

# KRISHNAPATNAM RAILWAY COMPANY LIMITED

TRD, OHE, TSS, SSP, PSI, GENERAL ELECTRICAL  
PREVENTIVE MAINTENANCE AND BREAK DOWN  
ACTIVITIES WORK BETWEEN KAPT AND OBVP

Stations Inclusive of YARDS of 119 Kms.

REQUEST FOR PROPOSAL DOCUMENT  
(OPEN TENDER)

**Bid No. KRCL/ Elect Maint./KAPT-OBVP/2024**



**KRISHNAPATNAM RAILWAY COMPANY LIMITED**

Regd.Office: 3<sup>rd</sup> Floor, Lekha Bhavan, South Central Railway,  
Opposite: Secunderabad East Metro Station, Secunderabad-500025.

Issued by:

Krishnapatnam Railway Company Limited,  
(RVNL Office premises)  
"Lekha Bhavan". 3rd Floor,  
S.C.Railway,  
Secunderabad. 500 025

2<sup>ND</sup> FEBRUARY 2024

## Section 1

### INTRODUCTION

1.1 Krishnapatnam Railway Company Limited (KRCL) desires to appoint a Contracting Agency through invitation of **Open Bids for TRD OHE, TSS, SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES work Between KAPT and OBVP Stations including Yards of 119 Kms of KRCL** under Vijayawada Division of South Central Railway through competitive bidding system. The tenders are invited to submit their financial proposal in response to this Request For Proposal. (RFP document)

1.2 The contents of this RFP Document include the following:

- a) Information to applicants, Instructions to Applicants, Evaluation criteria for Financial proposal
- b) Covering letter/Proposal Submission Form
- c) Financial Proposal submission Form
- d) Bid Security Form.

## Section- 2

### INSTRUCTIONS TO APPLICANTS.

2.1. General.

2.1.1 KRCL invites Tenders for TRD, OHE, TSS, SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES work Between KAPT and OBVP Stations including Yards of 119 Kms of KRCL under Vijayawada Division of South Central Railway.

2.1.2. The selection is based on lowest financial bid from the qualified bidders.

2.1.3. Invitation for Bids: The Applicants should submit their Bids (Proposal) in separate covers as specified ---

2.1.4. The Bidders/applicants shall submit all the documents as mentioned above along in their BID Document which are **MUST MEET CONDITIONS**. The Bidders should satisfy the minimum eligibility criteria as brought out in this document. If these criteria are not satisfied the bid will be cancelled and the offer will be summarily rejected.

2.1.5 In preparing their Bid proposals Applicant are expected to examine in detail the documents comprising this RFP Document. Material deficiencies in providing the information requested may result in rejection of the application.

2.1. 6. The Applicants are requested to submit the proposal and all their correspondence in English.

2.1.7 KRCL reserves its right not to select any or all of the applicant(s) without assigning any reason.

2.1.8. The RFP document can be downloaded from KRCL web site [www.krcl.org.in](http://www.krcl.org.in) **w.e.f. 02-02-2024**. The cost of Document is **Rs. 5,000/- (Rs. Five Thousand only)** to be payable by Demand Draft. Demand Draft is payable in favour of KRISHNAPATNAM RAILWAY COMPANY LIMITED payable at NEW DELHI should be submitted along with the offer at the time of

submission **in a separate envelop** marked “Cost of Bidding Document” failing which the offer will be summarily rejected. Under no circumstances the cost of Bidding Document will be refunded to the applicants.

Applicant/Bidders, submitting bid document/s should ensure the submission of the following under taking in Form -1

“We have not tampered or made any changes in the bidding documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we understand the bid will be rejected summarily and forfeiture of bid security/the contract will be liable to be forfeited/terminated along with forfeiture of performance security, even if LOA is issued.

#### **2.1.9 BID SECURITY**

A **Bid Security in the form of a DEMAND DRAFT**, from a scheduled Indian Bank in favor of **KRISHNAPATNAM RAILWAY COMPANY LIMITED, payable at NEW DELHI**, for the sum of **Rs. 4,83,200/- (Rs. Four lakh eighty three thousand two hundred only)** will be required to be submitted by each Applicant as per format given at Form of Bid Security. The Demand Draft in Original shall be placed in an envelope and attached with the envelope containing the financial proposals. Bids received without the appropriate Bid Security shall be summarily rejected. The same shall be returned to unsuccessful bidders on finalization and award of tender. In case of successful bidder, bid security will be adjusted towards Security Deposit/ Performance Guarantee.

#### **2.2 CORRUPT PRACTICES**

The Company requires that Bidders/Applicants observe the highest standards of ethics during the execution of the Contract.

#### **2.3. PROPOSAL VALIDITY**

The proposal shall remain valid for acceptance by KRCL for a period of 120 days from the last date of submission of proposal. In case of need KRCL may request the Applicants to extend the period of validity of their proposals on the same terms and conditions and Applicants shall have the right to refuse such further extension.

#### **2.4 ENQUIRIES & CLARIFICATIONS**

Enquiries, if any, can be addressed to:

CHIEF FINANCIAL OFFICER,  
KRISHNAPATNAM RAILWAY COMPANY LTD,  
(RVNL Office premises)  
“Lekha Bhavan”, 3rd Floor,  
S.C.Railway, Secunderabad- 500 025  
Tele; 011-26738231. 040-27710154  
Email: [krcl.rail@gmail.com](mailto:krcl.rail@gmail.com)

**2.5 SUBMISSION OF PROPOSAL:**

The Applicants shall submit its Proposal in the following covers:

Cover 1. Cost of Bidding Document. (Demand Draft for Rs 5,000/- Drawn in favour of **KRISHNAPATNAM RAILWAY COMPANY LIMITED payable at New Delhi.**

Cover 2. Bid Security. (through Demand Draft) for **Rs. 4,83,200/- (Rupees Four lakhs eighty three thousand two hundred only).**

Cover 3. Financial proposal and

Outer Cover- This shall contain in the sealed covers 1,2 & 3

**2.5.1 Outer Cover**

All parts of the proposal (sealed cover 1, sealed cover 2, and sealed cover 3) organized as above, shall be placed in a sealed outer envelope and it should be superscripted as under;

**Outer Cover – Proposal for TRD, OHE, TSS, SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES WORK BETWEEN KAPT AND OBVP STATIONS OF KRCL UNDER VIJAYAWADA DIVISION OF SOUTH CENTRAL RAILWAY.**

Submitted by \_\_\_\_\_ (Name of the Bidder/Applicant)

Submitted to

CHIEF FINANCIAL OFFICER,  
KRISHNAPATNAM RAILWAY COMPANY LTD,  
(RVNL Office premises)  
“Lekha Bhavan”, 3rd Floor,  
S.C.Railway,  
Secunderabad. 500 025

The Applicant can submit the Proposal by Registered Post/courier or submit the same in person, so as to reach the designated address by the time and date stipulated. No delay in the submission of the Proposal for any reason will be entertained. Any proposal received by KRCL at the designated address after the deadline for submission of the Proposals stipulated, shall not be opened and shall be returned as such to the Applicant as it is.

**2.5.2 Cover 1 – Cost of Bidding Documents.**

The applicant shall place the original DD as specified 2.1.8 in this Sealed Cover, which shall be super scribed as under.

Cover 1. **Cost of Bidding Document.**

**Proposal for TRD, OHE, TSS SSP, PSI, ELECTRICAL GENERAL, PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS OF KRCL UNDER VIJAYAWADA DIVISION OF SOUTH CENTRAL RAILWAY.**

Submitted by ----- (name of the Bidder/Applicant)-\_\_\_\_\_

2.5.3 Cover 2 – Cost of Bid Security

<p>Cover 2. <b>Cost of Bid Security</b></p> <p><b>Proposal for TRD, OHE, TSS, SSP, PSI &amp; ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS OF KRCL UNDER VIJAYAWADA DIVISION OF SOUTH CENTRAL RAILWAY.</b></p> <p>Submitted by ----- (name of the Bidder/Applicant)-_____</p>
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2.5.4 Cover 3 – **Financial Proposal**. The applicant shall place the original Financial Proposal in a sealed envelope which shall be super scribed as under.

<p>Cover 3. <b>FINANCIAL PROPOSAL</b></p> <p><b>Proposal for TRD, OHE, TSS, SSP, PSI &amp; ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS OF KRCL UNDER VIJAYAWADA DIVISION OF SOUTH CENTRAL RAILWAY.</b></p> <p>Submitted by ----- (name of the Bidder/Applicant)-_____</p>
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2.6 **LAST DATE OF SUBMISSION**

**The Proposals must be received by KRCL by 15.00 HRS of 5<sup>th</sup> March, 2024 at the following address**

CHIEF FINANCIAL OFFICER  
KRISHNAPATNAM RAILWAY COMPANY LTD,  
(RVNL Office premises)  
“Lekha Bhavan” 3rd Floor,  
S.C.Railway,  
Secunderabad- 500 025

2.7 Bid Opening

2.7.1 Interested Bidders may like to be present in KRCL office at the closing time of bid submission and witness the Bid Opening at 15.30 hours on the last date of submission as mentioned in 2.6 above. Only the main envelope will be opened and availability of RFP fee and Bid Security amount will be checked. All such bids received after the expiry of the prescribed deadline for submission of bids shall be returned to the bidders in unopened condition.

2.7.2 After the bid opening, the evaluation of Financial Proposal received shall be initiated.

## 2.8 Preparation of Proposal. **FINANCIAL PROPOSAL**

2.8.1 In preparing the Financial proposal, the Applicants/Bidders are expected to take into account the requirements and **MUST MEET CONDITIONS** outlined in the RFP documents.

2.8.2 The financial proposal should be as per the format given.

2.8.3. The rates given in Schedule/Item are inclusive of GST. Hence no need to quote GST separately.

2.8.4. The Bidder/Tenderer/Applicant should quote the percentage rate, in both figures and words, for each Schedule in columns 4 & 5 respectively. Also mention in columns no. 6 whether the percentage rate mentioned in column's 4 & 5 are **ABOVE or BELOW or AT PAR** over the estimated rate.

2.8.5 All payments shall be subject to deduction of tax at source in accordance with the provisions of The Income Tax Act and any other applicable law.

## 2.9 Organization of the Financial Proposal.

The Financial Proposal shall be organized in the following manner.

No.	Description	Relevant Exhibit
1	Covering Letter Submission Form <b>(MUST MEET CONDITION)</b>	Form- 1
2	Financial Proposal Submission Form and Summary of Cost. (Bid Document) – <b>(MUST MEET CONDITION)</b>	Form- BID DOCUMENT Annexure II
3	Cost of Tender Documents- <b>(MUST MEET CONDITION)</b>	Form & DD
4	Bid Security and Form.	Form & DD
5	Eligibility Criteria- Experience of Works- <b>(MUST MEET CONDITION)</b>	Form II
6	Turn over certificate- <b>(MUST MEET CONDITION)</b>	Form. III
7	Electric Contract License Certificate- <b>(MUST MEET CONDITION)</b>	Certificate
8	Tender Form- <b>(MUST MEET CONDITION)</b>	In the form
9	BID DOCUMENTS IN CD/PENDRIVE IN WORD FORMAT TO BE SUMITED ALONG WITH BID DOCUMENTS <b>(MUST MEET CONDITION)</b>	

## 2.10 OTHER INSTRUCTIONS

All applicants should note the following.

2.10.1 Proposals that are incomplete in any respect or those that are not consistent with the requirements as specified in this RFP Document or those that do not contain the

information as per the specified formats, **will be considered non-responsive and will be liable for rejection.**

2.10.2 All communication and information provided should be legible, and where ever the information is given in figures, the same should also be mentioned in words. In case of conflict between amounts stated in figures and words, **the amount stated in words will be taken as correct.**

2.10.3 No change in or supplementary information to a Proposal shall be accepted once submitted. However, KRCL reserves the right to seek additional information from the Bidders/Applicants, if found necessary, during the course of evaluation of the Proposal. In case of non-submission, incomplete submission or delayed submission of such additional information clarifications sought by KRCL, the Proposal would be evaluated solely on the basis of the available information.

2.10.4 **KRCL reserves the right to reject any or all of the Proposals without assigning any reason whatsoever.**

## 2.11 EVALUATION OF FINANCIAL PROPOSAL

The Financial Proposals that are found to be responsive and complete shall be then assessed based on the evaluation criteria as specified below: -

### 2.11.1 ELIGIBILITY CRETERIA (MUST MEET CONDITION)

2.11.2 The tenderer(s) should have physically completed similar work AS PER SCOPE OF WORKS FURNISHED IN ANNEXURE III viz.,

- a) (1) Execution of erection (including design, supply and applicable), testing and commissioning of 25 KV A.C. 50 H single phase, traction overhead equipment for Railway applications including assisted/private/departmental sidings, and/or
  - (2) Replacement of OHE assets viz, cantilevers, auto tensioning devices, Span droppers, catenary/contact wires and OHE modification works in yards in existing Electrified territory, and/or
  - (3) Maintenance of 25 KV A.C. 50 Hz single phase, traction overhead equipment for Railway applications including Assisted/Private/Departmental sidings. And /or
  - (4) Stringing of 33 KV and above rating transmission lines including erection of transmission towers/OH lines poles and associate Civil engineering works for PGCIL/TRANSCO/SEB/DISCOMs/any Govt. agencies and /or, Erection, testing and commissioning of 25 KV Overhead Electric Equipment in Railway applications, including 25 KVA Axillary Transformers and 25 KV switching stations. “  
for a minimum value of
- 1) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or
  - 2) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender or
  - 3) One similar work costing not less than the amount equal to 60% of advertised value of the tender in the last Seven years, ending last day of month previous to the one in which tender is invited.

2.11.3 FINANCIAL TURN OVER; The tenderer must have minimum average annual contractual turnover of V/N or “V” whichever is less, where

V=Advertised value of the tender in crores of Rupees

N= Number of years prescribed for completion of work for which bids have been invited.

The Average annual contractual turnover shall be calculated as an average of “total Contractual Payments” in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover. Tenderer(s) should submit to this effect attested certificate from the Central Govt./Public sector under taking/NGR/Section of at least 50 Km long for the work done for them or Audited balance sheet duly certified by a Chartered Accountant for THREE FINANCIAL YEARS (i.e., current financial year and previous three financial years) i.e., after 01-04-2020 up to the date of tender opening

**2.11.4 Electrical Contractor License: (MUST MEET CONDITION)**

The tenderer should have valid Electrical Contractors License Grade A up to 33 KV issued by Govt. Electrical License Board (OR) the Site Supervisor should possess necessary A Grade License issued by a Govt. Licensing Authority to carry out works of appropriate voltage.

