Shop to assembly line	DMC	1
7	Wiring work in Roof area of DMC of 3PH MEMU including installation of equipment and termination. Movement of relevant items from Stores/feeder Shop to assembly line	DMC	1
8	Harness Laying in trays and Inserting in cable jackets for 3Ph MEMU. Movement of relevant items from Stores/feeder Shop to assembly line	DMC	1
9	Installation of conduits cable boxes and other accessories in Underframe of DMC/TC of 3PH MEMU as per Drawings. Movement of relevant items from Stores/feeder Shop to assembly line.	DMC	1
10	Wiring work in TC of 3PH MEMU Including installation of Equipment and termination. Movement of relevant items from Stores/feeder Shop to assembly line	TC	3
11	Installation of conduits cable boxes and other accessories in Underframe of TC of 3PH MEMU as per drawings. Movement of relevant items from Stores/feeder Shop to assembly line.	TC	3
12	Harness preparation work for 1-Unit	Set	1
13	MSU Mounting on axle (4 Nos./Set)	Set	1

(Total in words: -only)

6. TERMS OF PAYMENT

Payment will be made to the contractor within 45 days after submission of bills and duly certified by BHEL Engineer-In-charge. This is subject to fulfilling relevant statutory compliances such as ESI /PF returns etc. as applicable under Contractor's statutory liability in this contract. Invoice to be submitted monthly unitwise. Completion of Erection and wiring – 75% and complete commissioning of rake – 25%.

7. SPECIAL INSTRUCTIONS

- 7.1 The management of BHEL shall have the right to withhold payment of or make recoveries from claims due to the contractor in respect of any loss or damage caused or occasioned in respect of the properties of BHEL under the terms and conditions of this arrangement or any payment necessitated due to the infringement of any statutory obligations by the contractor.
- 7.2 The contractor shall not transfer or submit the work to any one without the prior written approval of BHEL. The contractor shall either by himself or through a competent agent approved by BHEL authorities, perform the said work.
- 7.3 The contractor or his authorized agent approved by BHEL shall be in attendance in BHEL premises during all working hours for supervising the work. For any negligence of the service employed by the contractor or for any loss or damage caused or occasioned by himself, his agents or workmen in respect of the property of BHEL, the contractor shall be personally responsible and shall make good the loss forthwith.
- 7.4 Whenever under the contract any sum of money shall be recovered from or payable by the contractor, the same shall be paid by the contractor on demand or such amount may also be deducted from any sum due or from any sum which at any time thereafter becomes due to the contractor under his contract or under any other contract or from his security deposit, in respect of this work or in respect of any other work.
- 7.5 If the management of BHEL engages workers to complete any part or whole of the work as per this contract for any period due to failure of the contract he has to reimburse to the management of BHEL, the extra cost involved on this account.
- 7.6 All items of work done shall be entered in a register daily so that complete record is obtained of all work performed under this arrangement, and signed and dated by both parties viz., persons authorized for and on behalf of BHEL and the contractor or his agent approved by the company each day on completion of work.
- 7.7 If any controversy regarding performance of any item of work is there it has to be settled before signing on the register by parties on the same day. No objection will be entertained after the contractor/his supervisor has signed in the register.
- 7.8 Without prejudice to any rights or remedies under this agreement if the contractor dies, the BHEL authorities shall have the right to terminate this agreement without any liability whatsoever as regards to enlistment of the work for the balance contract period after the death of the contractor.
- 7.9 **The contractor shall disburse the wages through Bank Account of Contract labours and obtain their signature in the payment register on or before 7th of every month, if it falls on Sunday/Holiday, payment shall be made on previous day.**

