

**E- TENDER DOCUMENT  
FOR**

**Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO DDU.**



**DEDICATED FREIGHT CORRIDOR  
CORPORATION OF INDIA LIMITED  
(A Government of India Undertaking)  
MINISTRY OF RAILWAY**

CGM/DDU/DFCCIL OFFICE  
Manas Nagar Railway Colony,  
Pt. Deen Dayal Upadhyay Nagar  
(Mughalsarai)  
Chandauli-232101 (Uttar Pradesh)

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**Total Pages: 131 (One Thirty one ) Pages**

## TOP SHEET

**Tender No.** DFCC-DDU-EL-MAINT-TRD-01 **Date** 09.02.2022

**Name of work:** Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO DDU.

**Estimated Cost of work:** Rs. 6,79,59,215.00 (Rs. Six Crore Seventy Nine Lakh Fifty Nine Thousand Two Hundred Fifteen Only) Excluding GST.

**Earnest Money Deposit/  
Bid Security:** Bid Security Declaration

**Completion Period:** 03 (Three) Years from the date of issue of Letter of Acceptance.

**Date of Opening:** 11.03.2022 at 15:30hrs

**For and on behalf of**

**CGM/DDU  
DFCCIL Office**

DFCCIL  
**TENDER FORM**

Place:.....

Date: .....

Tender No. ....

Name of Work .....

**Chief General Manager ,  
Dedicated Freight Corridor Corporation of India Limited,  
Manas Nagar Railway Colony,  
Pt. Deen Dayal Upadhyay Nagar (Mughalsarai),  
Chandauli-232101, U.P.**

I / We ..... haveread the various conditions of tender attached hereto and agree to abide by the said conditions. I / We also agree to keep this tender open for your acceptance for a period of **90 days** from the date fixed for opening the same. I /We offer to do the work for **“Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO DDU”** at the rates quoted in attached schedule and here by bind myself/ourselves to complete the work in all respects within **03 Years from the date of issue of letter of acceptance of the tender.**

2. I / We also hereby agree to abide by the all the DFCCIL/Indian Railway Standard General Conditions of Contract, with all correction slip 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 DFCCIL/Railway in the annexed Special Conditions/Specifications, Schedule of Rates with all correction slip up-to-date for the present contract.
3. **Bid Security Declaration:** I/We, M/s (Name of bidder) am/are aware that I/We have been exempted from submission of Bid Security/Earnest Money Deposit in lieu of this Bid Security Declaration.
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 Witness :

(1).....

(2).....

Signature of Tenderer(s)

Date.....

Address.....

**Dedicated Freight Corridor Corporation of India Limited**  
(A Government of India Undertaking)  
**MINISTRY OF DFCCIL**

Tender No. DFCC-DDU-EL-MAINT-TRD-01

Date: 09.02.2022

M/s \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**NOTICE FOR INVITATION OF TENDER**

CGM/DDU for and behalf of DFCCIL invites open E-Tender on One packet system on the prescribed forms for the under noted work. The key details of the tender are as under:

<b>1</b>	<b>Open Tender Notice No.</b>	<b>DFCC-DDU-EL-MAINT-TRD-01</b>
<b>a)</b>	<b>Name of the work</b>	Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-ChirailaPauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03Years under GM/CO DDU.
<b>b)</b>	<b>Tender Value(Rs.)</b>	Rs. 6,79,59,215/- (Rupees Six Crore Seventy Nine Lakh Fifty Nine Thousand and Two Hundred Fifteen Only)Excluding GST.
<b>c)</b>	<b>Earnest Money (Rs.)</b>	To be submitted in the form of <b>Bid Security Declaration</b> as per <b>Form No. 24</b>
<b>d)</b>	<b>Period of Completion</b>	<b>03 Years</b>
<b>e)</b>	<b>Cost of Tender Document</b>	Rs. 11,800/- (Inclusive of GST) The cost of the tender document shall be deposited through e-payment mode at <a href="http://www.ireps.gov.in">www.ireps.gov.in</a>
<b>f)</b>	<b>Security Deposit</b>	5% of Contract value
<b>g)</b>	<b>Validity of offer</b>	90 days from the date of opening of the Technical Bid of the Tender
<b>h)</b>	<b>Address for Communication</b>	General Manager/Coordination/DDU,DFCCIL,Manas Nagar Railway Colony,PtDeenDayalUpadhyay Nagar (Mughalsarai)Chandauli -232101, Uttar Pradesh, India Acting through: Ashok Verma, General Manager Mobile: +917897412009 Email: <a href="mailto:ashokkverma@dfcc.co.in">ashokkverma@dfcc.co.in</a>
<b>i)</b>	<b>Date &amp; Time Schedule</b>	
	<b>Pre-Bid Meeting</b>	On 17.02.2022 at 11.00 Hrs At office of Employer: General Manager/Coordination/DDU, DFCCIL, Manas Nagar Railway Colony, Pt.Deen Dayal Upadhyay Nagar (Mughalsarai) Chandauli -232101, Uttar Pradesh, India  The Pre-Bid Meeting shall also be organized through video-conference or virtual platform for which details will be uploaded on websites <a href="http://www.ireps.gov.in">www.ireps.gov.in</a> and <a href="http://www.dfccil.com">www.dfccil.com</a> prior to scheduled date.
	<b>Date and Time of start and submission of filled Tender Document</b>	NIT and Tender Document can be viewed after 00.00 Hrs of 09.02.2022 and Bidding can be started after 00.00 Hrs of 25.02.2022 and can be submitted up to 15.00 Hrs of 11.03.2022 through <a href="http://www.ireps.gov.in">www.ireps.gov.in</a>
	<b>Date &amp; time of opening of Tender</b>	Date 11.03.2022 at 15:30 hrs
<b>j)</b>	<b>E-Tendering Website address as Help desk no</b>	<a href="http://www.ireps.gov.in">www.ireps.gov.in</a> For any help,Please contact IREPS Helpdesk at 011-23761525(10 Lines)
CGM/DDU		

## 2 **ELIGIBILITY CRITERIA**

Eligibility of the applicants shall be assessed based on the “**Eligibility Criteria**”, “**Essential Qualifying Criteria**” and “**Other Qualifying Criteria**” as given in **Notice Inviting E-Tender**.