2.11.5 Qualification of the contractor’s Personnel for 25 KV OHE Maintenance works: Since the contract is primarily manpower oriented, therefore qualification and competence of the manpower deployed by the contractor is a crucial factor. Therefore, Contractor is required to deploy Supervisors, Technician, and Helpers round the clock for all maintenance and restoration of 25KVOHE Breakdown works. The contractor shall ensure the required minimum educational qualification & Experience for his deployed Supervisors, Technician, and Helper as mentioned here under.

**2.12 Performance Guarantee:**

The Bidder shall obtain (at his cost) and deliver a Performance Security Equal to 5% of Contract value within 30 days after receiving the Letter of Acceptance. The performance Guarantee shall be at the Bidders option, in any of the following forms.

- A) **PAY ORDER OR DEMAND DRAFT IN FAVOUR OF KRISHNAPATNAM RAILWAY COMPANY LIMITED PAYABLE AT NEW DELHI.**
- B) **FIXED DEPOSIT RECEIPT (WITH BANKS IN INDIA ONLY) ---a/c with KRCL.**

**The Performance Guarantee shall be released without Interest, after the physical completion of the work based on completion certificate by Engineer in chief /KRCL and after passing the Final Bill based on NO CLAIM CERTIFICATE.**

**2.13 Security Deposit:**

The scale of Security Deposit that would be recovered from the contractor shall be as follows as per the Extent instructions.

- a) Security Deposit for the work shall be 5% of the contract value.



b) The recovery shall be at the rate of 10% from the bill amount till the full security deposit is recovered.

c) Security Deposits will be recovered only from the running bills of the contract and no other mode of collecting Security Deposit such as Security in the form of instruments like Bank Guarantees, Fixed Deposit etc, shall be accepted towards Security Deposit.

d) The Security Deposit shall be released only after the expiry of the contract period and after passing the final bill based on NO CLAIM CERTIFICATE.

**3.0: Details of Bid/ Tender is placed at Annexure I (TENDER FORM).**

**4.0: Details of Summary of Work Schedule is placed at Annexure II.**

**FORM 1 FORMAT OF COVERING LETTER/PROPOSAL SUBMISSION FORM**

**(MUST MEET CONDITION)**

(The covering letter is to be submitted by the Tenderer/Bidder, on their letter head)

To,

CHIEF FINANCIAL OFFICER  
KRISHNAPATNAM RAILWAY COMPANY LTD,  
RVNL Office premises.  
“Lekha Bhavan” 3rd Floor,  
S.C.Railway,  
Secunderabad- 500 025

Dear Sir,

Sub: RFP Application for **TRD, OHE, TSS, SSP, PSI, & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS of KRCL UNDER VIJAYAWADA DIVISION, SOUTH CENTRAL RAILWAY.**

The undersigned offer for **TRD, OHE, TSS, SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS** of KRCL, in accordance with your Request for Proposal Document and our Proposal submitted herewith. We are hereby submitting our Proposal, which includes a Financial Proposal and other Forms sealed under a separate envelope.

We hereby declare that all the information and statements made in this proposal are true and accept that any misinterpretation contained in it may lead to our disqualification

We undertake, if our Proposal is accepted, to initiate the OHE MAINTENANCE Services related to the assignment within 10 days from the date of issue of letter of intent.

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents.
- (b) We offer to execute the assignment in conformity with the Terms of Reference in Bidding Documents.
- (c) Our Bid shall be valid for a period of 120 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiry of that period:
- (d) If our bid is accepted, we shall submit a Performance Security in accordance with the Bidding Documents;
- (e) If our bid is accepted, we commit to deploy resources and key personnel consistent with the requirements stipulated in the bidding document.
- (f) We understand that this bid, together with your written acceptance thereof included in your notifications of award, shall constitute a binding contract between us, until a formal contract is prepared and executed, and
- (g) We have not tampered or made any changes in the bidding documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we

understand the bid will be rejected summarily and forfeiture of bid security/the contract will be liable to be forfeited/terminated along with forfeiture of performance security, even if LOA has been issued.

(h) We understand that KRCL is not bound to accept any proposal received by KRCL.

Yours sincerely

Signature of the Bidder-  
Name and Title of Signatory-  
Name of the firm-  
Date-

## EXPERIENCE CERTIFICATE

S. No.	Work Details	Details
1	Name of Work	
2	Agt. No date and Name of the Agency	
3	Agt. Value in Rs.	
4	Due Date of Completion	
5	Actual Date of Completion	
6	Work Completed/in Progress	

Note: Separate Certificates for Work Completed and work in physically progress with payments received should be given.

The certificate to be issued by an officer not below the rank of JA Grade or bill passing officer in Railways and Bill passing Officer/Executive In-charge of work in other Government department/Govt bodies/Public Sector under taking. The certificate should bear the signature and seal of the issuing officer, name of the department etc.

Signature:  
Name:  
Designation:  
Office Stamp:  
Date:

**CERTIFICATE FROM CHARTERED ACCOUNTANT IN THEIR LETTER HEAD**

TO WHOMSOEVER CONCERNED

We ----- are the Auditors for the Firm/ Applicant -----since last-----  
(many) years. On the Strength of the above association, we are issuing this Certificate to the Firm on the Annual Contractual Turnover during the last three Audited Financial years as per Audited Balance Sheet.

It is further certified that advances or loans taken by the firm in connection with execution of works is not reflected in the contractual receipts from Works Contracts indicated below.

Sl. No.	Financial Year	Contractual Receipts from Works contracts executed for Govt/Govt. bodies/PSUs. Rs.	Remarks (if any)
(1)	(2)	(3)	(4)

Signature:

Name of CA:

Address:

Office Seal:

Phone No.:

Email:

Date:

## 6.1 Part I: **General Conditions of Contract (GCC)**

### 6.1.1 Definitions

The following words and expressions shall have the meanings assigned to them except where the context otherwise requires.

“Agreement” means the Conditions of Service Agreement (Part 1: GCC and Part II: SCC) together with the undertakings and the Appendices, any further clarifications, and Letter of Award and formal Agreement.

“Applicable Law” means the laws and any other instruments having the force of law in India.

“Client” means Krishnapatnam Railway Company Limited also called as KRCL.

“Client’s Representative” means any of its officers nominated by the Client and notified from time to time to the Agency.

“MINISTRY OF RAILWAYS (MoR)” means Ministry of Railways having its office at Rail Bhawan, Rafi Marg, New Delhi 110001

“Month” means a period of one month according to the Gregorian calendar commencing with any day of the month.

BIDDER” means the Agency named in the Agreement, who has to perform the services, and which expression shall include his/their legal successors and permitted assigns.

“Party” means Client or Agency as the case may be and “Parties” means both of them.

“Third party” means any other person or entity as the context requires.

“Rupees” means the currency of India, and shall be the currency used for the project.

### 6.1.2 Interpretation

6.1.2.1 The headings in the Agreement shall not be used in its interpretation.

6.1.2.2 The singular includes the plural, the masculine includes the feminine, and vice-versa where the context requires.

6.1.2.3 If there is a conflict between provisions of the Agreement, the last to be written chronologically shall prevail, unless otherwise specified in Part II of the Service Agreement – SCC.

### 6.1.3 Obligations of Agency/ Bidder.

6.1.3.1 Scope of Services to be performed by the Agency/ Bidder.

6.1.3.2 The Agency/Bidder shall exercise reasonable skill, care and diligence in the performance of his obligations under the Agreement.

#### 6.1.3.3 Performance Guarantee

The Agency/Bidder shall obtain (at his cost) and deliver a Performance Security equal to 5% of contract value (detail to be seen under INSTRUCTIONS TO TENDERERS AND CONDITIONS OF TENDER – PERFORMANCE GUARANTEE BELOW) to the client within 30 (Thirty) days from the date of issue of Letter of Acceptance. The Performance Guarantee shall be at the Agency’s option, in any of the following forms:

**A) PAY ORDER OR DEMAND DRAFT IN FAVOUR OF KRISHNAPATNAM RAILWAY COMPANY LIMITED PAYABLE AT NEW DELHI.**

**B) FIXED DEPOSIT RECIEPT (WITH BANKS IN INDIA ONLY) ---a/c with KRCL.**

The Client shall return the Performance Security to the Agency within 31 days after satisfactory completion of the assignment.

Wherever the contract is terminated under Clause 6.1.15.1.2 of this agreement, the Performance Guarantee (equal to 5% of contract value) deposited with the client, shall be with held and the balance work should be got done separately.

The balance work shall be got done independently without risk and cost of the original Agency.

#### 6.1.4 Change in Constitution

The Agency shall promptly notify Client of any changes in the constitution of the Agency. It shall be open for Client to terminate the Agreement on the addition or introduction of new partner managing the Project for the Agency without the previous approval in writing of Client. But in absence of and until its termination by Client as aforesaid, this Agreement shall be in full force, and effect notwithstanding any changes in the constitution of the Agency by addition or introduction of any new partners.

#### 6.1.5 Information

Client shall within a reasonable time give to Agency, free of cost, all information which they are able to obtain and which may pertain to the services.

#### 6.1.6 Decisions

On all matters properly referred to it in writing by the Agency/Bidder, Client shall give a decision in writing within a reasonable time.

#### 6.1.7 Assistance

CLIENT shall assist in:

- (2) Providing Agency /Bidder unobstructed access wherever it is required for the services.
- (ii) Providing Agency /Bidder access to other organizations for collection of information.

#### 6.1.8 Engaging of Personnel

6.1.8.1 The Agency /Bidder shall employ and provide such qualified and experienced personnel as are required to carry out the Services.

6.1.8.2 The Agency /Bidder shall ensure that the key personnel are assigned to the specified tasks and deployed on the field in accordance with the work plan.

#### 6.1.8.3 Representatives

For the administration of the Agreement, the Agency shall designate an official or individual to be his representative.

#### 6.1.8.4 Changes in Personnel

6.1.8.4.1 Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Agency, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Key Personnel, the agency/Bidder shall provide as a replacement a person of equivalent or better qualifications and experience. This shall however be done with the approval of Client within 7 days of such an event, and hence, no penalty shall then be leviable. However, change of key personnel may also be permitted by KRCL in exceptional circumstances, if the contractual period extends beyond the permissible limits of the currency of the contract, no penalty will be levied if the delay is on account of KRCL. However, if the agency/Bidder replaces/changes any of the Key Personnel without the prior consent/approval of KRCL, then a sum equal to One month salary of the removed/changed Key personnel will be deducted from the agency/Bidder as penalty for each such case of change in Key personnel. However, in case of repeated similar changes by the agency/Bidder the amount of penalty can be increased by the client at its discretion upto Two times of the normal penalty applicable.

6.1.8.4.2 If the Client finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Agency/Bidder shall, at the Client's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Client.

6.1.8.4.3 The Agency/Bidder shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

6.1.9 Liability of Agency/Bidder to Client

6.1.9.1 The Agency/Bidder shall only be liable to pay compensation to Client arising out of or in connection with the Agreement if a breach of Contract is established against him.

6.1.9.2 Such compensation shall be limited to the fees actually paid to the Agency under this Contract.

6.1.9.3 Duration of Liability

The agency shall not be considered liable for any loss or damage resulting from any occurrence unless a claim is formally made on him by the client.

6.1.10 Agreement Effective Date

The Contract shall come into effect from the date of acceptance of Letter of Award by the Agency/bidder or the date of commencement of work as intimated by the Agency/bidder to the client, whichever is earlier.

6.1.11 Commencement and Completion

The Services shall be commenced and completed at the times or within the periods stated in Agreement subject to extensions in accordance with the Agreement.

6.1.12 Modifications

6.1.12.1 The Contract can be modified with mutual consent of the parties.

6.1.12.2 KRCL shall have right to extend the contract period further at the same Rates, Terms and conditions with the mutual consent of the Agency under "Variation Clause"

6.1.13 It shall be the bounden duty of the agency/Bidder to strictly adhere to the time for performance of various services indicated in the Contract.

6.1.14 Extension of Time for Completion

6.1.14.1 If circumstances arise for which the agency/Bidder is not responsible and which make it impossible for him to perform in whole or in part the Services in accordance with the Contract he shall promptly dispatch a notice to Client for extension of time, giving specific reasons.

6.1.14.2 The client on his satisfaction regarding genuineness and adequacy of the circumstances will grant such extension. However, no additional cost will be paid for the extended period.

6.1.15 Abandonment, Suspension or Termination

6.1.15.1 By Notice of Client

6.1.15.1.1 Client may suspend all or part of the Services or terminate the Agreement by notice of at least 14 days to the agency who shall immediately make arrangements to stop the Services and minimize expenditure.

6.1.15.1.2 If Client considers that Agency/Bidder is not discharging his obligations or has engaged in corrupt or fraudulent practices or has defaulted in any terms of the Agreement or has failed to provide correct information in relation to the Assignment; Client can inform the Agency by notice stating grounds for the notice. If a satisfactory reply is not received within 7 days of receipt of the notice by Agency, Client can with a further notice terminate the Agreement.

6.1.15.1.3 If Agency/Bidder is adjudged bankrupt, or if he makes a general assignment for the benefits of his creditors, or if a receiver is appointed on account of his insolvency, or persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a breach of the Agreement, then Client may terminate the services of the Agency as per the procedure given in the previous clause.

6.1.15.1.4 Client may complete the project by whatever method may be deemed expedient and the Agency shall not be entitled to receive any further payment.



#### 6.1.15.2 By Notice of the Agency/Bidder

6.1.15.2.1 The Agency/Bidder may, by notice to the Client, terminate this contract if payments pursuant to Clause 6.1.17 and 6.1.18 of this Agreement are not received within 30 days after the due dates, and such default has not been remedied within 45 days after notice has been given by the Agency to the Client.

#### 6.1.16 Rights and Liabilities of the Parties

Termination of the Agreement shall not prejudice or affect the accrued rights or claims and liabilities of either party.

#### 6.1.17 Payment to Agency/Bidder

Client shall pay the Lump sum Price to the Agency in partial payments for the performance of services as described in accepted schedule of payment. Partial payments may be withheld if the Agency does not deploy the key personnel in accordance with the staffing schedule. Whenever the team leader/key professional does not attend scheduled meetings, a penalty amounting to 15 days salary of such team leader/key professional shall be imposed on the agency/bidder for every single default, in absence of the prior notice of 7 (seven) days / intimation for non-attendance due to unavoidable circumstances. However, absence of key personnel due (i) to death, medical incapacity, retirement, etc., upto a reasonable period of 7 days and (ii) under force majeure conditions may be accepted by the client upon receipt of immediate information from the Agency/bidder.