- 7.10 The rates of wages should be quoted inclusive of ESI & PF. Exact amount of wages remitted to ESI & PF authorities in respect of workmen engaged for the above and the details of amounts remitted towards their PF & ESI for each month to be enclosed.
- 7.11 The contractor shall apply & obtain license under the Contract Labour (R&A) Act 1970 and comply with the relevant provision of this Act, in respect of the labour employed by him for executing this contract. The contractor shall furnish necessary returns to the authority through the principal Employer.
- 7.12 The contractor shall comply with the provisions of the Code on Wages Act 2019, Workmen's Compensation Act 1923 and other statutory law relating thereto and made thereunder from time to time.
- 7.13 The contractor shall comply with the provisions of the workmen's compensation Act 1923 Employment of Children Act 1938, Employer's Liability Act, 1938, Industrial Disputes Act 1947 & other Acts Central or States that may be applicable to him. He shall be liable to pay all such sum or sums that may become payable as contribution, compensation, penalty, fine or otherwise, which the provision of the said acts, to or on behalf of any workmen employed by the contractor by an authority empowered under the relevant Act. Any cost incurred by the Management of BHEL in connection with any claim or proceedings under the said Acts or in respect of loss, injury or improper performance of this contract by the contractor, his workmen, servant and any money which may become payable to the management of BHEL as aforesaid shall be deemed to be deducted by the management of BHEL from any money due or accruing to the contractor by the management of BHEL or may be recovered by the management of BHEL from the contractor in the other manner.
- 7.14 The contractor should take independent code numbers under EPF Act 1952 and ESI Act 1948 and shall cover his workmen under the Employees Provident fund schemes and Employees State Insurance Act 1948 and show proof of payment of subscriptions / contributions to the concerned authorities. Both in respect of ESI/EPF the contractor shall obtain necessary declaration forms from his employees and obtain individual insurance and PF number and shall furnish to the company necessary proofs for having made remittance of ESI & PF contributions in respect of all contract labourers engaged by him.
- 7.15 Regards Employees State Insurance Act, the contractor shall submit Photostat copies of the challans of remittance of the contributions (both the employees' contributions and his own contribution thereon) to the ESI Corporation in respect of the employees engaged in RCF by him for this work for the relevant period before any payment is released by BHEL..
- 7.16 As regards the Employees Provident Fund and Miscellaneous Provision Act 1952 and rules and regulations and schemes framed thereunder, he shall be liable to pay employees compensation under the Act in respect of all labour employed by him for the execution of the contract. For this purpose, he shall indicate the code number obtained by him from the Regional Provident Fund Commissioner through H.R. department, EDN BHEL and produce the Photostat copy of the challan receipt of monthly remittance of the contractor will be released only on production of 'NO DUE CERTIFICATE' from the Regional Provident Fund Commissioner. He shall also

furnish such returns as are due under the Act to be sent to the appropriate authorities through BHEL as Principal Employer.

- 7.17 The BHEL General Conditions of Contract shall also apply to this work except to the extent modified in these conditions. The contractor shall scrutinize the GCC available in BHEL EDN and acquaint himself with provisions thereof to the satisfaction.
- 7.18 The management of BHEL shall be at liberty to terminate the contract by issuing a month's notice to the contractor without assigning any reason what so ever. As regards unsatisfactory performance or non-compliance with any of the terms & conditions of the contract by the contractor, the management of the BHEL shall have the right to terminate the contract forthwith without notice & rearrange the balance work through other agencies at the risk & cost of the contractor & under such circumstances, the security deposit paid by the contractor shall stand forfeited.
- 7.19 The contractor shall follow such Act, rules & regulations of the State/Central Govt that are in force & that may be framed from time to time. BHEL shall not be responsible for any infringement of the various statues in force by the contractor.
- 7.20 The contractor shall take, at his own cost the necessary license in respect of this work. The expenses in completing the formalities in executing the agreement including execution on stamp paper will also be met by the contractor.
- 7.21 **Statutory Deduction such as TDS towards Income Tax and GST TDS** will be made as per Rules from the bills payable to contractor.
- 7.22 **Signature of the Parties**
Work order issued by BHEL to be signed and returned to BHEL. It should be signed with seal of the firm / company.

7.24 The Job contractor shall maintain following Registers under Contract Labour (Regulation and Abolition) (Central) Rules, 1970 / other Acts applicable.

- i) Muster Roll – Form No. (XVI)
- ii) Register of Workmen Employed by Contractor – Form No. (XIII)
- iii) Wage Register – Form No. (XVII)
- iv) Register of Over Time – Form No. (XXIII)
- v) Register of Fines – Form No. (XXI)
- vi) Register of Advance – Form No. (XXII)
- vii) Register of Wages cum Muster Roll – Form No. (XVIII)
- viii) Wage Slips – Form No. (XIX)
- ix) Employment Cards – Form No. (XIV)
- x) Register of Deduction for Damage of Loss – Form No. (XX)
- xi) Service Certificate – Form No. (XV)

- xii) Registers under Equal Remuneration Act
- xiii) Leave with wages – Form No. 14 under Karnataka Factories Rules 1969
- xiv) Bonus Register – Form C under payment of Bonus Rules 1975
- xv) Accident Register
- xvi) ESI/PF challans, records, Registers and returns under ESI/PF Acts.
- xvii) Any other records / registers required to be maintained by the contractors under statutory provisions applicable to him

ARBITRATION & CONCILIATION

8.1: Conciliation

8.1.1 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 Contract/Order, 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 the Buyer 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.