The Tender document can be downloaded from IREPS website [www.ireps.gov.in](http://www.ireps.gov.in) and DFCCIL’s website [www.dfccil.com](http://www.dfccil.com). Tenderers are advised not to make any corrections, additions or alterations in the downloaded tender documents. In case, any corrections, additions or alterations in the downloaded tender documents are made, such tender shall summarily rejected.

3. The cost of tender documents shall be deposited in DFCCIL account on IREPS portal.
4. DFCCIL may issue addendum(s)/corrigendum(s) to the tender documents. In such case, the addendum(s)/corrigendum(s) shall be issued and placed on IREPS website. The tenderers who have downloaded the tender documents from website must visit the website and ensure that such addendum(s)/corrigendum(s) (if any) is also downloaded by them. Such addendum(s)/corrigendum(s) (if any) shall also be submitted, duly stamped and signed, along with the submission of the tenders.
5. The tender documents shall be submitted in online mode through website [www.ireps.gov.in](http://www.ireps.gov.in) in single bids only. Single offer viz. containing Technical offer and financial offer along with necessary documents like scanned copy of TDC to be uploaded. Detailed credentials as per the requirement of eligibility criteria in “**Technical offer**” as well as “**Financial offer**” to be submitted through IREPS portal. **Bids are required to be submitted only by online mode and uploaded on the e-tendering web site using Digital Signature for signing the documents.**
6. Tenders shall be opened at **the address given below** at 15:30 hours on the same day in the presence of the tenderer(s) or their authorized representatives intending to attend the opening.

**Address of Office of the Chief General Manager/ DDU (for Opening of E-tenders):**

**Chief General Manager/DDU, DFCCIL, Manas Nagar Railway Colony, Pt. Deen Dayal Upadhyay Nagar (Mughalsarai), Chandauli-232101, U.P.**

All the Bids received shall be opened on the date and time mentioned above in the tender notice, through process of e-tendering. The sequence of opening shall be:

- i) Bid Security Declaration
  - ii) Technical offer.
  - iii) Financial offer.
7. Tender shall be submitted as per “Instructions to Tenderers” as followed on IREPS portal.
8. Any tender received without Bid Security Declaration in the form as specified in tender documents shall not be considered and shall be summarily rejected.
9. DFCCIL reserves the right to cancel the tenders before submission/opening of tenders, postpone the tender submission/opening date and to accept / reject any or all tenders without assigning any reasons thereof. DFCCIL’s assessment of suitability as per eligibility criteria shall be final and binding.

10. Tenderers may note that they are liable to be disqualified at any time during tendering process in case any of the information furnished by them is not found to be true. The decision of DFCCIL in this regard shall be final and binding.
11. DFCCIL reserves the right to pre-qualify the bidder(s) provisionally based on the documents submitted by them and open financial bid(s), subject to their final verification. In the event of any document being found false, the provisional qualification shall stand withdrawn, and the next lower bidder shall automatically come to the position of such disqualified bidder. Action against such disqualified tenderers shall be taken as per above Clause No. 10.0 of Notice Inviting Tender.
12. The validity of the offer shall be 45 days.
13. The transfer of tender documents purchased by one intending tenderer to another tenderer is not admissible. Tenderer can submit tenders only on the documents purchased/downloaded from website mentioned above.

We look forward for your active participation.

For and on behalf of **DFCCIL**  
**Chief General Manager/DDU**

## 1.0 **ELIGIBILITY CRITERIA**

The tenderer shall satisfy the following eligibility criteria to qualify for this tender:

### I. **Essential Qualifying Criteria**

#### A. **Firms/companies**

- (i) The tenderer should have a registered office anywhere in India.

*The documentary proof regarding A. above should be submitted as part of the tender document.*

**Note:** For the purpose of documentary proof of “registered office” as mentioned in (i) above any address of office as mentioned in any of the following documents submitted along with the original offer by tenderer(s) may be considered as registered office of the tenderer(s).

1. Address mentioned in the article of association of company duly registered under Companies Act, 1956.
2. Address mentioned in Partnership Deed
3. Address mentioned in Trade License obtained by the individual from Govt. body.
4. Address mentioned in any tax departments.
5. Address mentioned in P.F. Registration documents.

#### B. **Technical Eligibility Criteria:**

1. In support of their credentials, the Tenderer(s) should have to submit documents as stipulated in tender document along with their tenders.
2. THE TENDERER(S) SHOULD SATISFY THE FOLLOWING MINIMUM ELIGIBILITY CRITERIA AS UNDER –

Firm must have successfully completed any of the following during last 07(Seven) years ending last day of month previous to the one in which tender is invited.

- (i) Three Similar works each costing not less than the amount equal to 30% of advertised value of the tender

OR

- (ii) Two Similar works each costing not less than the amount equal to 40% of advertised value of tender

OR

- (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender.

Work executed with Central/State Govt./Semi-Govt. organizations/Authorities, PSUs, Govt. of India undertakings shall only be considered to qualify above eligibility. Certificates from the private Individuals/ Organizations shall not be considered.

The Tenderer(s) will produce/attach the certificate of Work completion with the Tender Document as per above and such certificate should clearly supported by following details:-



- a) Name of Agency issuing a certificate.
- b) Date of issue of certificate.
- c) The name of Work.
- d) The Acceptance letter no.
- e) The date of issue of Acceptance letter.
- f) Agreement no.
- g) Date of execution of Agreement.
- h) Date of original Completion of Work as per Acceptance Letter.

- i) Date of Actual completion of Work.
- j) The Amount of Work done as per Agreement (in Rupees).
- k) The Final Amount of Work at the time of Completion of Work (in Rupees).
- l) Whether the Work is completed satisfactory or not satisfactory.

**Notes:**

**Following will be considered as similar work:**

Similar nature of work of this tender is:- "**Maintenance/ Erection of 2X25 kV or 25 kV OHE in Railways System/ Metro Rails System or Maintenance/erection of at least one TSS/substation of not less than 132/33 kV**".

Erection of 2X25kV OHE or 25 kV OHE means “satisfactory execution of work of railway electrification at 25kV /2X25 KV involving preparation of design and drawing for OHE, casting of foundation, erection of masts, bracket fabrication & erection, wiring and other related works with experience of working in power and/or traffic blocks anywhere in the railways”.

Erection of POS, TSS/Substation means “Any work of augmentation of capacity of substation, supply and erection of capacitor banks, overhauling and /or repairing and/or rehabilitation and/or commissioning of PSI equipments, Traction transformers, Auxiliary transformers, circuit Breakers, Interrupters, Relays and control panel etc. with experience of executing works under power block which should include activities planned for execution of work”.