#### 6.1.18 Time for Payment

Amount due to the Agency shall be paid promptly and generally within 30 days of presentation of claim (Bill).

#### 6.1.19 Currency of Payment

All payments shall be made in Indian Rupees.

#### 6.1.20 Disputed invoices

If any item or part of an item in an invoice submitted by the Agency is contested by Client, then Client shall give prompt notice with reasons and shall not delay payment on the balance invoice.

#### 6.1.21 Language and Law

The language of the agreement shall be English and it shall be governed by Indian Laws.

#### 6.1.22 Assignment and Sub-Contracts

6.1.22.1 The Agency shall not, without the written consent of Client, assign the benefits from the Agreement.

6.1.22.2 The Agency shall not assign obligations under the Agreement without the written consent of Client.

6.1.22.3 The Agency shall not without the written consent of the Client initiate or terminate any sub-contract for performance of all or part of the Services.

#### 6.1.23 Copyright

The copyright of all documents prepared by the Agency in performance of the services under the Agreement shall be vested in Client provided that the Agency may retain copies of the documentation prepared by them for record purposes only.

#### 6.1.24 Conflicts of Interest

6.1.24.1 Unless otherwise agreed in writing by Client, the Agency and his personnel shall have no interest in nor receive remuneration in connection with the Project except as provided for in the Agreement.

6.1.24.2 The Agency shall not engage in any activity that might conflict with the interests of Client under the Agreement.

#### **6.1.25 Notices**

Notices under the Agreement shall be in writing and will take effect from receipt at the address stated in Part II of the Service Agreement. Delivery can be by hand or facsimile message subsequently confirmed by letter or by registered letter against a written confirmation of receipt.

#### **6.1.26 Publication**

Unless otherwise specified in Part II of the Service Agreement, Agency either alone or jointly with others, can publish material relating the Services, subject to approval by Client, if it is within two years of completion or termination of the services. Thereafter, the Agency may publish only that information/material which is already available in the public domain. For information not available in the public domain, the Agency shall necessarily have to obtain the prior permission of KRCL before publication of such material.

#### **6.1.27 Claims for Loss or Damage**

Any claim for loss or damage arising out of breach or termination of the Agreement shall be agreed between Client and the Agency or failing which the same shall be referred to arbitration in accordance with Clause 6.1.29 of this agreement.

#### **6.1.28 Taxes and Duties**

The Agency and their personnel shall pay such taxes, duties, fees and other impositions as may be levied under the Applicable Laws, the amount of which shall be deemed to have been included in the Contract Price. The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

#### **6.1.29 Conciliation and Arbitration**

6.1.29.1 Any dispute or claim arising out of or relating to this Agreement or the breach, termination or the invalidity thereof, shall firstly be attempted to be settled by conciliation.

6.1.29.2 All dispute or relating to this contract on any issue whether arising during the progress of the services or after the completion or abandonment thereof or any matter directly or indirectly connected with this Agreement shall in the first place be referred to a mutually agreed sole conciliator to be appointed by Client.

6.1.29.3 The Conciliator shall make the settlement agreement after the parties reach agreement and give an authenticated copy thereof to each of the parties.

6.1.29.4 The settlement agreement shall be final and binding on the parties. The settlement agreement shall have the same status and effect of an arbitration award.

6.1.29.5 The views expressed or the suggestions made or the admissions made by either party in the courses of conciliation proceedings shall not be introduced as evidence in any arbitration Proceedings.

6.1.29.6 Any dispute that cannot be settled through the Conciliation procedure shall be referred for Arbitration in accordance with the Rules stipulated in Part II of this Agreement (para 6.2.2 below) in force on the effective date of the Agreement.

6.1.29.7 The parties agree to comply with the awards resulting from arbitration and waive their rights to any form of appeal in so far as such waiver can validly be made.

#### **6.1.30 Force Majeure**

6.1.30.1 If, at any time during the currency of the Contract, the performance in whole or in part by either party of any obligation under this Contract shall be prevented or delayed by reason of any war, hostilities, invasion, acts of public or foreign enemies, rebellion, revolution, insurrection, civil commotion, sabotage, large scale arson, floods earthquake, large scale epidemics, nuclear accidents, any other catastrophic unforeseeable

circumstances, quarantine restrictions, any statutory rules, regulations, orders or requisitions issued by a Government department or competent authority or acts of God (hereinafter referred to as “event”) then, provided notice of the happening of such an event is given by either party to the other within 21 days of the occurrence thereof.

6.1.30.2 Neither party shall by reason of such event be entitled to terminate the Contract or have claim for damages against the other in respect of such non-performance or delay in performance.

6.1.30.3 The obligations under the Contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist.

6.1.30.4 If the performance in whole or part of any obligation under the Contract is prevented or delayed by reasons of the event beyond a period mutually agreed to if any, or 120 days, whichever is more, either party may at its option terminate the Contract.

6.1.30.5 In case of doubt or dispute, whether a particular occurrence should be considered an “event” as defined under this clause, the decision of the Client shall be final and binding.

6.1.30.6 Deliverables which have been accepted shall be paid for by the Client even if the same is subsequently destroyed or damaged as a result of the event. The cost of rebuilding or replacing any work that has been delivered shall be borne by the Client.

6.1.30.7 If the Contract is terminated under the Clause, the Agency shall be paid fully for the work done under the Contract, but not for any defective work or work done which has been destroyed or damaged before its acceptance.

6.1.30.8 If neither party issues notice regarding the event within 21 days of its occurrence, the said event be deemed not to have occurred and the Contract will continue to have effect as such.

**6.2 Part II: Special Conditions of Contract (SCC)**

6.2.1 Language of the Agreement shall be English.

The Agreement shall be interpreted, construed and governed by the laws of India and the legal proceedings, if any, shall be under the jurisdiction of the courts of Hyderabad

6.2.1.1 Notices shall be delivered to:

For CLIENT:

Client

\_\_\_\_\_

\_\_\_\_\_

For the Agency

\_\_\_\_\_

\_\_\_\_\_

---

Attention:

\_\_\_\_\_

\_\_\_\_\_

Facsimile:

\_\_\_\_\_

**6.2.2 Arbitration**

6.2.2.1 If the efforts to resolve all or any of the disputes through conciliation fail, then such disputes shall be referred within 30 days for Arbitration in accordance with the following provisions:

6.2.2.2 All the matters to be arbitrated upon under this agreement shall be referred to a sole Arbitrator.

6.2.2.3 The Client shall prepare a panel of three Arbitrators, who are not associated with the work, out of which the Agency will choose one.

6.2.2.4 If, in a dispute subject to clause 6.2.2.2 of this agreement the Agency fails to appoint the arbitrator within thirty (30) days after the Client has nominated the panel, the Client may nominate an arbitrator from the panel of arbitrators, for that dispute.

6.2.2.5 No suspension of work on account of arbitration.

6.2.2.6 The reference to arbitration shall proceed notwithstanding that Works shall not then be or be alleged to be complete provided always that the obligations of the Client and the Contractor shall not be altered by reasons of arbitration being conducted during the progress of Works. Neither party shall be entitled to suspend the work to which the dispute relates on account of arbitration.

6.2.3 Rules Governing the Arbitration Proceedings

6.2.3.1 The arbitration proceedings shall be governed by Indian Arbitration and Conciliation Act 1996, as amended from time to time including provisions in force at the time the reference is made.

6.2.3.2 Interest on Arbitration Award

6.2.3.3 Where the Arbitration award is for payment of money, no interest shall be payable on whole or any part of the money for any period, till the date on which the award is made.

6.2.4 Cost of the Arbitration

The cost of arbitration shall be borne by the respective parties. The cost shall inter-alia include the fees of the arbitrator(s) as per the rates fixed by CLIENT from time to time.

7.0.1 VARIATION OF COSTS (PVC): Labour and material escalation clause: NOT APPLICABLE to this contract.

#### **8.0.1 VARIATIONS IN QUANTITIES;**

The quantities of each item of work furnished in the schedule are approximate and are intended for the guidance of Tender/Contractor in actual execution of work there may be some increase in the quantities specified. Such variation up to 25% shall in no degree affect the validity of the contract and it shall be performed by the contractor as provided there in and be subjected to the same conditions, stipulations and obligations originally and expressly included and provided for in specification and drawings and the amount to be paid therefore shall be calculated in accordance with the following rates.

8.0.2. In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates.

(a) Quantities operated in excess of 125% but up to 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender.

(b) Quantities operated in excess of 140% but up to 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender.

(c) Variations in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.

(d) Variation to quantities of Minor Value item

The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1% on the total original agreement value.

(d) (i) Quantities operated upto and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the rate awarded for that item in that particular tender.

(d) (ii) Quantities operated in excess of 100% but up to 200% of the agreement quantity of the concerned minor value item, shall be paid at 98% of the rate awarded for that item in that particular tender.

(d) (iii) Variation in quantities of individual minor value item beyond 200% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.

8.03. General Conditions of Contract of INDIAN RAILWAYS will be applicable for this contract.

9.0.1 Provisions of payment of wages Act:

The contractor shall comply with the provisions of the Payment of Wages Act. 1936 and the rules made there under in respect of all employees directly or through pretty contractors or sub-contractors employed by her in the services/works

9.02. Provisions of Employees Provident Fund and Misc. provision Act: The Agency should ensure Statutory payments, such as EPF/ESI/Insurance/Minimum Wages etc. to its employees /labour.

The contractor shall comply with the provisions of Employees Provident Fund scheme, Employees Pension scheme etc. The details of the scheme and procedure of payment may be referred from GCC of South Central Railway

9.0.3 The Agency should provide PPE like, Helmets, Safety Slings, Reflective Jackets, Hand Gloves, Shoes, Uniform etc. to its staff/Labour.

**ANNEXURE I**

**KRISHNAPATNAM RAILWAY COMPANY LIMITED**

**TENDER FORM**

Name of Work: **TRD, OHE, TSS, SSP, PSI, & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES IN OBVP-KAPT ELECTRIFIED LINE OF KRCL under VIJAYAWADA DIVISION of South Central Railway**

To

CHIEF FINANCIAL OFFICER,  
KRISHNAPATNAM RAILWAY COMPANY LIMITED.  
RVNL OFFICE PREMISES  
"Lekha Bhavan" 3rd Floor,  
S.C.Railway,  
Secunderabad- 500 025

I/We \_\_\_\_\_ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We offer to do the work for KRCL, at the rates quoted in the attached schedule and hereby bind myself/ourselves to complete the work in all respects within with in stipulated period from the date of issue of letter of acceptance of the tender.

2. I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Schedule of Rates with all correction slips up-to-date for the present contract.

3. A sum of ₹ \_\_\_\_\_ has already been deposited as Earnest Money. Full value of the Earnest Money shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:

- (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
- (b) I/We do not execute the contract documents within seven days after receipt of notice issued by KRCL that such documents are ready; and
- I I/We do not commence the work within fifteen days after receipt of orders to that effect.

4. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Witnesses:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

\_\_\_\_\_

Signature of Tenderer(s)

Date \_\_\_\_\_

Address of the Tenderer(s)

## TENDER FORM

**Name of Work: TRD, OHE, TSS SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENACE AND BREAKDOWN ACTIVIIIES BETWEEN OBVP-KAPT STATIONS of KRCL under VIJAYAWADA DIVISON of South Central Railway**

### Summary of SCHEDULE Details at ANNEXURE.

SL	Descripti on of Schedule	Estimated cost.	<i>Rate quoted by the contractor's percentage, Above, Below, At par. % In Figures.</i>	% Quo ted in wor ds.	Write whether percentage quoted in Col. 4%5 is above/Below/A t par over Estimated Rae.	Amount In Figures	Amount in words
1	2	3	4	5	6	7	8
1	SCH.I	2,58,62,400					
2	SCH. II	60,37,160					
3	SCH. III	61,98,024					
4	SCH.IV	66,24,000					
5	SCH. V	94,91,600					
6	SCH. VI	124,11,500					
	TOTAL	6,66,24,684					

The quantities shown in above Schedule are approximate and are as a guide to give the tenderer(s) an idea of quantum of work involved. The KRCL reserves the right to increase/ decrease and/or delete or include any of the quantities given above and no extra rate will be allowed on this account.

The tenderer should quote the percentage rate, in both figures and words, for each schedule in columns 4 & 5 respectively. Also mention in column no. 6 whether the percentage rate mentioned in columns 4 & 5 are **ABOVE** or **BELOW** or **AT PAR** over the estimated rate.

- a. The price for each schedule shall be calculated and written against each schedule, in both figures and words in columns 7 & 8 respectively.

- b. The total price as sum of the price of all the bills/schedules shall be shown, in both figures and words under columns' 7 & 8 respectively.
- c. Bidder should ensure that the rates are filled with due care and caution so as not to lead to any omission or discrepancy or ambiguity.
- d. The item rates given in each schedule are based on **INCLUSIVE OF GST, (18%) and OTHER TAXES.**
- e. While quoting the rates, Bidders shall consider the various provisions of the Central Goods and Services Tax Act, 2017 (CGS Integrated Goods and Services Tax Act, 2017 (IGST)/Union Territory Goods and services and Tax Act 2017 (UTGST)/respective State's States Goods and Services Tax Act, 2017(SGST) also, as notified by Central/State Government & as amended from time to time and all taxes, duties and levies applicable to the contract. Bidders shall also ensure that full benefit of Input Tax credit (ITC) likely to be admissible to them is duly considered while quoting rates.
- f. The successful bidder who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under GST/IGST/UTGST/SGST Act to **KRCL within 07 days from the date of the award of contract**, without which no payment shall be released to the contractor. The contractors shall be responsible for deposition of applicable GST to be concerned authority
- g. **INSTRUCTIONS FOR Schedule V. (PROVISION AND MAINTENANCE OF VEHICLES)**
  - a) The vehicles shall be new and delivered and maintained by the contractor in Good Road worthy conditions including daily cleaning. The vehicle shall be replaced with a new vehicle after a maximum run of 75000 Kms or Three yeas whichever is earlier.
  - b) The contractor shall employ and make available competent drivers fully licensed to operate the vehicles as and when required by the Officers of KRCL. The contractor shall replace drivers at the request of the Officers of KRCL.
  - c) The vehicles shall be licensed and insured for use on the public highway and shall have comprehensive insurance cover for any qualified driver authorized by the Officers of KRCL together with any authorized passengers and the carriage of Goods and samples.
  - d) The contractor shall provide fuel, oil for running of each vehicle for 3000 Kms monthly for item No. 3, where the vehicle is required and ensure maintenance in conformity with the vehicle manufacturer's recommendations and all relevant toll and parking charges incurred in connection with the Works. The vehicle shall be provided day and night as required by the Officers of KRCL.
  - e) A suitable replacement shall be provided by the contractor for any vehicle out of service for more than 24 hours. If the contactor at any time fails to provide vehicles or substitute vehicle as specified, an amount of Rs. 2,000 per day for each vehicle that the contractor failed to provide shall be recovered from the contractor.
  - f) Contractor should engage drivers for day and night shift separately and should be available with vehicles at Hqrs. The rate should be quoted accordingly.