8.1.2 The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration & Conciliation Act, 1996 or any statutory modification thereof and as provided in Procedure to these Conditions. The Procedure together with its Formats will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in these Conditions.

8.1.3 The Seller agrees that the Buyer may make any amendments or modifications to the provisions stipulated in the Procedure to these Conditions from time to time and confirms that it shall be bound by such amended or modified provisions of the Procedure with effect from the date as intimated to the Seller by the Buyer.

8.2: Arbitration

With a Sole Arbitrator:

8.2.1 Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 23.1 herein above or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract (hereinafter referred to as the '**Dispute**'), then, either Party may, 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 Unit/Division/Business Group issuing the Contract within 45 days of receipt of the complete Notice in terms of this Clause.

- 8.2.2 The language of arbitration shall be English. The Arbitrator/Arbitral Tribunal shall pass a reasoned award.
- 8.2.3 The cost of arbitration shall initially be borne equally by the Parties subject to the final apportionment of the cost of the arbitration in the award of the Arbitrator(s).
- 8.2.4 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 the place from where the contract is issued.
- 8.2.5 Notwithstanding the existence or 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 except where the Contract has been terminated by either Party in terms of this Contract.

8.3: IN CASE OF CONTRACT WITH PUBLIC SECTOR ENTERPRISE (PSE) OR A GOVERNMENT DEPARTMENT, THE FOLLOWING SHALL BE APPLICABLE:

- 8.3.1. In the event of any dispute or difference relating to the interpretation and application of the provisions of the commercial Contract between Central Public Sector Enterprises (CPSEs)/Port Trusts inter-se and also between CPSEs and Government Departments/Organisations (excluding disputes concerning railways, Income Tax, Customs and Excise Departments), such dispute or difference shall be taken up by either party for resolution through Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD) as mentioned in Department of Public Enterprises (DPE) Office Memorandum No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018 as amended from time to time.”
- 8.3.2. A copy of the extant Department of Public Enterprises (DPE) Office Memorandum No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018 as available on Govt. of India website and the same as amended from time to time shall apply in all such cases.

BHARAT HEAVY ELECTRICALS LIMITED

(ELECTRONICS DIVISION)

MYSORE ROAD, BANGALORE-560 026

GENERAL CONDITIONS OF CONTRACT

It is hereby agreed by me / us that the BHEL General Conditions of Contract including subsequent amendments / additions / deletions to clauses if any, and conditions pertaining the settlement of disputes by Arbitration form an integral part of the tender documents and that the tender submitted by me/ us is subject to the aforesaid BHEL General Conditions of Contract 2019 which has been read and accepted by me/us.

TENDERER

ISSUING OFFICER

SAFETY CODE

RESPONSIBILITIES OF THE CONTRACTOR IN RESPECT OF SAFETY OF MEN, EQUIPMENT, MATERIAL AND ENVIRONMENT

1. Before commencing the work, contractor submit a “SAFETY PLAN” to the authorised BHEL Official. The ‘SAFETY PLAN’ shall indicate in detail the measure 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 hereunder. 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 modification in the Safety Plan. Contractor shall abide by BHEL decision in this respect.
2. The contractor shall take all necessary safety precautions and arrange for appropriate appliances as per direction of BHEL or its authorised officials to prevent loss of human lives, injuries to personnel engaged, and damage to property and environment.
3. The contractor shall provide to its work force and ensure the use of the following personal protective equipment as found necessary and as directed by the authorised BHEL officials:
 - (i) Safety Helmets conforming to IS-2925: 1984.
 - (ii) Safety Belts conforming to IS-3521: 1983.
 - (iii) Safety Shoes conforming to IS-1989: 1978
 - (iv) Eye and Face protection devices conforming to IS – 8520: 1977 and IS-8940: 1978
 - (v) Hand and body protection devices conforming to:
 - IS-2573: 1975
 - IS-6994: 1973
 - IS-8807: 1978
 - IS-8519: 1977

All tools, tackles, lifting appliances, material handling equipment scaffolds, cradles, safety nets, ladders, equipment’s 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.