The tenderer (s) must be an established, experienced and reputed construction firm and have regularly undertaken works of the similar type tendered for and have adequate technical knowledge and practical experience in field.

**C. Financial Eligibility Criteria:**

The contractual payments received by the Firm or the arithmetic sum of contractual payments received by Firm in the previous three financial years and current financial year upto the date of opening of tender shall be at least 150% of advertised tender value of the work as mentioned in the tender. In support of which the attested certificate from Employer/Client, TDS certificate/Audited balance sheet duly certified by Chartered accountant etc to be submitted with tender.

Each tenderer has to satisfy the eligibility criteria for technical capability, competence as well as for financial capacity and organizational resources as specified in the tender documents to qualify for consideration of bid submitted by tenderer(s).

There should not be any unsatisfactory performance Report of the Contractor from any source.

Tenderer(s) may please note that their offers will be evaluated as per the credentials/ documents attached by the tenderer(s) along with the tender/offer.

**D. JVs SHALL NOT BE CONSIDERED.****II. System of verification of Tenderer's credentials : -**

Railway board letter no. 2017/Trans/01/Policy dated 08.02.2018, accordingly following changes have been approved by Railway board.

For the works tenders, it has been decided to adopt the affidavit-based system of credential verification. The tenderer shall submit along with the tender document, documents in support of his/their claim to fulfill the eligibility criteria as mentioned in the tender document. Each page of the copy of documents/certificates in support of credentials, submitted by the tenderer, shall be self-attested/digitally signed by the tenderer or authorized representative of the tendering firm. Self-attestation shall include signature, stamp and date (on each page). Only those documents which are declared explicitly by the tenderer as “documents supporting the claim of qualifying the laid down eligibility criteria”, will be considered for evaluating his/their tender. The system shall be applicable once it is made operational in IREPS. This system is already being followed by some of Railway/DFCCIL PSUs.

1. In all works tender documents, followings para may be added in the section describing the qualification and eligibility criteria.

“The tenderers shall submit a notarized affidavit on a non judicial stamp stating that they are not liable to be disqualified and all their statements/documents submitted along with bid are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as Annexure-V. Non submission of an affidavit by the bidder shall result in summary rejection of his/their bid. And it shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested by which they/he is qualifying the Qualifying Criteria mentioned in the tender document. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned”.

With the submission of the affidavit as mentioned above, the practice of verification of tenderer(s) documents by the Railway/DFCCIL may be dispensed with.

- a) The Railway/DFCCIL reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall when so required by the Railway/DFCCIL, make available such information, evidence and documents as may be necessary for such verification. Any verification or lack of such verification, by the Railway/DFCCIL shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any right of the Railway/DFCCIL thereafter.
- b) In case any wrong information submitted by the tenderer, the contract shall be terminated, Earnest Money Deposit (EMD) if any, Performance Guarantee (PG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on entire Indian Railway/DFCCILs for 5 (five) years.
- c) With such a system of self certification of credentials, tender finalization should also be speed up. It has accordingly been decided that the tender validity period should be reduced to 45 days for single packet and 60 days for two packet system of tendering ( in place of the present limits of 90 days and 120 days) for tenderers having affidavit based system of credential verification.

2. The tenderers shall provide satisfactory documentary evidences acceptable to Railway/DFCCIL along with the tender to show that:
  - 2.1 They have an established technically competent and adequate staffs organization to ensure that the services required under this tender can do satisfactorily.
  - 2.2 They have sufficient equipments; plants and machinery to meet the obligations under the contract and to complete the work contract all within the stipulated time schedule and accepted by him.
- 3 The tenderer should submit the details of similar works done in the past.
- 4 The tenderer should submit the attested copies of the certificates obtained from the agencies wherever the works have completed successfully. These certificates should indicate the details of installation and successful commissioning of the similar type of equipments executed by the tenderer.
- 5 The tenderer will submit, along with offer list of work in hand indicating description of work, contract value, approximate value of balance work yet to be done and date of award of work.
- 6 They have adequate financial resources to meet the obligations under the contract. They have also required to submit the report from recognized bank of financial institutions.

\*\*\*\*\*

**FORMAT-I**
**DETAILS OF SIMILAR WORKS COMPLETED IN LAST THREE YEARS**

S. N.	Description of the work	Contract No. and date	Date of award of work	Stipulated date of completion	Date of actual completion	Value of completed work (In Lakhs of Rs)	Reasons of delays, if any	Penalty. If any, imposed for delay	Any other relevant information	Remarks
1										
2										
3										
4										
5										

**Note:**

1. Please attach copies of the certificates issued by the client.
2. Only those works shall be considered for evaluation for which copies of the Certificates issued by the client are attached.

FORMAT - II				
ANNUAL TURNOVERS FOR THE LAST 3 YEARS				
S.N.	YEAR	Turnover from similar nature of works (In lacks of Rs)	Turnover from all sources (In lacs of Rs)	Remarks
1				
2				
3				
4				
5				

**Note:**

1. Please attach certified/attested copies in support of which the attested certificate from Employer/Client, TDS certificate/Audited Balance Sheet/P&L Account duly certified by Chartered Accountant etc.

FORMAT-III										
DETAILS OF ONGOING WORKS										
S. N.	Description of the work	Name and address of Employer	Contract No. and date	Date of award of work	Stipulated date of completion	Value of work as per order (In Lakhs of Rs)	Value of work completed so far (In Lakhs of Rs)	Anticipated date of completion of work	Any other relevant information	Remarks
1										
2										
3										
4										
5										
6										
7										
8										
9										

**Note: 1.** In case of joint venture, the information is to be furnished by both the partners – *Not applicable for this tender.*

## **PART – I**

### **CHAPTER –I**

#### **Instructions to Tenderer and Conditions of Tendering**

##### **1.1.1 General (for on line tendering system)**

Submission of Online Bids is mandatory for this Notice Inviting Tender. E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Suppliers/ Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, DFCCIL, Delhi has decided to use the portal (<https://www.ireps.gov.in>) of a Government of India. Benefits to Suppliers/service providers are outlined on the Home-page of the portal.