**KRISHANAPATNAM RAILWAY COMPANY LIMITED**

KRCL invites Tenders for the following works.

**The closing Date and Time is 05-03-2024 at 15.00 Hrs**

Name of the work	<b>TRD, OHE, TSS, SSP, PSI ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES WORK BETWEEN KAPT-OBVP STATIONS OF KRCL under Vijayawada Division of South Central Railway</b>
Tender Type.	<b>Open</b>
Advertised Value.	<b>Rs. 6,66,24,684/-</b>
EMD	<b>Rs.4,83,200/-</b>
Cost of Bid Document	<b>Rs. 5,000/-</b>
Tender Closing Date & Time	<b>05-03-2024 at 15.00 Hrs.</b>
Tender Opening Date & Time	<b>05-03-2024 at 15.30 Hrs.</b>
Contract Period	<b>2 Years (24 Months)</b>

**I. Instructions to Tenderers and Conditions of Tender:** The following documents form part of Tender / Contract:

- (a) Tender Forms – First Sheet and Second Sheet
- (b) Special Conditions/Specifications of South Central Railway applicable
- I Schedule of approximate quantities (enclosed)
- (d) Details of scope of work may be seen at Annexure- III of this RFP document.
- (e) Standard General Conditions of Contract and Standard Specifications (Works and Materials) of Indian Railways as amended/corrected up to latest correction slips,
- (f) Schedule of Rates as amended / corrected up to latest correction slips,

**II.** The Tenderer(s) shall quote his / their rates as a percentage **ABOVE** or **BELOW** or **AT PAR** the Schedule of Rates of KRCL as applicable to except where he/they are required to quote item rates and must tender for all the items shown in the Schedule of approximate quantities attached. The quantities shown in the attached Schedule are given as a guide and are approximate only and are subject to variation according to the needs of the KRCL. The KRCL does not guarantee work under each item of the Schedule. The tenderer(s) shall quote rates / rebates only at specified place in Tender Form. Any revision of rates / rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be summarily ignored and will not be considered.

III.. Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his/their entries must be attested by him / them.

IV. The works are required to be completed within a period of TWENTY FOUR months from the date of issue of acceptance letter.

**V. ELIGIBILITY CRITERIA & CREDENTIALS**

5.0: The tenderer who fulfils the following eligibility criteria are only eligible to quote:

5.0.1 **Electrical Contractor License:** The tenderer should have valid Electrical Contractors License Grade A up to 33 KV issued by Govt. Electrical License Board (OR) the Site Supervisor should possess necessary A Grade License issued by a Govt. Licensing Authority to carry out works of appropriate voltage.

5.0.2 Qualification of the contractor’s Personnel for 25 KV OHE Maintenance works: Since the contract is primarily manpower oriented, therefore qualification and competence of the manpower deployed by the contractor is a crucial factor. Therefore, Contactor is required to deploy Supervisors, Technician, and Helpers round the clock for all maintenance and restoration of 25KVOHE Breakdown works. The contractor shall ensure the required minimum educational qualification & Experience for his deployed Supervisors, Technician, and Helper as mentioned here under.

**Criteria for selection of OHE labour. (Annexure B)**

Designation	Qualifications and work experience of Personnel hired for maintenance
Manager	<ol style="list-style-type: none"> <li>1) Should have at least 5 years minimum experience in Railway Electrification project or OHE maintenance contract OR Retired SEE</li> <li>2) Should be able to coordinate with clients for the purpose of maintenance.</li> <li>3) Should be able to record maintenance activities and submission of bills.</li> </ol>
OHE Supervisor	<ol style="list-style-type: none"> <li>1) Three years for a diploma holder and two years for a graduate engineer in a railway Electrification Project or OHE maintenance contract or Retired SSE</li> <li>2) Capable of understanding layout plans and structural rection drawing.</li> </ol>
PSI Supervisor	<ol style="list-style-type: none"> <li>1) Three years for a diploma holder and two years for a graduate engineer in a railway Electrification Project or OHE maintenance contract. Or Retired SSE</li> <li>2) Should have working knowledge of PSI</li> </ol>
OHE fitter	Capable of adjusting cantilevers as per SED provided and dismantling and erection of BWA with two years of experience as a fitter in a Railway Electrification Project.

OHE Helper	Minimum one-year experience in a railway electrification project.
OHE Mastry	Capable of adjusting cantilevers as per SED provided and dismantling and erection of BWA with a minimum of three years experience as OHE fitter.

### 5.1 Work Experience: (Similar Nature of works)

- a) The tenderer(s) should have physically completed similar work (AS FURNISHED IN ANNEXURE III. MUSR MEET CONDITION) viz.,
- “(1) Execution of erection (including design, supply and applicable), testing and commissioning of 25 KV A.C. 50 H single phase, traction overhead equipment for Railway applications including assisted/private/departmental sidings, and/or
- (2) Replacement of OHE assets viz, cantilevers, auto tensioning devices, Span droppers, catenary/contact wires and OHE modification works in yards in existing Electrified territory, and/or
- (3) Maintenance of 25 KV A.C. 50 Hz single phase, traction overhead equipment for Railway applications including Assisted/Private/Departmental sidings. And /or
- (4) Stringing of 33 KV and above rating transmission lines including erection of transmission towers/OH lines poles and associate Civil engineering works for PGCIL/TRANSCO/SEB/DISCOMs/any Govt. agencies and /or, Erection, testing and commissioning of 25 KV Overhead Electric Equipment in Railway applications, including 25 KVA Axillary Transformers and 25 KV switching stations. “

For a minimum value of

- 1) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or
- 2) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender or
- 3) One similar work costing not less than the amount equal to 60% of advertised value of the tender in the last Seven years, ending last day of month previous to the one in which tender is invited.

(b) The total value of similar nature of work completed during the qualifying period and not the payments received within qualifying period alone, shall be considered. In case, the final Bill of similar nature of work has not been passed and final measurements has not been recorded, the paid amount including statutory deductions will be considered. If final measurements have been recorded and work has been completed with negative variation, then also the paid amount including statutory deductions will be considered. However, if final measurements have been recorded and work has been completed with positive variation but variation has not been sanctioned, original contract value or last sanctioned Agreement value whichever is lower shall be considered for judging eligibility.

5.1.2 FINANCIAL TURN OVER; The tenderer must have minimum average annual contractual turnover of V/N or “V” whichever is less, where

V=Advertised value of the tender in crores of Rupees

N= Number of years prescribed for completion of work for which bids have been invited.

The Average annual contractual turnover shall be calculated as an average of “total Contractual Payments” in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover. Tenderer(s) should submit to this effect attested certificate from the Central Govt./Public sector under taking/NGR/Section of at least 50 Km long for the work done for them or Audited balance sheet duly certified by a Chartered Accountant for THREE FINANCIAL YEARS (i.e., current financial year and previous three financial years) i.e., after 01-04-2020 up to the date of tender opening.

5.1.3 The value of work completed will not include the cost of any materials issued free of cost by the Railway / Department/NGR/Private line section of at least 50 KM long etc. Only cash value of the Agreement and executed cash value will be reckoned for eligibility.

**NOTE:** The tenderer who do not fulfill the requisite qualifications and who do not furnish documentary evidence along with Tender document will be summarily rejected. Any misleading information will be rescinded and will lead to disqualification of tender.

5.1.4 The tenderer(s) shall also submit the following documents along with his/their tender.

- a) List of personnel, organization available on hand and proposed to be engaged for the subject work.
- b) List of plant and machinery available on hand (own) and proposed to be inducted (own and hired to be given separately) for the subject work.
- c) List of works completed in the last three financial years giving description of work, organization for whom executed, approximate value of contract at the time of award, date of award and date of scheduled completion of work. Date of actual start, actual completion and final value of contract should also be given.
- d) List of works on hand indicating description of work, contract value, approximate value of balance work yet to be done and date of award.

5.1.5 In case of Clause 5.1.4 (a) and (d) mentioned above, supportive documents/certificates from the organizations with whom they worked/are working should be enclosed.

5.1.6 Certificates from **private individuals for whom such works are executed/being executed will not be accepted.**

5.1.7 The works executed by the tenderer for Government Departments or Semi Governments/Public Sector undertaking/NGR/Private Line Owner of repute having at

least 50 KM section shall only be considered for eligibility. **Works executed for a party other than these parties shall not be considered for eligibility.** The certificate to be issued by an officer not below the rank of JA Grade/General Manager (Finance) or bill passing officer in Railways or Bill passing Officer/Executive – In-Charge of work in other Government Department/Govt. bodies /Public Sector under taking /NGR or General Manager level Officer of a Private Company. The Certificate should bear the signature and seal of the issuing officer, name of the department etc.

- 5.1.8 i) In case the tenderer is a partnership firm(s), the experience and turnover certificate shall be in the name and style of the firm only
- ii) If the Tenderer is a partnership firm, all the partners shall be jointly and severally liable for successful completion of the work and no request for change in the constitution of the Firm shall be entertained.
- iii) During the currency of the contract, no partner of the firm shall be permitted to withdraw from the partnership business and in such an event it shall be treated as breach of trust and abandonment of contract.

5.2.0 The tenderer / tenderers shall quote percentage rates as stipulated in the schedules. The quantities shown in the attached schedule are given as guidance and are approximate only and are subject to variation according to the needs of the KRCL. The KRCL accepts no responsibility for their accuracy, and the KRCL does not guarantee work under each item of schedule.

5.2.1 The tenderers are required to take note of all the Schedules are inclusive of Taxes and cess leviable under Works Contract and quote their rates inclusive of all taxes and cess.

5.2.2 Bids containing erasures and alterations of the tender documents are liable to be rejected. Any corrections made by the tenderer/tenderers in his/their entries must be attested by him/them.

5.3.0 The work is required to be completed within a period of (Twenty four) 24 months from the date of issue of acceptance letter including intervening monsoon period.

5.4.0. Earnest Money should only be paid through “DEMAND DRAFT’ IN FAVOUR OF ‘KRISHNAPATNAM RAILWAY COMPANY LIMITED’ PAYABLE AT NEW DELHI.

Cheques, War Bonds and Government Promissory Notes will not be accepted towards the earnest money. No interest shall be paid on the Earnest Money. Earnest Money to the unsuccessful bidders will be returned within thirty (30) days from the date of issue of the LOA to the successful bidder.

The tenderer shall hold the offer open till such date as may be specified in the tender. It is understood that the tender documents have been sold/issued to the tenderer and the tenderer is being permitted to tender in consideration of the stipulation on his part that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the KRCL. Should the tenderer fail to observe or comply with the foregoing stipulation,

the amount deposited as security for the due performance of the above stipulation shall be forfeited by KRCL. If the tender is accepted, the amount of Earnest Money will be held as security deposit for the due and faithful fulfillment of the contract. The earnest monies of unsuccessful tenderers will save as herein before provided be returned to the unsuccessful tenderers but KRCL shall not be responsible for any loss or depreciation that may happen to the security for the due performance of the stipulation to keep the offer open for the period specified in the tender documents or to the earnest money while in their possession nor be liable to pay interest thereon.

- 5.4.1 It shall not be obligatory on the said authority to accept the lowest tender and no tenderer / tenderers shall demand any explanation for the cause of rejection of his/their tender.
- 5.4.2 If the tenderer deliberately gives / tenderers deliberately give wrong information in his/their tender or creates/create circumstances for the acceptance of his/their tender, the KRCL reserves the right to reject such tender at any stage.
- 5.4.3 If a tenderer expires after the submission of his tender or after the acceptance of his tender, the KRCL shall deem such tender is cancelled. If a partner of a firm expires after the submission of their tender or after the acceptance of their tender, the KRCL shall deem such tender as cancelled, unless the firm retains its character.
  - (a) Documents testifying to the tenderer's works experience and financial status should be submitted along with the tender.
- 5.4.4 Tenders must be enclosed in a sealed cover, super scribed with the name of the work as appearing on the top sheet and must be sent by registered post/ or as mentioned in Tender Notice, so as to reach **not beyond 15.00 hours on 05-03-2024 or deposited in the box kept for the purpose. The boxes will be sealed at 15.00 hours on 05-03-2024 and will be opened at 15.30 hours on 05-03-2024 at the place mentioned above.**
- 5.4.5 Non-compliance with any of the condition set forth herein above is liable to result in the tender being rejected.
- 5.4.6 The authority for acceptance of the tender, who does not bind himself to accept the lowest or any other tender nor does he undertake to assign reasons for declining to consider any particular tender or tenders.
- 5.4.7 The successful tenderer/tenderers shall be required to execute an agreement with the KRCL for carrying out the work according to the General Conditions of Contract and specifications for works and materials, of South Central Railway Standard Specifications including correction slips issued from time to time.
- 5.4.8 The tenderer shall keep the offer open for a minimum period of 120 days from the date of opening of the tender, within which period; the tenderer cannot withdraw his offer, subject to the period being extended further if required, by mutual

agreement from time to time. Any contravention of the above condition will make the tenderer liable for forfeiture of EMD.

- 5.4.9 Should the KRCL decide to negotiate with a view to bring down the rates, the tenderer called for negotiations should furnish the following form of declaration before commencement of negotiations.

I/We-----do declare that in the event of failure of contemplated negotiations relating to Tender No.-----opened on -  
-----my original tender shall remain open for acceptance on its original terms and conditions.

- 5.5.0 **DEDUCTION OF INCOME TAX AT SOURCE**: In terms of Section 194-C inserted by the Finance Act, 1972, in the Income-Tax Act, 1961, the KRCL shall, at the time of arranging payments to the contractor and/or sub-contractor (in the case of sub-contractor only when the KRCL is responsible for payment of consideration to him under the contract) for carrying out any work (including supply of labour for carrying out any work) under the contract, be entitled to deduct Income-Tax at source on income comprised in the sum of such payment.