All electrical equipment’s, connections and wiring for constructions power, its distribution and use shall conform to the requirement of the Indian Electricity Act and 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 appliances including portable electric tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed. The contractor shall not use any hand lamp energized by electric power with supply voltage of more than 24 volts. For work in confined space lighting shall be arranged with power sources of not more than 24 volts.

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

of Fire Safety at the Construction Sites” shall be made available by BHEL to the contractor for reference, on demand by the contractor, during tendering stage itself.

Where it becomes 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 and Carbides of Calcium Manual of the Chief Controller of Explosives, Govt. of India. etc., prior approval to the authorised BHEL official at the site shall also be taken by the contractor in all such matters.

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.

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 agencies. Cost of damages if any, to life and property arising out of such violation of statutory regulations and BHEL instructions shall be borne by the contractor.

In case of a fatal or disabling injury accident to any person at construction sites due to the 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.

In case of any damage to property by the contractor, BHEL shall have the right to recover cost of such damages from payments from payments due to the contractor after holding an appropriate enquiry.

In case of any delay in the completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have to recover cost of such delay from payments due to the contractor, after notifying suitably and giving him opportunity to present his case.

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.

The contractor shall submit report of all accidents, fires and property damage, dangerous occurrence 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, the contractor to the authorised BHEL official shall also submit periodic reports on safety from time to time as prescribed.

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.

If safety record of the contractor in execution of the awarded job is to the satisfaction of Safety Department of BHEL, issue of an appropriate certificate to recognize the safety performance of the contractor may be considered by BHEL after completion the job.

HEALTH, SAFETY & ENVIRONMENTAL POLICY

The Management is committed to be an environmentally sound company in its activities, products, services and to provide safe and healthy working environment covering its employees, products & services as an integral part of business performance through:

- Compliance with applicable Legislation and Regulation
- Setting objectives and targets to eliminate/control/minimise environmental pollution, risks due to Occupational Health and Safety Hazards.
- Promotion of activities for conservation of resources by environmental management with focus on oil, electrical energy and chemicals.
- Enhancement of Environmental, Safety and Occupational Health awareness amongst employees, customers, suppliers, contractors by proactive communication.
- Regular evaluation and pro-active measures for prevention & control of environmental pollution/accidents/occupational diseases.
- Appropriate training of employees and interested parties on Health, Safety & Environmental (HSE) aspects.
- Formulation and maintenance of HSE Management Programs for continual improvement.
- Periodic review & audit of HSE Management System to ensure its continuing suitability, adequacy and effectiveness
- Communication of HSE Policy to all employees and interested parties.
- Co-operation with concerned agencies/regulatory bodies engaged in HSE activities.

CERTIFICATE BY CHARTERED ACCOUNTANT ON LETTER HEAD

This is to certify that M/s (Hereinafter referred to as ‘Company’) having its registered office atis registered under MSMED Act 2006, (Entrepreneur Memorandum No ((Part-II)..... dtd Category:(Micro/Small). (Copy enclosed).

Further verified from the books of Account that the investment of the company as per the latest audited financial year **as per MSMED Act 2006 is as follows:**

For Manufacturing Enterprises: Investment in plant and machinery (i.e., original cost excluding land and building, and the items specified by the Ministry of Small Industry vide its notification No.S.O.1722 (E) dated October 5,2006:

Rs.Lacs.

For Service Enterprises: Investment in equipment (original cost excluding land and building, and furniture, fittings and other items not directly related to the service rendered ar as may be notified under the MSMED Act, 2006:

Rs.Lacs.

The above investment of Rs. Lacs in within the permissible limit of Rs..... Lacs forMicro / Small /Medium (strike off which is not applicable) Category under MSMED Act 2006.

(or)

The company has been graduated from its original category (Micro/Small) (Strike off which is not applicable) and the date of graduation of such enterprise from its original category is (dd/ mm/yy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide S.O.No.3322(E) dated 01.11.2013 published in the Gazette notification dated 04.11.2013 by ministry of MSME.

Date:

(Signature)

Name -

Membership Number -

Seal of Chartered Accountant

TENDERER

ISSUING OFFICER

ANNEXURE-II

TERMS & CONDITIONS FOR REVERSE AUCTION

Against this enquiry for the subject item/s tem with detailed scope of work as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The reverse auction shall follow the philosophy of English Reverse (No ties).