##### **1.1.2 Instructions**

###### **a. Online E-Bidding Methodology:**

Online E- Bid System – Financial bids and Technical bids shall be submitted by the bidder at the same time in single Packet

###### **b. Broad outline of activities from Bidders perspective:**

- i. Procure a Digital Signing Certificate (DSC)
- ii. Register on Electronic Tendering System (ETS)
- iii. Create Users and assign roles on ETS
- iv. View Notice Inviting Tender (NIT) on ETS
- v. Download Official Copy of Tender Documents from ETS
- vi. Clarification to Tender Documents on ETS – Query to DFCCIL (Optional) - view response to queries posted by DFCCIL, through addenda.
- vii. Bid-Submission on ETS: Prepare and arrange all document/paper for submission of bid online and tender fees and EMD deposit on offline.
- viii. Attend Public Online Tender Opening Event (TOE) on ETS
- ix. Post-TOE Clarification on ETS (Optional)-Respond to DFCCIL's Post-TOE queries
- x. Attend Public Online Tender Opening Event (TOE) on ETS

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the ETS.

**Note 1:** It is advised that all the documents to be submitted are kept scanned and converted to PDF format in a separate folder on your computer before starting online submission. Fin. offer tab brings up the Financial Offer Page



where the bidder can submit his rates against the schedule items included in the tender.

**Note 2:** While uploading the documents, it should be ensured that the file name should be the name of the document itself.

**c. Digital Certificates**

For integrity of data and its authenticity/non-repudiation of electronic records and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC), also referred to as Digital Signature Certificate (DSC), of Class-III issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].

**d. Registration**

The Tender document can be downloaded from the website [www.ireps.gov.in](http://www.ireps.gov.in) and to be submitted in the e-format. Cost of the Tender Document has to be submitted to DFCCIL online through IREPS portal before the scheduled date and time of submission of the tender and Bid security declaration has to be submitted otherwise the Bid will not be considered. Amendments, if any, to the tender document will be notified in the above website as and when such amendments are notified. It is the responsibility of the bidders who have downloaded the tender document from the website to keep themselves abreast of such amendments before submitting the tender document.

Intending bidders are requested to register themselves with [www.ireps.gov.in](http://www.ireps.gov.in) for obtaining user-id, Digital Signature etc. by paying Vendor registration fee and processing fee for participating in the above mentioned tender.

- e.** DFCCIL, has decided to use process of e-tendering for inviting this tender and thus the physical copy of the tender would not be sold.

**1.1.3 General (for tender)**

**1.1.3.1 Name of the Work: Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO DDU.**

**1.1.3.2** “A bidder in the capacity of Individual or Sole Proprietor, Partnership Firm, or Company can participate in the tender and the bidder must forward attested copies of the constitution of its firm such as partnership deed, Memorandum and Articles of Association, etc. along with original Power of Attorney of authorized signatory”.

**1.1.3.3** The work is proposed to be executed under the following relationship.

**A)Employer: DFCCIL address - Chief General Manager/DDU, DFCCIL, Manas Nagar Railway Colony, Pt. Deen Dayal Upadhyay Nagar (Mughalsarai), Chandauli-232101, U.P.**

B) **Contractor**: The successful tenderer to whom the work is awarded shall become the contractor for the execution of this work.

1.1.3.4 Throughout these bidding documents, the terms “bid” and “tender” and their derivatives (“bidder”/“tenderer”), “bid/tendered”, “bidding”/“tendering”, etc.) are synonymous. Day means calendar day. Singular also means plural.

1.1.3.5 Scope of Work -

**Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under CGM/DDU(GM/CO/DDU).**

The scope given above is only indicative. The detailed scope has been described in the tender documents.

1.1.3.6 Estimated cost of the work: **Rs. 6,79,59,215.00 (Rs. Six Crore Seventy Nine Lakh Fifty Nine Thousand Two Hundred Fifteen Only)** excluding GST.

1.1.3.7 Tenderer(s) may carefully note that they are liable to be disqualified at any time during tendering process in case any of the information furnished by them is not found to be true. The decision of Employer in this respect shall be final and binding.

1.1.3.8 A bidder shall submit only one bid in the capacity of an Individual or Sole Proprietor, Partnership firm or Company. Violation of this condition is liable to disqualify the tenders in which such bidder has participated.

#### **1.1.4 Cost of Bidding**

1.1.4.1 The bidder shall bear all costs associated with the preparation and submission of the bid and the Employer will in no case be responsible or liable for these costs regardless of the conduct or the outcome of the bidding process.

### **B. The Bidding Documents**

#### **1.1.5 Content of bidding documents submitted through online mode only**

1.1.5.1 The bidding documents include the following:

1. Notice Inviting Tender
2. Instructions to tenderer(s)
3. Tender Form
4. Special Conditions of Contract
5. General Terms and Conditions of Contract
6. Financial bid and Bill of Quantities

1.1.5.2 The bidder is expected to examine all instructions, terms, conditions, forms, specifications and other information in the bidding documents. Failure to furnish

all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidder's risk and may result in rejection of his bid.

#### **1.1.6 Understanding and Amendment of Tender Documents**

**1.1.6.1** The bidder must obtain for itself on its own responsibility and its own cost all the information including risks, contingencies and other circumstances in execution of the work. It shall also carefully read and understand all its obligations and liabilities given in tender documents.

**1.1.6.2** The bidder is advised to visit and examine the site where the work is to be executed and its surroundings or other areas as deemed fit by the bidder and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and execution of the contract. The cost of visiting the site and collecting relevant data shall be at the bidder's own expenses. It is a condition of the tender that the tenderer is deemed to have visited the site and satisfied himself with all the conditions prevailing including any difficulties for executing the work.

**1.1.6.3** At any time prior to the deadline for submission of bids, Employer may for any reason whether at its own initiative or in response to any request by any prospective bidder amend the bidding documents by issuing Corrigendum, which shall be part of the Tender documents.

**1.1.6.4** Employer may at its discretion extend the deadline for submission of the bids at any time before the time of submission of the bids.

#### **C. Preparation of the Bids**

##### **1.1.7 Language of Bid**

**1.1.7.1** The bid prepared by the bidder and all documents related to the bid shall be written in English.

##### **1.1.8 Signing of All Bid papers and Completing Bill of Quantities**

**1.1.8.1** All the pages of the tender documents and credentials submitted by tenderer shall be digitally signed by the tenderer or his representative holding the Power of Attorney.

**1.1.8.2** The tenderer must fill and submit the prices as per instructions given in schedule of rates. He shall not make any addition or alteration in the tender documents. The requisite details should be filled in by the tenderer wherever required in the documents. Incomplete tender or tender not submitted as per instructions is liable to be rejected. If a tenderer does not quote a price/rate as per instructions, his tender shall be summarily rejected.