The deductions towards income-tax to be made at source from the payment due to non-residents shall continue to be governed by Section 195 of the Income-Tax Act 1961.

- 5.5.1 Tenders are required to submit the following documents along with the tender:

- i) DD for EMD (MUST MEET CONDITION)
- ii) Certificate in support of credentials (MUST MEET CONDITION)
- iii) Turn over certificate (MUST MEET CONDITION)
- iv) DD for cost of tender (MUST MEET CONDITION)
- v) Any other documents specified by the KRCL for the tender work (MUST MEET CONDITION)

5.5.2 If the tender is not accompanied by any of the documents mentioned above, (UNDER MUST MEET CONDITION) the tender shall be summarily rejected. No post tender correspondence will be entertained; however, if any clarification is required by the KRCL the same may be sought from the tenderer.

5.5.3 i) The onus of establishing the credentials of the tenderer(s) from the Office records or otherwise does not lie with the KRCL. KRCL shall evaluate offer only from the certificates / documents (as referred above) submitted along with the tender offer.

- ii) Any certificates / documents offered after the tender opening shall not be given any credit and shall not be considered.

- iii) Even if the tenderer(s) is / are working contractor(s) of the any Division also if he / they do not enclose the required certificates his / their offer will not be considered.

#### **5.5.4 Delayed/ Post Tender Submission of Documents/ information of Mandatory Nature linked to Eligibility Criteria called for at Tender stage: -**

**1. The offer of Tenderer(s) who do not enclose Experience Certificate and Turnover Certificate with requisite details and supporting documents, along with their Tender to establish their credentials shall be summarily rejected, even though they are working contractors or contractors on approved list.**

2. (i) The offer shall be evaluated only from the certificates/documents (as referred above) submitted along with the tender offer.

(ii) Any Certificate/Documents offered after the tender opening shall not be given any credit and shall not be considered.

(iii) Tenderer(s) shall note that conditional/alternate offer will not be considered and will summarily be rejected, even though such condition makes them as the lowest tenderer.

(iv) KRCL reserves the right to verify the authenticity of the documents/information furnished.

#### **V. EARNEST MONEY DEPOSIT**

(a) The tender must be accompanied by a sum of **Rs.4,83,200/-** through DD or as mentioned in tender documents, failing which the tender shall not be considered.

(b) The tenderer shall be required to deposit Earnest Money with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the conditions of tender. The Earnest Money shall be 2% of the estimated tender value costing up to Rs. 1 crore and for works estimated to cost more than Rs. 1 crore, the earnest money shall be Rs. 2 lakhs plus ½% (half Percent) of the excess of estimated cost of work beyond Rs. 1 crore subject to a maximum of Rs. 1 crore i.e. **Rs. 4,83,200/-** as indicated in the tender notice.

(c) It shall be understood that the tender documents have been sold/issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulations, the aforesaid EMD amount shall be liable to be forfeited by KRCL.

(d) If his tender is accepted the earnest money mentioned in sub clause (a) above will be retained as part security for the due and faithful fulfillment of the contract. The Earnest Money of other Tenderers shall, save as herein before provided be returned to them, but the KRCL shall not be liable to pay interest thereon.



(e) **The Earnest Money should only be paid through “DEMAND DRAFT” IN FAVOUR OF ‘KRISHNAPATNAM RAILWAY COMPANY LIMITED’ PAYABLE AT NEW DELHI**

(f) The Tenderer(s) shall keep the offer open for a minimum period of 120 days from the date of pending the Tender.

PERFORMANCE GUARANTEE:

1.1 Performance guarantee at a rate of 5% of the contractual value shall be deposited by the successful bidder. The successful bidder shall have to submit a Performance Guarantee (PG) valuing 5% of the contract value. Within 30 (thirty) days from the date of issue of Letter of Acceptance (LOA). Extension of time for; submission of PG beyond 30 (thirty) days and upto the date of submission of PG from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 15% per annum shall be charged for the delay beyond 30 (thirty) days, i.e. from 31<sup>st</sup> day after the date of issue of LOA. In case the contractor fails to submit the requisite PG after 60 days from the date of issue of LOA, a notice shall be served to the contractor to deposit the PG immediately however not exceeding 90 days from the date of issue of LOA. In case the contractor fails to submit the requisite PG even after 90 days from the date of issue of LOA, the contract shall be terminated duly forfeiting EMD and other dues, if any payable against that contract. The failed contractor shall be debarred from participating in re- tender for that work. In case 60<sup>th</sup> day is a bank holiday or office closure next working day should be considered as the last day for submission of the PG's. Decision of Authority competent to sign the Contract Agreement would be final in case of any dispute.

1.2 The value of PG to be submitted by the, contractor will not change for variation upto 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 10% (ten percent) for the excess value over the original contract *value* shall be deposited in four equal parts by the contractor. On the other hand, if the value of Contract decreases by more than 25% of the original contract value, Performance guarantee amounting to 10% of the decrease in the contract *value* shall be returned to contractor. The PG amount *in* excess of required PG for decreased contract value, available with KRCL shall be returned to the contractor duly safeguarding the interest of KRCL.

1.3 The applicable Performance Guarantee shall be calculated as per the revised *value* of the contract covering all variations up to the determination of the contract.

1.4 If the penalty imposed exceeds 50% of the applicable maximum penalty (as per the *revised value* of the contract), a PG equivalent to 25% of the applicable PG shall be forfeited. If the penalty imposed exceeds 75% of the applicable PG, a PG equivalent to 50% of the applicable PG shall be forfeited. The PGs shall be encashed by the agency/bidder after the completion of the contract.

1.5 The successful bidder shall submit the Performance Guarantees (PG) in any of the following forms, amounting to 5% of the contract value –

- A) Pay order or Demand Draft in favour of  
KRISHNAPATNAM RAILWAY COMPANY LIMITED Payable at NEW DELHI**
- B) FIXED DEPOSIT RECEIPT (BANKS IN INDIA ONLY) a/c with KRCL**

1.6 The Performance Guarantees shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. These PGs shall be initially valid up to the stipulated date of completion and maintenance period, if any plus 60 days beyond that. In case, the time for completion of service gets extended, the contractor shall get the validity of PGs extended to cover such extended time for completion and maintenance period, if any of service plus 60 days.

#### SECURITY DEPOSIT

Security Deposit at the rate of 5% the contractual value shall be payable by the successful bidder. Security Deposit will be recovered from the on account bills @ 10% of Bill value, till it reaches 5% of the contract value.

**Note: General conditions of Contract, and Special Conditions of Contract for OHE Maintenance pertains to South Central Railway will be applicable for this Tender.**

**FORM NO. II****EXPERIENCE CERTIFICATE**

<b>S. No.</b>	<b>Work Details</b>	<b>Details</b>
1	Name of Work	
2	Agt. No date and Name of the Agency	
3	Agt. Value in Rs.	
4	Due Date of Completion	
5	Actual Date of Completion	
6	Work Completed/in Progress	

Note: Separate Certificates for Work Completed and work in physically progress with payments received should be given.

The certificate to be issued by an officer not below the rank of JA Grade or bill passing officer in Railways and Bill passing Officer/Executive In-charge of work in other Government department/Govt bodies/Public Sector under taking. The certificate should bear the signature and seal of the issuing officer, name of the department etc.

Signature:  
Name:  
Designation:  
Office Stamp:  
Date:

**FORM NO. III**

**CERTIFICATE FROM CHARTERED ACCOUNTANT IN THEIR LETTER HEAD**

TO WHOMSOEVER CONCERNED

We ----- are he Auditors for the Firm/ Applicant -----since last-----  
(many) years. On the Strength of the above association, we are issuing this Certificate to the  
Firm on the Annual Contractual Turnover during the last three Audited Financial years as per  
Audited Balance Sheet.

It is further certified that advances or loans taken by the firm in connection with execution  
of works is not reflected in the contractual receipts from Works Contracts indicated below.

Sl No	Financial Year	Contractual Receipts from Works contracts executed for Govt/Govt. bodies/PSUs. Rs.	Remarks (if any)
(1)	(2)	(3)	(4)

Signature:

Name of CA:

Address:

Office Seal:

Phone No.:

Email:

Date:

## KRISHNAPATNAM RAILWAY COMPANY LIMITED

Name of the Work: TRD, OHE, TSS, SSP, PSI ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES WORK BETWEEN KAPT-AND OBVP STATIONS of KRCL under Vijayawada Division of South Central Railway for a period of TWO Years

## SUMMARY OF SCHEDULES

Sl. No.	Description of Schedule	Estimated Cost in Rs.	Rate quoted by Contractor as percentage above below at par over the estimate rates			In Figures	In Words
			Percentage In Figures	Percentage in Words	Write Whether percentage quoted in col 4 & 5 is above /below/at par over estimated rates		
1	2	3	4	5	6	7	8
1	SCHEDULE-I: OHE Maintenance Activities.	2,58,62,400					
2	SCHEDULE-II: Other Maintenance Activities.	60,37,160					
3	SCHEDULE-III PSI Maintenance	61,98,024					
4	SCCHEDULE IV. Electrical General Maintenance.	66,24,000					
5	SCHEDULE-V. House Keeping and Manning of TSS	94,91,600					
6	SCHEDULE.E VI Provision and Maintenance of Vehicles	1,24,11,500					
	Total Estimated Price	<b>6,66,24,684</b>					

## NOTE

- a) Please mention the percentage rate, in both figures and words, for each schedule in columns 4 & 5 respectively. Please also mention in column 6 whether the

percentage rate mentioned in columns 4 & 5 are above or below or at par over the estimated rates. All the schedules should be signed by the Bidder.

- b) The price for each bill shall be calculated and written against each bill, in both figures and words, in columns 7 & 8 respectively.
- c) The total price, as sum of the price of all the bills/ schedules shall be shown, in both figures and words under columns 7 & 8 respectively in the last row of the summary sheet.
- d) Bidder should ensure that the rates are filled with due care and caution so as not to lead to any omission or discrepancy or ambiguity.
- e) The item rates given in each bill are based on all- inclusive of GST and other taxes.
- f) While quoting their rates, Bidders shall consider the various provisions of the Central Goods and Services Tax Act, 2017 (CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services and Tax Act. 2017 (UTGST)/ respective state's State Goods and Services Tax Act, 2017 (SGST) also, as notified by Central/ State Government & as amended from time to time and all taxes, duties and levies applicable to the contract. Bidders shall also ensure that full benefit of Input Tax Credit (ITC) likely to be admissible to them is duly considered while quoting rates.
- g) The successful bidder who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to KRCL within 07 days from the date of the award of contract, without which no payment shall be released to the contractor. The contractor shall be responsible for deposition of applicable GST to be concerned authority.

**KRISHNAPATNAM RAILWAY COMPANY LIMITED**

**Name of Work: TRD, OHE, TSS, SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS OF KRCL under Vijayawada Division of South Central Railway for a period of Two years.**

SCHEDULE-I OHE MAINTENANCE ACTIVITIES.

Provision of OHE labour for OHE Maintenance activities as per Annexure-A (Note Items in the list to be carried out only as and when required/directed by Railway/KRCL vide Annexure B for selection of OHE labors.

Sl. No.	Description of Item	Unit	Quantities	Amount	Total
1	Manager for OHE and PSI Maintenance	Man Month	24	79,000	18,96,000
2	i)OHE Fitter (12 Laborers)	Man Month	288	27,400	78,91,200
	ii) OHE Helper (12 Laborers)	Man Month	288	24,200	69,69,600
	iii)OHE Maistry (3 Nos)	Man Month	72	42,200	30,38,400
	iv)OHE Supervisor (4 Nos)	Man Month	96	63,200	60,67,200
	Schedule Total				<b>2,58,62,400</b>

**KRISHNAPATNAM RAILWAY COMPANY LIMITED**

**Name of Work: TRD, OHE, TSS SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS OF KRCL under Vijayawada Division of South Central Railway for a period of Two years.**

SCHEDULE-II OTHER OHE MAINTENANCE ACTIVITIES					
S. No.	Description of Item	Unit	Quantities	Amount	Total
1	Loading, unloading & transportation of Railway supplied material (applicable for material more than 2 MT)	Each Occasion	120	4,200	5,04,000
2	Erection of catenary/contract wire splicing for each pair	Each	30	3,200	96,000
3	Erection of Traction Mast and portal other than boom.	Each	60	3,100	1,86,000
4	Transfer of OHE equipment from one mast to the another	Each	210	1,196	2,51,160
5	Supply, Operation and handing over of tools & plant for 25 KV, Electrical Items etc. maintenance activities as per Annexure C & D.	Each	2	25,00,000	50,00,000
Schedule Total					<b>60,37,160</b>

Note: Annexure D incorporates scope and supply of T&P Items and OHE main spares.



**KRISHNAPATNAM RAILWAY COMPANY LIMITED**

**Name of Work: TRD, OHE, TSS SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS OF KRCL under Vijayawada Division of South Central Railway for a period of Two years.**

<b>SCHEDULE III. PSI MAINTENANCE</b>					
<b>PART A. TSS &amp; SP/SSP MAINTENANCE</b>					
S. No.	Description of Items	Unit	Quantity	Amount	Total
1	Monthly maintenance of 132 kv/27 kv power transformer Bay	Each	144	5,530	7,96,320
2	Half yearly Maintenance of 132 kv/27 kv power transformer Bay	Each	24	8,540	2,04,960
3	Half yearly 25 kv bay feeder isolator maintenance.	Each	24	12,278	2,94,672
4	Half yearly maintenance of feeding post gantry TSS & associated equipment's	Each	12	16,014	1,92,168
5	Quarterly maintenance of 25 KV bay equipment other than isolator	Each	48	6,524	3,13,152
6	Quarterly maintenance of feeding post interrupter in TSS	Each	72	6,524	4,69,728
7	Quarterly maintenance of series Bank reactor interrupter in TSS	Each	12	5,531	66,372
8	Quarterly maintenance of circuit breaker interrupter in TSS	Each	12	5,531	66,372
9	Half yearly maintenance of earthing station	Each	576	40	23,040
10	Monthly panel maintenance of TSS	Each	72	2,766	1,99,152
11	Fortnightly battery and battery charger Maintenance of TSS	Each	144	1,768	2,54,592
12	Quarterly maintenance of BM in SP/SSP	Each	480	3,147	15,10,560
13	Fortnightly Maintenance of battery, battery charger and SP/SSP yard cleaning	Each	360	1,273	4,58,280
14	Half yearly gantry maintenance of SP/SSP	Each	30	11,062	3,31,860
15	Quarterly Maintenance of AT	Each	180	906	1,63,080

16	Rectification of 25 KV Drop out Fuse switches for 5/10/25 KVA Auxiliary Transformers	Each/	90	1,076	96,840
17	Removal and re erection of PSI equipment	Each	30	5,530	1,65,900
18	Reclamation of DCP (5 kg, 10 kg & 25 kg), CO2 (kg) and foam type extinguisher.	Nos	600	68	40,800
19	Transformer oil testing by accredited agency.	Occasion	24	22,924	5,50,176
Schedule Total					<b>61,98,024</b>

NOTE: Annexure D incorporates cope of supply of T&P items and PSI Maintenance spares.