1. For the proposed reverse auction, only techno-commercially qualified bidders shall be eligible to participate.
2. Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit `Process compliance form` (to the designated service provider) as well as `Online sealed bid` in the Reverse Auction. Non-submission of `Process compliance form` or `Online sealed bid` by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/contractors (as available on www.bhel.com).
3. Business rules along with RA event schedule, bid decrement, extension etc. also will be communicated through service provider for compliance.
4. Bidders are required to submit their acceptance to the terms/conditions/modalities in the process compliance form to be submitted to the service provider before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
5. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at Total Cost to BHEL for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
6. The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.
7. Any variation in the final RA 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).
8. If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guideline for suspension of business dealing with suppliers/contractors (as available on www.bhel.com).

9. The H1 bidder (whose quote is highest in online sealed bid) will not be allowed to participate in further RA process. In case of tie for H1 bid (identical online sealed bids), 15 minutes additional time shall be provided only once and all the participating bidders shall be informed by mail/message on bidding screen to enable bidders submit revised online sealed bids so as to break the tie.
10. In case of failure of RA, sealed envelope price bids (of items(s) for which RA has failed) of all the techno-commercially qualified bidders shall be opened and the tender shall be processed accordingly. However, the envelopes sealed bid(s) of techno-commercially acceptable bidders(s) who had agreed to participate in the RA and had failed to submit the online sealed bid shall not be opened.
11. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, as provided on case-to-case basis to Service provider within two working days of Auction without fail.
12. Bidders shall be required to read the “Terms and Conditions” section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the “Business Rules of Reverse Auction”, which will be communicated before the Reverse Auction.

Note: In case of enquiry through e-procurement, the sealed electronic price bid (e-bid) is to be treated as sealed envelope price bid.

ANNEXURE -III

ELECTRONIC FUNDS TRANSFER (EFT) OR PAYLINK DIRECT CREDIT FORM

Please Fill Up the form in CAPITAL LETTERS only:

TYPE OF REQUEST (Tick one): CREATE _____ CHANGE: _____

BHEL Vendor/Supplier Code: _____

Company Name: _____

Address: _____

Permanent account Number (PAN): _____

City: _____

PINCODE

STATE

Contact Person(s)

Telephone No:

Fax No:

E-Mail-Id:

1. Bank Name:

2. Bank Address:

3. Bank Telephone No:

4. Bank Account no:

5. Account Type: Saving/Cash Credit

6. 9 Digit Code Number of Bank and branch
Appearing on MICR cheque issued by Bank

7. Bank Swift Code (applicable for EFT only)

8. Bank IFSC Code(applicable for RTGS)

9. Bank IFSC Code (applicable for NEFT)

I hereby certify that the particulars given above are true, correct and complete and that I, as a representative for the above named Company, hereby authorize BHEL, EDN, Bangalore
TENDERER
ISSUING OFFICER

to electronically deposit payments to the designated bank account. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold BHEL/Transferring Bank responsible. This authority remains in full force until BHEL - EDN Bangalore receives written notification requesting a change or cancellation.

I have read the contents of the covering letter and agree to discharge the responsibility expected of me as a participant under ECS/EFT.

Date:

Authorized Signatory:

Designation:

Telephone No. with STD Code

Company seal

BANK CERTIFICATE

We certify that _____ has an Account No _____ with us and we confirm that the bank details given above are correct as per our records.

Date:

Place:

(.....)
Signature

Please return completed form alongwith a blank cancelled cheque or photocopy thereof to:
Bharat Heavy Electricals Ltd. Electronics Division, Mysore Road, BANGALORE -560026

ANNEXURE – IV

DECLARATION OF ACCEPTANCE TO TERMS & CONDITIONS

1. I / we have understood clearly the areas, scope and nature of works and terms and conditions and shall scrupulously abide by the same.
2. As a registered contractor, I / we have understood clearly of our sole responsibility to faithfully comply with all the, requirements, Labour Laws including the Factories Act/, Code on Wages Act 2019/, Contract Labour (Regulation & Abolition) Act/, Workmen Compensation Act/, ESI Act/, PF Act/, Sales tax and Taxation Acts and others as applicable from time to time and M/s. BHEL-EDN or its officers shall not in any way be held responsible for any failure or violation on our part.
3. I / we have understood clearly of our sole responsibility to disburse the wages due payable to the personnel engaged by me/us under the contract promptly in due time and rated irrespective of whether M/s. BHEL-EDN has settled our bills or not. It is also clearly understood by us that we should ensure that the wages paid are in no case less than the minimum wages prescribed and in force at the relevant period.
4. I / we agree to maintain all types of registers applicable under the prevailing labour laws and produce them for verification as and when called by the officers of BHEL-EDN/Inspecting authorities.