**1.1.8.3** The tenderer must ensure that tender documents shall be submitted on line through class 3 Digital Signature only. To participate in the E-Bid submission, it is mandatory for the bidders to have user ID and password in [www.ireps.gov.in](http://www.ireps.gov.in) through IREPS portal.

### 1.1.9 **Deviations**

The tenderer should clearly read and understand all the terms and conditions, specifications, etc. mentioned in the original tender documents. If the tenderer has any observations, the same may be indicated in his forwarding letter along with the tender. Tenderers are advised not to make any corrections, additions or alterations in the in his own entries the same shall be initialed and stamped by him. If this condition is not complied with, tender is liable to be rejected.

### 1.1.10 **Earnest Money (Bid Security)**

**Bid Security Declaration:** I/We, M/s (Name of bidder) am/are aware that I/We have been exempted from submission of Bid Security/Earnest Money Deposit in lieu of this Bid Security Declaration. I/We understand and accept that if I/We withdraw my/our bid within bid validity period or if awarded the tender and on being called upon to submit the Performance Guarantee/Performance Security fail to submit the same within the stipulated time period mentioned in tender documents or on being called upon to sign the contract agreement fail to sign the same within stipulated period mentioned in tender documents, I/We i.e., the bidder shall be banned from submission of bids in any Works / Service Tender issued by Indian Railways/DFCCIL for a period of 12 months from the date of such banning done on e-platform IREPS.

### 1.1.11 **Period of validity of the tender:**

1.1.11.1 The tender shall remain valid for the period 45 days after the date of the opening of the tender. If the Tenderer gives validity period less than that fixed/prescribed by Employer, the tender shall be liable to be rejected.

1.1.11.2 Notwithstanding the above clause, Employer may solicit the tenderer's consent to an extension of the validity period of the tender. The request and the response shall be made in writing.

### **Submission of Bids**

#### 1.1.12 **Deadline for submission of tender**

1.1.12.1 The tender documents shall be submitted in online mode through website [www.ireps.gov.in](http://www.ireps.gov.in) in single bids only. Single offer viz. containing Technical offer and financial offer along with necessary documents like scanned copy of EMD and scanned copy of TDC to be uploaded. Detailed credentials as per the requirement of eligibility criteria in “**Technical offer**” as well as in “**Financial offer**” are to be uploaded. **Bids are required to be submitted only by online mode through e-tendering web site (IREPS portal) using Digital Signature class 3 for signing the documents.**

1.1.12.2 A tender received without on line to Employer is liable to be rejected.

1.1.12.3 Tender document fees received after opening of the tender shall be rejected.

#### 1.1.13 **Withdrawal of tender**

No tender can be withdrawn after submission and during tender validity period.

**1.1.13.1** Submission of a tender by a tenderer implies that he had read all the tender documents including amendments if any, visited the site and has made himself aware of the scope and specifications of the work to be done, local conditions and other factors having any bearing on the execution of the work.

**1.1.14 Submission of tender/bid:-**

**1.1.14.1** The tenders shall be submitted on or before the due date and time with all the relevant documents as mentioned -

- a) Forwarding letter of the tenderer.
- b) Documents to be submitted as per required documents
- c) Scanned copy of tender document fees.
- d) The Bill of Quantities with prices quoted as mentioned.

**1.1.14.2** Tender document fees shall be deposited in DFCCIL account and proof of transaction along with transaction ID to be scanned and uploaded along with Tender document.

**1.1.15 Bid opening and Evaluation**

**1.1.15.1 Opening of the Tender:-** Tenders will be opened on line at the address mentioned in “Notice Inviting Tender” in presence of tenderer(s) or authorized representatives of tenderer(s) who wish to attend the opening of tenders.

The sequence of opening shall be:

- i) Bid Security Declaration
- ii) Technical offer.
- iii) Financial offer.

**1.1.15.2** Tenderer(s) or their authorized representatives who are present shall sign register in evidence of their attendance.

**1.1.15.3** Tenderer’s name, presence or absence of Bid Security Declaration, total cost of work quoted or any other details as Employer may consider appropriate will be announced and recorded at the time of bid opening.

**1.1.16 Clarification of the tenders**

**1.1.16.1** To assist the examination, evaluation and comparison of the tenders, Employer may at his discretion ask the tenderers for any clarifications as considered essential. All such correspondence shall be in writing and no change in price or substance of the tender shall be sought or permitted. The above clarification for submission of the details shall form part of the tender and shall be binding on tenderer.

**1.1.17 Preliminary examination of bids**

**1.1.17.1** The Employer shall examine the bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed and whether the bids are generally in order.

**1.1.17.2** Arithmetical errors shall be rectified on the following basis if found. If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between subtotals and the total price, the

unit or subtotal price shall prevail, and the total price shall be corrected. If there is a discrepancy between words and figures, the rate in words shall prevail.

**1.1.17.3** Prior to the detailed evaluation, Employer shall determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the bidding documents. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions and specifications of the bidding documents without material deviations, objections, conditionality or reservation. A material deviation, objections, conditionality or reservation is one:

- i) That affects in any substantial way the scope, quality or performance of the contract.
- ii) That limits in any substantial way, inconsistent with the bidding documents, the Employers' rights or the successful Bidder's obligations under the contracts; or
- iii) Whose rectification would unfairly affect the competitive position of other Bidders who are presenting substantially responsive bids.

**1.1.17.4** If a bid is not substantially responsive, it shall be rejected by the Employer.

**1.1.17.5** In case of tenders containing any conditions or deviations or reservations about contents of tender document, Employer may ask for withdrawal of such conditions/deviations/reservations. If the tenderer does not withdraw such conditions/deviations/ reservations, the tender shall be treated as non-responsive. Employer's decision regarding responsiveness or non-responsiveness of a tender shall be final and binding.

**1.1.18 Evaluation and comparison of tenders**

**1.1.18.1** In case of open tenders, bids, which are determined as substantially responsive, shall be evaluated based on criteria as given in "**Eligibility Criteria**". The tenderer must submit all necessary authentic data with necessary supporting certificates of the various items of evaluation criteria failing which his tender is liable to be rejected.