**KRISHNAPATNAM RAILWAY COMPANY LIMITED**

**Name of Work: TRD, OHE, TSS SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENACE AND BREAKDOWN ACTIVIIIES BETWEEN KAPT AND OBVP STATIONS OF KRCL under Vijayawada Division of South Central Railway**

<b>Schedule IV. Electrical General Maintenance.</b>					
Sl. No.	Description of item	Unit	Quantities	Amount	Total
1	Ele. Gel. Maistry	Man/Month	24	42,200	10,12,800
1	Ele. Genl Fitter (5 Nos)	Man/Month	120	27,400	32,88,000
2	Ele. Genl Helper (4 Nos)	Man/Month	96	24,200	23,23,200
Total of Schedule					<b>66,24,000</b>

**KRISHNAPATNAM RAILWAY COMPANY LIMITED**

**Name of Work: TRD, OHE, TSS, SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENACE AND BREAKDOWN ACTIVIIIES BETWEEN KAPT AND OBVP STATIONS OF KRCL under Vijayawada Division of South Central Railway**

<b>Schedule V. House Keeping &amp; Manning of TSS</b>					
S.NO	Description of item	Unit	Quantities	Amount	Total
1	PSI Fitter (10 Nos)	Man/Month	240	27,400	65,76,000
2	Rental for Depot and residence for Staff at Rapur, Adurupalli, Cherlopalli & KAPT	Month	24	47,400	11,37,600
3	Regular House Keeping of TSS	Man Day	1140	700	7,98,000
4	Manning and House Keeping at Rapur	Man Day	1400	700	9,80,000
Total of Schedule					<b>94,91,600</b>

4745800

**KRISHNAPATNAM RAILWAY COMPANY LIMITED**

**Name of Work: TRD, OHE, TSS, SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENACE AND BREAKDOWN ACTIVIIIES BETWEEN KAPT AND OBVP STATIONS OF KRCL under Vijayawada Division of South Central Railway**

<b>Schedule VI Maintenance of Vehicles</b>					
S. No	Description of item	Unit	Quantity	Amount	Total
1	Hiring of 6T BD Vehicle for running 3000 Km per month for transportation of OHE material	Month	48	1,30,000	62,40,000
2	Extra running charges per Km or part there of over initial running of 3000 km per month per vehicle	KM/Month	4500	35	1,57,500
3	Hiring of Four wheeler Bolero/Innova/Tawera type vehicles for the use of KRCL up to 3000 Km per month	Month	72	73,000	52,56,000
4	Hiring of Two Wheeler	Month	24	10,000	2,40,000
5	Extra running charges per Km or part there of over initial running of 3000 km per month per vehicle for S.No.3	KM/Month	7000	20	1,40,000
6	Hiring of 15 T crane on hourly basis	Per hour	180	2,100	3,78,000
<b>Schedule Total</b>					<b>1,24,11,500</b>

- a) The vehicles shall be new and delivered and maintained by the Contractor in good roadworthy condition including daily cleaning. The vehicle shall be replaced with a new vehicle after a maximum run of 75000 Kms or three years whichever is earlier.
- b) The Contractor shall employ and make available competent drivers fully licensed to operate the vehicles as and when required by the Engineer/Employer. The Contractor shall replace drivers at the request of the Engineer/Employer.
- c) The vehicles shall be licensed and insured for use on the public highway and shall have comprehensive insurance cover for any qualified driver authorized by the Engineer together with any authorized passengers and the carriage of goods or samples.
- d) The Contractor shall provide fuel, oil for running of each vehicle for 3000 kms monthly for item No. 3. where the vehicle is required and ensure maintenance in conformity with the vehicle manufacturer's recommendations and all relevant toll and parking charges incurred in connection with the Works. The vehicle shall be provided day and night as required by the Engineer/Employer.
- e) A suitable replacement shall be provided by the contractor for any vehicle out of service for more than 24 hours. If the contractor at any time fails to provide vehicle(s) or substitute vehicle(s) as specified, an amount of Rs. 2000 per day for

each vehicle (that the Contractor failed to provide) shall be recovered from the Contractor.

- f) Contractor should engage drivers for day and night shift separately and should be available with vehicles at Hqrs. The rate should be quoted accordingly.
- g) Provision of Third Four wheeler Vehicle is on need basis.

<b>SUMMARY</b>		
<b>S. No.</b>	<b>Schedule Nos.</b>	<b>Amount</b>
1	Schedule No. I	2,58,62,400
2	Schedule No. II	60,37,160
3	Schedule No. III	61,98,024
4	Schedule No. IV	66,24,000
4	Schedule No. V	94,91,600
5	Schedule No. VI	1,24,11,500
	<b>Total</b>	<b>6,66,24,684</b>

**NOTE:**

**1. EXPLANATORY NOTES FOR TRD, OHE, TSS, SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND THE BREAK DOWN ACTIVITIES – PLEASE SEE – ANNEXURE. III**

**2. THE INSTRUCTIONS ARE AS PER AC. TRACTION MANUAL OF INDIAN RAILWAYS WHICH MAY PLEASE BE REFERRED.**

## KRISHNAPATNAM RAILWAY COMPANY LIMITED

**Name of Work: TRD, OHE, TSS SSP, PSI & ELECTRICAL GENERAL PREVENTIVE MAINTENANCE AND BREAKDOWN ACTIVITIES BETWEEN KAPT AND OBVP STATIONS OF KRCL under Vijayawada Division of South Central Railway**

The instructions are as per A.C. Traction Manual of Indian Railways. Which may please be referred.

**EXPLANATORY NOTES FOR OHE AND PSI MAINTENANCE SCHEDULE**

Sch. Sl. No. 1	Loading, unloading & transportation of Railways supplied materials (applicable for material more than 2 MT)
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Job shall cover loading and unloading of railway supplied materials for execution of major work that requires shifting of heavy duty items such as OHE mast, portals and booms and also shifting of dismantled materials to consignee's depot. Also safe handling and shifting of railway materials during the break down. Job shall also cover collection of materials from store depot, loading and unloading of materials from depot to site and site to depot.

Sch. Sl. No. 2	Erection of Catenary & Contact wire Splicing
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**The Checking and maintenance against this item shall be carried out in line with Para 20307, 20310 of ACTM Vol-1I part-of Indian Railways with its latest correction slips if any.**

Job shall cover erection of catenary/contact wire splicing with fasteners to splice existing OHE with newly laid OHE and adjustment there of as per requirement.

The splice in OHE becomes necessary when

- 1) 2 or more catenary strands are broken, a small length requires replacement as a result of excessive wear or restoration after breakdown.
- 2) Checking to see if any slipping of the ends of two contact wires have taken place. When viewed through the top window, there should be no gap between the two contact wire ends
- 3) When the diameter of contact wire on ML comes under 8.25mm and on yard 8mm
- 4) When there is any OHE break down like snapping of contact wire splice need to be provided.
- 5) When there is any OHE break down like catenary wire snapping, catenary splice needs to be provided

Note: Contact wire splices should not be re-used.

Sch. Sl. No.3	Erection of Traction mast and Portals other Boom
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**Erection of Traction mast and portals other than Boom shall be carried out in line with Appendix-1 Para 18.0, 20 ACTM Vol-1I part-I) of Indian Railways with its latest correction slips if any.**

The materials required in this part of work shall be supplied by Railways.

Erection of Mast: The job shall cover manual erection, alignment and setting before grouting of individual traction mast including dwarf mast. Erection of traction mast also includes painting with cold galvanizing paint in rusted area if any in the mast supplied by Railways. The masts released may also have to be reused.

For erection, the contractor can use his own road crane duly transporting the structures to the site. Transporting and Crane price are covered separately in the schedule. Temporary bonding of structure by means of 2nos. of 8 SWG wire shall be done before boom erection, where propel bonding arrangement is not available.

Erection of Portal other than boom: The job shall cover erection, alignment and setting before grouting, wherever required, the portals, gantries, 2/3 tracks cantilever structures. The job shall also include erection of galvanized bolts, nuts washers etc. Wherever required as per approved designs and drawings. In case of road approach is not available, the transportation of mast by Tower wagon may be allowed by the Railways.

Sch. Sl. No.4	Transfer of over-head equipment from one mast or support to another
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**Transfer of over-head equipment from one mast or support to another shall be carried out in line with Appendix-1 ACTM VOI-J1 part-II of Indian Railways with its latest correction slips if any**

The job shall cover transfer of over-head equipment to a bracket assembly on a new mast or support, and dismantling of the erected bracket assembly from the old mast or support and consequent adjustment to over-head equipment required such as re-spacing of droppers, leveling etc. The foundation and steel work and bracket assembly for the new mast or structure will be paid for under appropriate items.

Sch. 2 Sl. No.1	Yearly maintenance of 220KV/27KV Power Transformer bay
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**Yearly maintenance of 220kV/27 KV Power Transformer bay shall be carried out in line with Para 20246, 20247, 20248, 20251, 20244, 20230, 20240, 20241 of ACTM Vol-II part-I of Indian Railways with its latest correction slips and HQ/SC'S instructions.**

The job shall cover checking & maintenance of equipments as mentioned below along with monthly maintenance as mentioned in Sl. No. 01 & 02.

220 KV/27 KV power transformer bay includes 220 KV/27 KV/21.6 MVA power transformer 1 No, 220 KV SF-6 circuit breaker 01 No. with spring operated drive unit, 198 KV lightning arrester 02 Nos, 25 KV Single pole Vacuum Circuit Breaker 01 No, 42 kV lightning arrester 01 No, 220 KV DP Isolator 05 Nos.

**A, 220/27 KV Power Transformer (Yearly)**

1. Do all the test as indicated in Sl No.1 & 2 Schedule A.
2. Check Gasket joints for any leakage. In case of leakage the same shall be attended.
3. Test oil as per the enclosed Annexure 1 referring Annexure 2.03 B of ACTM VOL.II Part I.

4. Oil sample shall be taken for DGA as per RDSO guidelines as per Annexure 2.03 B of ACTM Vol.II Part I.
5. Move the Tap setting switch Up & Down for full range for few times. Set the tap finally at correct position.
6. Check water tightness of terminal boxes. If required replace gasket.
7. Check Thermo well packets holding temperature sensors, Oil to be topped up if required.
8. Check dial type Oil gauges for free movement of pointer, adjust if required.
9. Check for operation of Buchholz relay to measure IR value of conducts with 500 V megger.

B.220 KV Circuit Breaker (yearly)

1. Do all the test as indicated in SI No.1 & 2 Schedule B.

C. 25 KV Circuit Breaker (Yearly)

1. Do all the test as indicated in SI. No.1 & 2 Schedule C.
2. Adjust coil assembly and ensure battery voltage is within specified limits.

D. 220 KV DP Isolator (yearly)

1. Do all the test as indicated in SI No.1 & 2 Schedule D.
2. Measure the clearance of blades in open position. Adjust if found necessary

E. Lightning Arrestor (42KV 198KV)

1. Check earthing terminals and earth strips for proper condition.,
2. Check line Jumper connection.
3. Record IR values with 5 kV megger.
4. Record Surge discharge counter and leakage current.

Sch. 2 Sl. No.3	Half yearly 25KV Bay Isolator maintenance
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**Half yearly 25KV Bay Isolator maintenance shall be carried out in line with Para 20246, 20232 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover checking & maintenance of equipments as mentioned below,

A. 25 KV Single pole Isolator 8 Nos. (Half yearly)

1. Manually operate isolator several times and observe if it operates smoothly and correctly. Check interlocks and integral lock. Lubricate moving parts as necessary with appropriate lubricant.
2. Observe for any signs of overheating and check the wipe of contact blade tips and fixed contact fingers and lightly Vaseline the contact making surfaces.
3. Clean all articulated joints, sliding and bearing surfaces thoroughly.
4. Check all split pins, lock nuts and check nuts for proper condition.
5. Check for correct setting and alignment of arcing horns.
6. Operate the isolator slowly, check for simultaneous operating of the blades on the poles and correct alignment of blade tips in the fixed contact jaws of the poles. Adjust if required to ensure that the blades are fully home between the contacts when handle is in closed position,
7. Check locking arrangements.



Sch.2. Sl. No. 4	Half yearly maintenance of Feeding post gantry TSS and associated equipment
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**Half yearly maintenance of Feeding post gantry in TSS and associated equipments bay shall be carried out in line with Para 20247, 20241, 20232 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover checking & maintenance of equipments as mentioned below, 25 KV double pole isolators- 6 nos, 25KV/110 V PT-5 nos, 42 KV, 10 KA Lightning Arresters-05

**A. 25 KV Double pole Isolator 6 Nos (Half yearly)**

1. Manually operate isolator several times and observe if it operates smoothly and correctly. Check interlocks and integral lock, Lubricate moving parts as necessary with appropriate lubricant.
2. Observe for any signs of overheating and check the wipe of contact blade tips and fixed contact fingers and lightly Vaseline the contact making surfaces.
3. Clean all articulated joints, sliding and bearing surfaces thoroughly.
4. Check all split pins, lock nuts and check nuts for proper condition.
5. Check for correct setting and alignment of arcing horns.
6. Operate the isolator slowly, check for simultaneous operating of the blades on the poles and correct alignment of blade tips in the fixed contact jaws of the poles. Adjust if required to ensure that the blades are fully home between the contacts when handle is in closed position.
7. Check locking arrangements.
8. Measure and record isolator clearance in 'Open' position. Adjust if clearance is beyond specified limit.

**B. Lightning Arrestor(42KV)**

1. Check earthing terminals and earth strips for proper condition.
2. Check line Jumper connection.
3. Record IR values with 5 kV megger,
4. Record Surge discharge counter and leakage current.