SIGNATURE OF THE CONTRACTOR

Date:

Name:

Place:

Address:

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ANNEXURE -V

SOLVENCY CERTIFICATE

[To be issued by consortium Banks as mentioned below not later than 12 months]

Ref:

Date:

This is to certify that M/s. _____ having their
Registered Office at _____ is
solvent to the extent of Rs. _____ [Amount in Words _____] as
disclosed by the information and record which are available with the bank.

This certificate is issued at the request of M/s. _____ for a
Tender Purpose.

This certificate is issued without any risk/liability or responsibility whatsoever on the part of the
Bank or any of its officers.

For Bank _____

Name of Signatory

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List of Consortium Banks

Sl.	Nationalised Banks	Sl	Nationalised Banks
1	Allahabad bank	19	Vijaya Bank
2	Andhra bank		Public Sector Banks
3	Bank of Baroda	20	IDBI
4	Canara Bank		Foreign bank
5	Corporation bank	21	CITI Bank N.A
6	Central bank	22	Deutsche Bank AG
7	Indian Bank	23	The Hong Kong and Shanghai Banking Corporation Limited
8	Indian Oversea Bank	24	Standard Chartered Bank
9	Oriental bank of Commerce	25	The Royal Bank of Scotland N.V.
10	Punjab National Bank	26	J P Morgan
11	Punjab & Sindh Bank		Private bank
12	State Bank of India	27	Axis Bank
13	State Bank of Hyderabad	28	The Federal Bank Limited
14	Syndicate Bank	29	HDFC
15	State Bank of Travancore	30	Kotak Mahindra Bank
16	UCO Bank	31	ICICI
17	Union Bank of India	32	Indusind Bank
18	United Bank of India	33	Yes Bank

ANNEXURE VI

EXPERIENCE CERTIFICATE

PROFORMA FOR FURNISHING EXPERIENCE CERTIFICATE

(Last 2 years preceding the date of opening of tender.)

Name and address of Department :

Agreement No & Date :

Name and address of Unit :

Value of Agreement :

Name and address of Contractor :

Original Currency :

Name and Type of work :

Actual date of completion :

Nature of work executed :

No. of extensions granted :

Sl. No.	Nature of Work	Value as per Agreement	Revised value	Payment received as per actual execution	Remarks

Details of Installations

General remarks about performance.

Signature and Seal of the Authority

issuing Certificate.

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ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Ltd.,
(A Government of India undertaking)
Electronics Division
PB 2606 , Mysore Road Bangalore , 560026 INDIA

PRICE BID

TENDER NO: PES/RCF/2020

DUE DATE: 19-02-2020

Name of Work: -Handling & installation of equipment including complete wiring work in 3PH MEMU coaches at RCF Kapurthala.

Contract work is defined for 143 basic units and one unit comprises of 1 DMC and 3 TCs. Contract shall be awarded in multiples of basic unit.

SL NO.	DESCRIPTION OF WORK	RATE PER UNIT	GST @18% (Rs.)	TOTAL AMOUNT PER UNIT (Rs)	QUANTITY	TOTAL AMOUNT FOR 143 UNITS (Rs.)
1	Handling & installation of equipment including complete wiring work in 3PH MEMU coaches at RCF Kapurthala for 143 units. Each unit is 1 DMC + 3 TCs				143	

TOOTAL AMOUNT FOR 143 UNITS (IN FIGURES)

TOOTAL AMOUNT FOR 143 UNITS (IN WORDS)

Note:

1. Evaluation is based on the total amount for 143 units
2. Invoice to be provided for tax amount claimed
3. BHEL reserves the right to assign 95 units to L1 bidder and counter offer for L2 or others at L1 price
4. In case L1 price is not accepted by L1,L2,L3,L4...., entire work load will be handed over to L1 bidder

TENDERER

ISSUING OFFICER