**1.1.18.2** The Employer reserves the right to negotiate the offer submitted by the tenderer to withdraw certain conditions or to bring down the rates to a reasonable level. The tenderer must note that during negotiations of rates of items of BOQ can only be reduced and not increased by the tenderer. In case the tenderer introduces any new condition or increases rates of any item of BOQ, his negotiated offer is liable to be rejected and the original offer shall remain valid and binding on him.

**1.1.19 Canvassing**

No tenderer is permitted to canvass to Employer on any matter relating to this tender. Any tenderer found doing so may be disqualified and his bid may be rejected.

**1.1.20 Right to accept any tender or reject all tenders**

Employer reserves the right to accept, split, divide, negotiate, cancel or reject any tender or to annul and reject all tenders at any time prior to the award of the

contract without incurring any liability to the affected tenderers or any obligation to inform affected tenderer, the grounds of such action.

- 1.1.21** If the tenderer, as individual or as a partner of partnership firm, expires after the submission of his tender but before award of work, the Employer shall deem such tender as invalid.

**1.1.22 Award of Contract**

- 1.1.22.1** Employer shall notify the successful tenderer in writing by a Registered Letter /Courier /Speed Post/email or per bearer that his tender has been accepted.

- 1.1.22.2** Letter of Acceptance after it is signed by the Contractor in token of his acceptance shall constitute a legal and binding contract between Employer and the contractor till such time the contract agreement is signed.

**1.1.23 Help desk for E-Tendering**

- 1.1.23.1** For any difficulty in downloading and submission of tender document visit at website [www.ireps.gov.in](http://www.ireps.gov.in). Users can send their queries to the Help desk through E-Mail. E-Mail ID of Help Desk is mentioned on the Help desk page ([helpdesk.eps@cris.org.in](mailto:helpdesk.eps@cris.org.in)). The reply to the query will be sent to the E-Mail ID of the user.

- 1.1.23.2** Bidder manual and system requirement is available on web site [www.ireps.gov.in](http://www.ireps.gov.in) for Necessary help.

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## **PART-I**

### **CHAPTER -II**

## **SPECIAL CONDITIONS OF CONTRACT**

### **1.2.1 INTRODUCTION**

Dedicated Freight Corporation of India (DFCCIL) is a Public Sector Undertaking under the administrative control of Government of India (Ministry of DFCCILs) for construction, maintenance and operation of the Dedicated Rail Freight Corridors. At present the company is undertaking construction of Eastern and Western corridors and has its corporate office at New Delhi and Field Units at various cities associated with CGM unit.

CGM/DDU unit have jurisdiction from DDU ERC to CPBN/SEBN with it's CGM/ DDU unit at Pt. Deen Dayal Upadhyay Nagar (Mughalsarai).

### **1.2.2 Definitions**

1.2.2.1 In the Conditions of Contract, the following terms shall have the meanings assigned here under except where the context otherwise requires:

- i) "Railway/DFCCIL" shall mean the President of the Republic of India or the Administrative Officers of the DFCCIL/Railway/DFCCIL or of the successor. DFCCIL authorized or any other officer of DFCCIL authorized to deal with any matters which these presents are concerned on his behalf.
- ii) "CHIEF GENERAL MANAGER" shall mean the officer in administrative in-charge of the project in charge of APL-1 section (DDU ERC to CPBN/SEBN) and shall mean and include their successors, of the successor DFCCIL.
- iii) "DEPUTY CHIEF PROJECT MANAGER " shall mean the officer in charge of lot wise or department /S&T/Electrical/Finance wise (Engineering department) of the DFCCIL include their successors of and shall mean and the successor DFCCIL.
- iv) PROJECT MANAGER/ DEPUTY PROJECT MANAGER/ASSISTANT PROJECT MANAGER shall mean the officer department wise (Engineering /S&T/ Electrical/ Finance Department) of the DFCCIL and shall mean and include their successors of the success of DFCCIL.
- v) "TENDER or BID" means the offer (Technical and/or Financial) made by individual, firm, Company, corporation, or Consortium for the execution of the works.
- vi) "TENDERER" shall mean the person/ the firm or company whether incorporated or not who tenders for the work with a view to execute the works on contract with DFCCIL and shall include their personal representatives, successors and permitted assigns.
- vii) "WORKS" shall mean the works contemplated in scope and schedules set forth in the tender forms and required to be executed according to terms and condition mentioned.
- viii) "Bill of Quantities (B.O.Q.)"/ "Schedule of Rates" means list of items of work, their



quantities and rates as accepted and forming part of contract agreement.

- ix) "EMPLOYER" means the Dedicated Freight Corridor Corporation of India Limited, A Govt. of India Undertaking (DFCCIL in abbreviation) acting through its Managing Director or any other authorized officer and shall include their legal successors in title and permitted assignees.
- xi) "CONTRACT" shall mean and include the Agreement or Letter of Acceptance, the accepted Bill of Quantities and Rates, the General Conditions of Contract, Special Conditions of Contract, Appendix to Tender, Tender Form, and Instructions to the Tenders and other Tender Documents.
- xii) "CONTRACTOR" shall mean the person or firm, company, corporation, whether incorporated or not who enters into the contract with DFCCIL and shall include legal representatives of such individual or persons comprising such firm or company or successors of such firm or company as the case may be such individual, or firm or company.
- xiii) "ENGINEER OR ENGINEER IN CHARGE" means the Chief General Manager of DFCCIL/ DDU (Employer), or any other officer authorized by the Employer to act on his behalf and for the purpose of operating the contract. "Engineers Representative" shall mean officer authorized by DFCCIL in direct charge of works.
- xv) "ACCEPTING AUTHORITY" shall mean the Chief General Manager/DDU of DFCCIL or any other officer authorized for dealing with the works for the purpose of this tender/Contract.
- xvi) Definitions mentioned in these tender documents elsewhere will be followed. In Case there is an ambiguity in any definition, the decision of CHIEF GENERAL MANAGER /DDU / DFCCIL regarding the interpretation shall be final and binding.

### **1.2.3 GENERAL DESCRIPTION OF SITE AREA, CLIMATIC CONDITIONS AND SYSTEM PARTICULARS**

1.2.3.1 The tenderer(s) are requested to visit the area of work and ascertain himself/themselves with the proposed works / services, surroundings and prevailing law and order conditions.

1.2.3.2 The location of work is located in the state of Uttar Pradesh.

#### **1.2.3.3 SCOPE OF WORK:-**

**Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO DDU(CGM/DDU).**

*1.2.4.1 The brief scope of work covers "Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO DDU".*

The work requires high degree of planning and execution.