**C.PT**

**A. 25 KV Interrupters (Quarterly)**

1. Check the color of silica gel in the breather. Recondition/ replace if blue color is changed to white color.
2. Clean and Check the Porcelain insulator surface should be clean without any damages (Chippings, Cracks, etc.) Clean with dry cloth.
3. Check for lubrication, lubricate if lubrication is found to be insufficient.
4. Check and record the operation counters.

Sch. 2 S.No.7	Half yearly maintenance of Earthing station
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**Half yearly maintenance of Earthing station shall be carried out in line with Para 20245 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover measure & recording of individual and combined earth resistance values of each earth electrodes provided in Traction Sub Station, Switching posts (SP/SSP), Auxiliary Transformer Locations. Recorded earth values to be stenciled on earth pits at each location. The earth values to be taken twice in a year, once in during summer (Feb-Apr) & the other during winter (Aug-Oct),

Sch.2 Sl. No. 8	Monthly panel maintenance of TSS
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**Monthly maintenance control & relay panel of TSS shall be carried out in line with Para 20234 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover checking & maintenance control & relay panel of TSS as mentioned below,

**A. Control and Relay Panels**

1. Clean the panel externally.
2. Check the tightness of all connections, remove cobwebs and wipe off accumulated dust with dry cloth.
- 3) Check all door switches, locks, lights etc.

Sch.2 Sl. No.9	Fortnightly Battery & Battery charger maintenance of TSS
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**Battery & Battery charger maintenance (Fortnightly) shall be carried out in line with Para 20220, 20226, 20235 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover checking & maintenance of Battery (Fortnightly) & Battery Charger (Quarterly) as mentioned below,

**A. 200 AH Battery/110 V**

1. Measure and record Specific gravity of electrolyte and cell voltage and charging current.
  2. Check the condition of container for any cracks/deformation etc including accumulation of sulphation on the terminals.
  3. Check the condition of inter cell connectors for tightness.
  4. Check the operation of battery charger.
- 
1. Clean externally the tank bushing oil level indicator with dry cloth.
  2. Check explosion vent diaphragm for any damage and presence of oil.
  3. Check for any oil leakage
  4. Check all bonding & earthing connection.
  5. Check the fuse holder and fuse element for proper condition

Sch. 2 Sl. No. 5	Quarterly maintenance of 25 kV bay equipments other than Isolators
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**Quarterly maintenance of 25 kV bay equipments other than Isolators shall be carried out in line with Para 20236 CT & PT, 20231 of ACTM Vol-II part-I of Indian Railways with its latest correction slips & OEM guidelines for 25KV Circuit Breaker.**

The job shall cover checking & maintenance of equipments as mentioned below 25KV Circuit Breakers-2 Nos, 25KV /110 V Potential Transformer-2Nos, 1500/750/5 Amps Current Transformer-02 Nos, 25 KV Interrupter- 01 no.

**A. 25 KV Circuit Breaker (Quarterly)**

1. Check the color of silica gel in the breather. Recondition/ replace if blue color is changed to white color.
2. Clean and Check the Porcelain insulator surface should be clean without any damages (Chippings, Cracks, etc.) Clean with dry cloth.
3. Check for lubrication, Lubricate if lubrication is found to be insufficient.
4. Check and record the operation counters.
5. Check Capacitor Trip Device (CTD) for proper operations.

**B. PT's & CT's (Quarterly)**

1. Clean externally the tank bushing oil level indicator with dry cloth.
2. Check explosion vent diaphragm for any damage and presence of oil.
3. Check for any oil leakage.
4. Check all bonding & earthing connection.
5. Check the fuse holder and fuse element for proper condition

**C. 25 KV Interrupters (Quarterly)**

1. Check the color of silica gel in the breather. Recondition/ replace if blue color is changed to white color.
2. Clean and Check the Porcelain insulator surface should be clean without any damages (Chippings, Cracks, etc.) Clean with dry cloth.
3. Check for lubrication, Lubricate if lubrication is found to be insufficient.
4. Check and record the operation counters.

Sch.2 Sl. No. 6	Quarterly maintenance of feeding post interrupters in TSS
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**Quarterly maintenance of feeding post interrupters in TSS shall be carried out in line with recommendations Original Equipments Manufactures.**

The job shall cover checking & maintenance of equipments as mentioned below, 25 KV Interrupter- 04 Nos.

**B. 200-AH Battery/110 V (Quarterly)**

1. Do all the test as indicated in schedule A.
2. If the battery is not in fully charged condition boost charge should be given as required and trickle charging rate increased to the extent required.
3. Check earth condition to the body of battery charger.

**C. Battery charger (Quarterly)**

1. Open out the covers of the battery charger and blow all dust.
2. Check tightness of all connections, bolts, nuts and screws.
3. Check all Ammeter, Voltmeter & Fuse conditions.
4. Once in 4th quarter measure and record the insulation resistance of the transformer windings of the battery charger with 500V megger.

Sch. 2 Sl. No. 10	Quarterly maintenance of BM in SP/SSP
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**Quarterly maintenance of BM in SP/SSP shall be carried out in line with recommendations Original Equipments Manufactures.**

The job shall cover checking & maintenance of BM (Interruption) in SP/SSP (Quarterly) between SBC-MYS section as mentioned below,

**A. 25 KV BM (Interruption) (Quarterly)**

1. Check the color of silica gel in the breather. Recondition/ replace if blue color is changed to white color.
2. Clean and Check the Porcelain insulator surface should be clean without any damages (Chippings, Cracks, etc.) Clean with dry cloth.
3. Check for lubrication, Lubricate if lubrication is found to be insufficient.
4. Check the records the operation counters.

**B. 25 KV BM (Interruption) (Half yearly)**

1. Do all the test as indicated in schedule A.
2. Check and lubricate if required to all moving parts in the operating mechanism.
3. Check contact wear indication. If green is not seen, contacts are worn off.
4. Check speed regulator for free movement any oil leakage/ stuck up.
5. Measure and record insulation resistance values of Breaker pole with respective earth.
6. Check all bus bar and terminal connections for proper condition.
7. Measure and record the contact wipe and travel.
8. Check oil level and smooth operation of spring charging motor reduction gear box. Top up with SA 90 Oil (For Alind Make CB only).

**C. 25 KV BM (Interruption) (Yearly)**

1. Do all the test as indicated in schedule A & B.
2. Measure closing! Tripping time of breaker with time interval meter
3. Adjust coil assembly and insure battery voltage in specified limits.

Sch. 2 Sl. No. 11	Fortnightly maintenance of battery, Battery charger and SP/SSP yard cleaning
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Sch.2 - Sl. No. Fortnightly maintenance of battery, Battery charger and SP/SSP yard cleaning

**Fortnightly maintenance of battery, Battery charger and SP/SSP yard cleaning shall be carried out in line with Para 20220, 20226, 20235 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover checking & maintenance of Battery (Fortnightly) & Battery charger (Fortnightly) as mentioned below,

**A, 40 AH Battery/110 V**

1. Measure and record Specific gravity of electrolyte and cell voltage and charging current.
2. Check the condition of container for any cracks/deformation etc including accumulation of sulphation on the terminals
3. Check the condition of inter cell connectors for tightness.
4. Check the operation of battery charger.

**B. 40 AH Battery/110 V (Quarterly)**

1. Do all the test as indicated in schedule A.
2. If the battery is not in fully charged condition boost charge should be given as required and trickle charging rate increased to the extent required.
3. Check earth condition to the body of battery charger.

**C. Battery charger**

1. Open out the covers of the battery charger and blow all dust.
2. Check tightness of all connections, bolts, nuts and screws.
3. Check all Ammeter, Voltmeter & Fuse conditions.
4. Once in 4th quarter measure and record the insulation resistance of the transformer windings of the battery charger with 500V megger.

**D. Yard cleaning**

1. The removal of wild grass, unwanted vegetation, tree leaves and other rubbish by the site, road. The removal should be done as and when required.
2. Cleaning of trenches, trench covers and removal of mud etc from the trenches and throwing away from SP/SSP.
3. The labour deployed for above work shall also spray the herbicide chemicals over the switch yard regularly, no extra payment of spraying of herbicide shall be paid.

Sch. 2 Sl. No. 12	Half yearly Gantry maintenance of SP/SSP
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**Half yearly maintenance of SP/SSP gantry & Associated equipments shall be carried out in line with Para 20247, 20241, 20232 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover checking & maintenance of equipments as mentioned below,

25 KV double pole isolators- 4 nos, 25KV/110 V PT- 4 nos, 42 KV, 10 KA Lightning Arresters-4 nos,

A. 25 KV Double pole Isolator 4 Nos (Half yearly)

1. Manually operate isolator several times and observe if it operates smoothly and correctly. Check interlocks and integral lock. Lubricate moving parts as necessary with appropriate
2. Observe for any signs of overheating and check the wipe of contact blade tips and fixed contact fingers and lightly Vaseline the contact making surfaces.
3. Clean all articulated joints, sliding and bearing surfaces thoroughly.
4. Check all split pins, lock nuts and check nuts for proper condition.
5. Check for correct setting and alignment of arcing horns.
6. Operate the isolator slowly, check for simultaneous operating of the blades on the poles and correct alignment of blade tips in the fixed contact jaws of the poles. Adjust if required to ensure that the blades are fully home between the contacts when handle is in closed position.
7. Check locking arrangements.
8. Measure and record isolator clearance in 'Open' position. Adjust if clearance is beyond specified limit.

B. PT's

1. Clean externally the tank bushing oil level indicator with dry cloth.
2. Check explosion vent diaphragm for any damage and presence of oil.
3. Check for any oil leakage.
4. Check all bonding & earthing connection.
5. Check the fuse holder and fuse element for proper condition.
6. Measure & record of insulation resistance of windings with ambient temperature.

C. Lighting Arrestor (Yearly)

1. Check earthing terminals and earth strips for proper condition.
2. Check line Jumper connection.
3. Record IR values with 5 kV megger.
4. Record Surge discharge counter and leakage current.

Sch.2 Sl. No.13	Quarterly maintenance of AT
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**Quarterly maintenance of AT shall be carried out in line with Para 20223-20254 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover checking & maintenance of AT (Quarterly) as mentioned below,

A. Auxiliary Transformer (Quarterly)

1. Clean externally the tank, conservator, bushings.
2. Check oil level in conservator.
3. Check silica-gel breather. If silica-gel is pink, replace it with new dry silica-gel and recondition the old silica-gel. Makeup oil if required.
4. Check for proper condition and alignment of dropout fuse element and assembly.
5. Check and record arcing horn gap settings.

**B. Auxiliary Transformer (Half yearly)**

1. Do all the test as indicated in schedule A
2. Measure and record insulation resistance of all windings to earth with 2.5 kV megger along with temperature of winding and ambient temperature.
3. Test Oil samples for BDV.
4. Check foundation and structure assembly for proper conditions and tightness.

**C. Auxiliary Transformer (Yearly)**

1. Do all the test as indicated in schedule A& B.
2. Test oil sample for acidity.
3. Measure and record earth resistance. Take remedial action if earth resistance is above the prescribed limits.

Sch. 2 Sl. No.14	Rectification of 25 kV dropout fuse
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**Rectification of 25 kV dropout fuse shall be carried out in line with Para 20223 20254 of ACTM Vol-II part-I of Indian Railways with its latest correction slips:**

The job shall cover Rectification of 25 kV dropout fuse in Auxiliary Transformer locations between OBVP-WRIN section. Rectification to be done immediately, as and when required. Nominated staff for the above job should be available to reach the working spot round the clock.

Sch. 2 Sl. No.	Breakdown attention of PSI equipments
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**The Breakdown attention of PSI equipments shall be carried out in line with Chapter 8 of ACTM Vol-II part-I of Indian Railways with its latest correction slips if any**

The job shall cover the Breakdown attention of PSI equipments as mentioned below,

The job shall cover Supply of Man Power for restoration of all 25KV **PSI equipments** such as circuit breakers, Interrupters, Potential transformers, AT, CT, Capacitor bank, Bus bar etc. during Break down round the clock on hourly basis for all restoration of 25KV PSI Equipments. The Contractor is required to deploy one Supervisors, One Technicians and Two Helpers who are competent to attend Failures in PSI equipments. The job against this item is applicable for Supply of Man Power on hourly basis consisting of the above staff in one Gang.

In case of major repair that requires OEM/Specialised agency attention then such repair will be undertaken by Railway separately.

Breakdown staff may be located at selected points as required by Railways to deal promptly with PSI equipments failures.

Sch. 2 Sl. No.	. Manning of SP/SSP in case of Emergency
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**The Manning of SP/SSP in case of Emergency shall be carried out in line with Para 20811 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover the Manning of SP/SSP in case of Emergency as mentioned below,

1) Whenever remote control working is not possible due to any fault on the communication cable or in the remote control equipment or failure of battery etc. it is necessary to arrange for manning the switching station by posting suitably qualified and competent staff who are authorized to carry out emergency switching operations as instructed by TPC. The manning staff shall make himself conversant with the equipment is required to operate and the rules that are laid down by the railway administration.

2. Manning staff shall carry out orders issued by TPC over the telephone, observing the rules laid down for exchange of telephone messages.

3) Manning staff should maintain a log book showing the details of operations in order in which they were done, interruption to power supply, abnormal occurrences, defects in plant requiring attention and other information if any. The log will be signed by both the relieving and relived staffs at every change of shift as a token of having taken over and hand over all equipment correctly.

4. The manning staff on shift duty is forbidden to leave the post station unless he is relived by another person. No interchange of duties or variation of duty hours is permitted without the prior permission of TPC, and staff who are unable from any cause to take their shift, shall at once notify TPC.

5. One man day in this part of schedule is for 12 hours. Contractor has to arrange for transport of the personnel manning the SP/SSP.

Sch. 2 Sl. No. 15	. Quarterly Maintenance of Capacitor Bank with series reactor.
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**Quarterly Maintenance of Capacitor Bank with series reactor shall be carried out in line with the Maintenance instruction No. TI/MI/00026 Rev.2.**

The job shall cover the Quarterly Maintenance of Capacitor Bank with series reactor, CT-1, 1, NCT-1, LA-1 as mentioned below,

**A. Capacitor Bank with series reactor (Quarterly)**

1. Clean the dust over the insulators with the help of a damp cloth. In case of oily deposits carbon tetrachloride or any other suitable solvent may be used for cleaning of the insulators.

2. Observe for any dielectric leakage/seepage, if any leakage/seepage is found, rectify it as given in Para 5.

3. Observe for any birdcages in and around the traction substations.

4. Observe physically for any abnormal temperature rise of the capacitor units.

**B. Capacitor Bank with series reactor (2nd Quarterly)**



Every 2nd quarterly maintenance, the following checking also to be done along with the schedule A:

1. Check the excessive tension on any of the connectors. Ease out the tension on the bushings, if required.
2. Observe for any rust collection/corrosion marks on the metallic parts and clean them.
3. Observe the current and voltage variations for the capacitor bank for at least 24 hours (Hourly readings of voltage and current for the capacitor bank should be recorded. If continuous recording facility is available, the same may be used). Compare the records of measurements with last recorded readings. Measurements with Digital meters shall be ideal. Examine and execute the changes for the past few years.

**C. Capacitor Bank with series reactor (4<sup>th</sup> Quarterly)**

Every 4th quarterly maintenance the following checking to be done along with the schedule A & B:

1. Ensure proper tightening of the fasteners and the connectors.
2. Measure the capacitance value and tan delta of the capacitor units at nearly the same ambient temperature. Compare with last measured values.

**D. PT's & CT's (Quarterly)**

1. Clean externally the tank bushing oil level indicator with dry cloth.
2. Check explosion vent diaphragm for any damage and presence of oil,
3. Check for any oil leakage,
4. Check all bonding & earthing connection.
5. Check the fuse holder and fuse element for proper condition

**E. Lighting Arrestor (Yearly)**

1. Check earthing terminals and earth strips for proper condition.
2. Check line Jumper connection.
3. Record IR values with 5 kV megger.
4. Record Surge discharge counter and leakage current.

Sch.2 Sl. No. 16	Removal and re-erection of PSI Equipments
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Removal and re-erection of PSI Equipments as per OEM manual

This job hall covers replacement of PSI equipments viz CT'S, PT's, AT's, LA'S, Capacitors, Isolators, Interrupters, CB's etc. The contractor shall provide 1 supervisor, 3 Skilled & 2 unskilled staff for the replacement work as and when required. The rate is for each occasion. The supply of material and tools will be provided by Railways. The man power deputed shall leave the work spot with the permission of engineer in charge. All released materials to be handed over to Railways.

Sch. 2 Sl. No.17	Reclamation of Fire Extinguisher
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The job shall cover Servicing & maintenance of,  
1) CO2 type Fire extinguisher: 5,9 kg capacity.

- 2) Dry-chemical powder (DCP) type: 5, 10 kg
- 3) Foam type.

Servicing of Fire extinguisher will be done once in a year and replacement of dry chemical powder will be done once in 2 years. All accessories require for replacement to be done by contractor, Details of servicing/ replacement to be stenciled on fire extinguisher.

TSS Manning & House Keeping.

Sch. 3 Sl. No.1	Regular Housekeeping of TSS
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Regular Housekeeping of TSS shall be carried out as below,

The job shall cover the Daily Housekeeping of TSS, control room, Battery room, Store room, staff room, staff rest room, TSS yard and surroundings. The TSS should be kept free of bushes, oil spillage etc. A checklist of cleaning shall be maintained in TSS. Attendance shall be maintained by the concerned SSE in charge. In case of absence of the house keeping personnel reliever should be immediately arranged by the contractor. The working hours will be 08.00 to 17.00 Hrs with lunch Hr between 13.00 to 14.00 Hrs.

Sch. 3 Sl. No.2	Manning of TSS.
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The job shall cover the Manning of TSS as mentioned below,

**Contract staff:**

- (i) The staff to be deputed should be able to take and write messages from Railway authorities in English/Hindi/Kannada over phone and should be able to convey the same to the desired person and should also be computer literate.
- (ii) Age should be more than 18 years and preferably less than 58 years as on date of commence of work.
- (iii) The contractor shall be solely responsible for the conduct of the staff deputed by him for the work.
- (iv) The contractor's staff should not carry any unauthorized/ dangerous/explosives in the complex. The staff to be deputed for manning of TSS highly skilled person should have passed minimum ITI or higher technical qualification and should possess experience in similar job in which they have dealt with maintenance of Electrical systems / equipments / switchgears and protective devices. However the person who is to be found to be qualified and suitable in scrutiny by representative of Sr.DEE/TRD/BZA will only are allowed to work.

**Transformer oil testing by accredited agency**

Sch.2 Sl. No.18	Transformer Oil testing
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**The testing of Transformer Oil shall be carried out in line with Para 20207, 20246 & Annexure 2.03B - 2.04 of ACTM Vol-II part-I of Indian Railways with its latest correction slips.**

The job shall cover testing of Transformer Oil as mentioned below,

**A. Every year preferably during summer season Power Transformer Oil sample to be send to approved laboratory (CPRI- Central Power Research Institute) for all tests as listed below,**

S. No.	Tests	Value as per ISO 1866 Permissible limits	To be recondition	To be rejected
1	2	3	4	5
1	Electric Strength (Breakdown voltage)  Below 72.5 k V 72.5 kV & less than 145kV 145 kV and above	Min  30 k V 50 kV40 Kv	Less than the value specified in Column 3	
2	Specific resistance (Resistivity) Ohm.cm at 27 O C	Above 10X10. 12	Between 1X10 12 to 10 x 10 12	Below 1 x 10 12
3	Water content Below 145 kV Above 145 kV	Max 35 ppm 25 ppm	Greater than the value specified in Column 3	
4	Dielectric dissipation factor, Tan delta at 90 O C	0.01 or less	Above 0.01 to 0.1	Above 0.1
5	Neutralization value mg KOH/g of oil	0.5 or less	Above 0.5	Above 1.0
6	Interfacial tension N/m at 27 O C	0.02 or more	0.015 and above but below 0.02	Below 0.015
7	Flash point in O c	140 or more	125 and above but below 140	Below 125
8	Sludge	Non-detectable	Sediment	Perceptible Sludge
9	Dissolved Gas Analysis (DGA)	Refer Annex.2.04		

Dissolved Gas Analysis (DGA);

Dissolved gas analysis (DGA) of the oil of a transformer in operation is a specialized technique to assess the internal condition of the transformer. DGA is performed by Gas Chromatography. The gases extracted from the oil by a suitable apparatus are transferred to the gas chromatography system for analysis.

The following tests are to be conducted to assess the Range of gas levels in Transformer Oil:

Gas	0-4 Years	4-10 Years	10 Years
Methane	10-30	30-80	30-130
Ethane	10-30	30-50	30-110
Ethylene	10-30	30-50	50-150
Acetylene	10-16	10-30	10-40
Hydrogen	20-150	150-300	200-500
Carbon Monoxide	200-300	300-500	500-700
Carbon Dioxide	3000-4000	4000-5000	1000-10,000

**Schedule 1: OHE maintenance activities**

Part A - Provision of OHE Labour for OHE Maintenance activities as per Annexure A. (Note - Items in this list to be carried out only as and when required /directed by Railway.)

1	Checking & Maintenance of Cantilever assembly
2	Checking & Maintenance of 25kV OHE conductors (by ladder trolley
3	Checking & Maintenance of all types of 25kV OHE jumpers not covered in other items
4	Checking & Maintenance of Overlaps (IOL/UIOL
5	Checking & Maintenance of AC wire, termination and jumper
6	Checking & Maintenance of 25kV Isolator (SP/DP) including jumper and earthing heel arrangement if any
7	Checking & Maintenance of 25kV OHE at Turnouts including jumper
8	Checking & Maintenance of 25kV OHE on a crossover
9	Checking & Maintenance of Section insulator assembly
10	Checking & Maintenance of Auto Tensioning Device (ATD
11	Checking & Maintenance of Feeder wire & feeder wire Termination/ Fixed Anchor   Termination
12	Foot patrolling of OHE to be carried out as per schedule with one railway staff (once in fortnight
13	Checking & Maintenance of all types of Bonds including cleaning of muff at OHE mast
14	Removal & re erection of various types of Bonds during Track machine work
15	Checking & Maintenance of all additional insulators
16	Checking & Maintenance of leaning of OHE mast till a new mast erected
17	Checking & maintenance of PTFE type Neutral section (monthly
18	Checking & Maintenance of 25kV OHE free from Foreign Body including bird nest etc
19	Tree trimming to maintain a minimum clearance of 5-6 meters from OHE - one big branches consisting of 5 small sub branch
20	Checking & compilation of hotspot of OHE using Thermo vision camera by a skilled engineer
21	Checking & Maintenance of Portal boom & drop arms free from Bird Nests
22	Replacement of various types of insulators

**Criteria for selection of OHE labour**

<u>Description</u>	<u>Qualifications and work experience of Personnel hired for maintenance</u>
Manager	(i) should have at least 5 years minimum experience in Railway Electrification project or OHE maintenance contract
	(ii) Should be able to coordinate with clients for the purpose of maintenance
	(iii) Should be able to record maintenance activities and submission of bills
OHE Supervisor	(i) Three years for a diploma holder and two years for a graduate engineer in a railway Electrification Project or OHE maintenance contract
	(ii) capable of understanding layout plans and structural erection drawings
PSI supervisor	(i) Three years for a diploma holder and two years for a graduate engineer in a railway Electrification Project or OHE maintenance contract
	(ii) should have working knowledge of PSI
OHE fitter	Capable of adjusting cantilevers as per SED provided and dismantling and erection of BWA with two years of experience as a titter in a Railway Electrification Project
OHE Helper	minimum one year experience in a railway electrification project
OHE Maistry	Capable of adjusting cantilevers as per SED provided and dismantling and erection of BWA with a minimum of three years' experience as OHE fitter

## Annexure-C

Sl no.	Description	Qty
Material for OHE maintenance to be procured by contractor		
1	Tirfor 2.5 Tonne/1.5 Tonne	4
2	Tirfor 5 Tonne/3 Tonne	1
3	Pull-lift 3 Tonne	4
4	Pull-lift 3/4 Tonne	8
5	Come-along clamps for: Catenary suitable for 19/2.108 sq mm conductor	6
6	Come-along clamps for contact wire 107 sq. mmm	6
7	Come-along clamps for Aluminum "SPIDER" Conductor 20 mm	6
8	Come-along clamps for earth wire (19/2.5 mm) Galvanized steel	6
9	Flood Light fitting with 500 Watt Lamps	6
10	First Aid Box	4
11	Fire Buckets 10 Ltr.	4
12	Portable Fire Extinguisher (Cap. 10 Ltr.) Dry Chemical Powder	4
13	Portable Fire Extinguisher (Cap. 9 Ltr.) (Foam Type)	4
14	Contact Wire cutter 36"	4
15	Dropper Wire cutter 12"	4
16	D'Shackles set of one each (1", 3/4", 5/8", 1/2)	4
17	Single Sleeve Pulley block 3 1/2" 1/2 Groove Steel	6
18	Single Sleeve Pulley Block 3 1/2" 1/2" Groove Fiber for drawal of catenary and contact wire	6
19	Single Sleeve Pulley Block 6"x 1" Groove Steel	4
20	Contact Wire twist-cum-bender 6"	4
21	steel sling with eye in each end 19 mm dia 1 meter, two meter, 4 meter and 6 meter long	3 each
22	Contact wire splicing jig	2
23	hammer 2 kg	4
24	micro meter	2
25	metric tape 15 meter and 30 meter	2
26	Bench vice 6"	1
27	Micrometer	1
28	Earth Megger/ tester	1
29	Megger 2500 V	1
30	Vernier calipers	1
31	Multimeter	1
32	Bond Press	1
33	Dekinker	1
34	Swivel Clip Opener	2
35	DE Spanners sizes (6/7 to 27/30 mm) complete set	4
36	DE Spanner 30-32	4
27	DE Spanner 24-26	4
38	DE Spanner 21-23	4
39	DE Spanner 18-19	4
40	DE Spanner 16-17	4
41	DE Spanner 14-15	4

42	DE Spanner 12-13	4
43	Ring Spanners set (6/7 to 27/30 mm)	4
44	Ring Spanners 30-32	4
45	Ring Spanners 24-26	4
46	Ring Spanners 20-22	4
47	Ring Spanners 18-19	4
48	Ring Spanners 16-17	4
49	Ring Spanners 14-15	4
50	Ring Spanners 12-13	4
51	Screw Driver 18"	4
52	Screw Driver 16"	4
53	Screw Driver 12"	4
54	Screw Driver 8"	4
55	Screw Driver 6"	4
56	Insulated cutting Plier (8", 12")	4
57	Insulated Nose Plier (8")	4
58	Adjustable Pillars Wrench 10"	4
59	Adjustable Spanner 12"	4
60	Adjustable Spanner 8"	4
61	Adjustable Spanner 6"	4
62	Set of Screw Driver	4
63	Pipe Wrench 12"	4
64	Pipe Wrench 8"	4
65	Hacksaw frame Adj. 12"	4
66	Plumb bob	4
67	Spirit level 12"	4
68	Spirit level 6"	4
69	Allen Key Sizes (2 to 10 mm)	4
70	Banner Flags	4
71	Hand Signal Flags (Red & Green)	4
72	Hand Signal lamps	4
73	Blow Lamp 1/2 Ltr. Cap.	4
74	Wall Clocks	4
75	Grease Gun	4
76	G.I. Pots	4
77	Oil Sampling bottles	4
78	Hydrometers	4
79	Thermometers	4
80	Crow Bars	4
81	Pick Axe	4

## Annexure-D

Sl. No.	Description	Qty
Material for OHE maintenance to be procured by Railways		
1	Bench Grinder (Double end) Pedestal motor driven (203 mm) disc	1
2	Portable Welding-cum-cutting Set (Gas) Range Cutting 1-100 mm welding 0.5 to 30mm (complete with oxygen and acetylene cylinders, trolley, helmet etc)	1
3	Portable Electric Drill 21.0 mm 1 ph, 230 V {For Drilling rails for bonding}	1
4	Honda Welding Generating Set (100/200 A.) with all accessories	1
5	Portable Diesel Generating Set 3 kVA, 240 V, 1 ph	1
6	Dynamometer (3500 kgx 20kg) 300 mm dia	1
7	Rail Jumpers with Clamps at both ends	4
8	Rail Jumpers extension with clamp at one end	4
9	Earthing discharge rod complete	8
10	Drilling Machine (25 mm) Motor Driven (Radial or Pillar)	1
11	Insulated ladder trolley for maintenance	2
12	Aluminum straight ladder extensible (11 m)	6