- i. Preventive/breakdown Maintenance of given under assets shall be done by contractor :-
  - a) 2x25 kV A.C. Traction Overhead Equipment on main line, 25kV OHE in loop lines and connecting chords etc. in sidings of DDU ERC – CPBN/SEBN section.
  - b) TSS in which transformers are in Scott connected each of 60(ONAN)/84(ONAF)/100 MVA, Power Transformers, 132kV/55kV along with requisite Circuit Breakers, Isolators, C&R Panel, C.T., P.T., auxiliary transformers and all other associated accessories inside TSS & RSS..
  - c) SP, each having 4 nos. auto transformers of capacity 12/8 MVA ONAN along with associated circuit breaker, switchgear control & relay panel etc. including control room.
  - d) SSP, each having 2 nos. auto transformers of capacity 12/8 MVA ONAN along with associated circuit breaker, switchgear control & relay panel etc. including control room
  - e) To maintain these, purchaser has established IMD (Integrated Maintenance Depot), IMSD (Integrated Maintenance Sub Depot). The tools and plants maintained by the purchaser at these IMD, IMSD. Other tools if required shall be arranged by the contractor at his own cost and no extra cost shall be payable for it.
  - f) The consumable material for the maintenance and replacement for the defective parts shall be provided by the purchaser. The material required for the maintenance shall be issued by authorized representative of CGM/DDU available at IMD/IMSD. Rest all other required tools and plants for maintenance shall be arranged by contractor.

Organization	Work/location	Quantum of assets to be maintained.	
DFCCIL	DDU to Chiraila Pauthui/New Sonnagar including branch lines, connecting lines and sidings.	2x25 kV A.C. Traction Overhead Equipment (OHE) of 129/125 sq. mm Copper- Magnesium Catenary and 150 sq. mm. grooved Copper-Sn Contact wire on Main & Loop Lines and PSI Equipment (TSS, SP & SSP)	Boundary of overlap or SI/Isolator feeding from  OHE to be maintained.

Schedule of quantities requires Preventive/breakdown Maintenance of 2x25 kV A.C. Traction Overhead Equipment in the above section by the contractor’s personnel round the clock for the configuration given at “**Schedule of Rates**”.

- ii. Special Checks & Preventive maintenance of the 2x25 kV A.C. Traction Overhead Equipment and Power Supply Installation Equipment including negative feeders under Power Block activities but strictly under the supervision of competent representatives of DFCCIL and with their time to time instructions only, in accordance with the Standard Maintenance Instructions issued by the DFCCIL.
- iii. Immediate attention for any breakdown in the 2x25 kV A.C. Traction Overhead Equipment & Power Supply Installation Equipment and quick restoration.

- 1.2.4.2 Place of work- In the jurisdiction of DFCCIL, DDU ERC – CPBN/SEBN section under CGM DDU. The work shall be executed under supervision of authorized representative of CGM/DDU, GM/EL/DDUL or PM/EL/DDU. If required by DFCCIL any other station/Site may be included under Schedule of work and no additional charges shall be given for this.
- 1.2.4.3 Quantities in schedule annexed to Contract- The quantities set out in the accepted schedule of rates with item of work quantified are the estimated quantities of the works and they shall not be taken as the actual and correct quantities of the works to be executed by the Contractor in fulfillment of his obligations under the contract. The actual/final quantity shall be executed as per approved design and drawing which is to be prepared by contractor if required. All the design calculations, if any, shall be done by contractor before execution of work. The contractor shall be responsible for any wastage of material due to mistake in design calculations.
- 1.2.4.4 New item of work – If during execution of the work, the contractor is called upon to carry out any new item of work not included in schedule of prices, the contractor shall execute such work at such prices as may be mutually agreed with the purchaser before commencement.

If required by DFCCIL, the contractor has to execute some portion of work as per/under the tender schedule at new location (at the same rate/ Price) over Uttar Pradesh.

## **1.2.5 LOCAL CONDITIONS:**

- 1.2.5.1 It will be imperative on each tenderer to fully acquaint himself with all the local conditions and factors which would have any effect on the performance of the contract and cost of the stores. The DFCCILs shall not entertain any request for clarifications from the tenderer regarding such local conditions. No request for the change of price, or time schedule of completion of work on account of any local condition or factor shall be entertained after the offer is accepted.
- 1.2.5.2 The intending tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender papers are adequate and all inclusive, for the completion of works to the entire satisfaction of the DFCCILs.
- 1.2.5.3 In the event of the intending tenderer desiring to have a field survey before furnishing his tender/quotations, he may apply to DFCCILs for permission in this regard. The DFCCILs will give such permission in writing but all the expenses in this regard will be borne by the tenderers.
- 1.2.5.4 The intending tenderer is advised to study the tender papers carefully, any submission of a bid by the tenderers shall be deemed to have been done after a careful study and examination of these documents with full understanding of the implication thereof. These conditions and specifications shall be deemed to have been accepted unless otherwise, specifically commented upon by the Tenderer in his offer. Failure to adhere to anyone of these instructions may render his offer liable to be ignored without any references.

**1.2.6 INTEGRATION WITH EXISTING WORKS:**

- 1.2.6.1 The tenderer should keep in mind, visit the location of works, take due note and give proper consideration of integrating the new works (sometimes on replacement account) with the existing system.

**1.2.7 ELECTRIC SUPPLY:**

The contractor shall make his own arrangements for electricity required by him for the purpose of execution of the contract. However, the DFCCIL shall arrange the required power supply for testing and commissioning of the works completed by the contractor.

**1.2.8 SCHEME OF WORK AND PROGRESS REPORT:**

- 1.2.8.1 The Contractor shall within fifteen (15) days of the date of award of the contract submit a BAR/PERT CHART and scheme for the execution. The contractor shall indicate in the form of notes of the assumptions and the basis adopted for the preparation of this BAR/PERT CHART.
- 1.2.8.2 The contractor shall submit a monthly progress report detailing the actual progress made in all activities as compared to the above BAR/PERT CHART. The monthly progress report shall indicate the reasons for the variations if any between the schedule quantities and actual progress, the action proposed and corrective measures required wherever necessary.

**1.2.9 INDIRECT TAXATION**

In the event of any new indirect taxation being imposed after the date of opening of tender and of being of such a nature that the contractor has to bear additional cost of material directly on account of such additional taxation the purchaser shall reimburse the contractor for such additional costs on receiving satisfactory proof that such taxation was legally leviable and that the contractor has actually incurred the additional costs.

**1.2.10 FORCE MAJEURE:**

If at any time, during the continuance of this 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, hostility, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics/pandemic, strikes, lockouts or acts of God (hereinafter, referred to events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Engineer as to whether the works have been so resumed or not shall be final and conclusive, PROVIDED FURTHER that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 120 days, either party may at its option terminate the contract by giving notice to the other party.

**1.2.11 AGREEMENT:**

The successful tenderer shall within 14 (fourteen) days after having been called upon by notice to do so be bound to execute an agreement based on accepted rates and lodge the same with purchaser together with the conditions of contract, specification and schedule of prices referred to therein duly completed.

**1.2.12 A)EXPENSES OF CONTRACTOR DRAWINGS ETC.:**

Any calculation, designs, drawings, schedules information, progress charts etc required by the purchaser's Engineers in connection with the contract, shall be furnished by the contractor at his own expenses.

**B) CONTRACTOR'S DRAWINGS:**

If required, before execution of the work the contractor shall submit to the purchaser for approval, three copies of all required drawings, work schedule programme which are necessary to ensure correct/ satisfactory performance as detailed in tender papers.

**1.2.13 SUB CONTRACTORS**

The contractor shall not sublet any part of the work under this contract for the purpose of this. However contractor may enter into contract with supplier for supply of the material for the purpose of this work. However such suppliers should be approved sources of RDSO for materials for which RDSO approved sources are available.

**1.2.14 DEFAULT AND DELAY**

1.2.14.1 The contractor shall execute the work with due diligence and expedition keeping to the approved time schedule. Should he refuse or neglect to comply with any reasonable orders given to him in writing by the Engineer's representative in connection with the work or contrivance the provision of the contract or the progress of work lags persistently behind the time schedule due to his neglect, the purchaser shall be at liberty to give seven (7) days notice in writing to the contractor requiring him to make good the neglect or contravention complained and should the contractor fail to comply with requisition made in the notice within seven days from the receipt thereof, it shall be lawful for the purchaser to take the work wholly or in part, out of the contractor's hands without any further reference and get the work or any part thereof as the case may be completed by other agencies at expense of the contractor without prejudice to any other right or remedy of the purchaser.

**1.2.14.2 LOSS SUSTAINED DUE TO DEFAULT AND DELAY:**

In the event of any loss to the purchaser on account of execution and/or completion of the work or any parts thereof by agencies other than the contractor, the contractor shall be liable to reimburse the loss to the purchaser without prejudice to any other right and remedies of the purchaser, and as the case may be met at the option, of the purchaser, from out of all or any of the following sources viz.

- i) Any amount due and payable to the purchaser on any account whatsoever.
- ii) The contractor's security deposit with the purchaser so far as available and
- iii) Any other assets whatsoever belonging to contractor.

**1.2.15 CONTRACTOR'S RESPONSIBILITY FOR DISCREPANCY:**

- a) All designs and drawings submitted by the contractor shall be based on thorough study and shall be such that the contractor is satisfied about their suitability. The purchaser's approval will be based on these considerations. Notwithstanding approval communicated by the purchaser, during the progress of the contract for designs and drawings, proto type samples of material after inspection of materials after erection and adjustments to installations the ultimate responsibility for correct designs and execution of work shall rest with the contractor.
- b) The contractor shall be responsible for and bear and pay the costs for any alteration of works arising from any discrepancies errors or omissions in the design and drawings supplied by him, whether such designs and drawings have been approved by the purchaser or not.

**1.2.16 Provision of Efficient and Competent Staff at Work Sites by the Contractor:**

- 1.2.16.1 The Contractor shall place and keep on the works at all times efficient and competent staff to give the necessary directions to his workmen and to see that they execute their work in sound and proper manner and shall employ only such supervisors, workmen and labourers in or about the execution of any of these works as are careful and skilled in the various trades.
- 1.2.16.2 The Contractor shall at once remove from the works any agents, permitted sub-contractor, supervisor, workman or labourer who shall be objected to by the Engineer and if and whenever required by the Engineer, he shall submit a correct return showing the names of all staff and workmen employed by him.
- 1.2.16.3 In the event of the Engineer being of the opinion that the Contractor is not employing on the works a sufficient number of staff and workmen as is necessary for proper completion of the works within the time prescribed, the Contractor shall forthwith on receiving intimation to this effect deploy the additional number of staff and labour as specified by the Engineer within seven days of being so required and failure on the part of the Contractor to comply with such instructions will entitle the Railway/DFCCIL to rescind the contract under Clause 62 of these conditions.

**1.2.17 Deployment of Qualified Engineers at Work Sites by the Contractor:**

- 1.2.17.1 The Contractor shall also employ qualified Graduate Engineer(s) or equivalent, or qualified Diploma Engineer(s).
- 1.2.17.2 In case the Contractor fails to employ the Engineer, as aforesaid in Para 4.23.1, he shall be liable to pay liquidated damages at the rates, as prescribed in the tender documents.

**1.2.18 WORKS BY OTHER AGENCIES:**

Any other works undertaken at the same time by the purchaser or the DFCCIL direct or through some other agency at the same site where the contractor is carrying out his work will not entitle the contractor to prefer any claim, regarding any delays or hindrance he may have to face on this account. The contractor shall comply with any instructions which may be given to him by the purchaser in order to permit simultaneous execution of his own works and of those undertaken by other contractors or the DFCCIL without being entitled on this account to any extra charge.

**1.2.19 ACCESS TO WORK SITE:**

- a) The purchaser shall afford access to the site for the purpose of this contract to the contractor at all reasonable times. In the execution of the work, no person other than the contractor or his only appointed representatives or approved sub contractor and bona-fide workman shall have access to site. Access to the site of work at all times shall be allowed by contractor to officials or approved representative of the purchaser or to DFCCIL staff for purpose of maintenance.
- b) The purchaser or his authorized representative shall have the right to refuse admission to the work site to any. Person employed by the contractor to whom the purchaser or his engineer may consider undesirable.
- c) The engineer or his representative shall be at liberty to object to the presence of any representative or other person employed by the contractor in or about the works on the ground of misconduct, incompetence or negligence, the contractor on receipt of notices of such objection in writing, shall forthwith remove the person so objected to and provide in his place another competent person and shall not allow such



person to enter the site of work subsequently. The purchaser will not be able to pay any cost or damage on this account.

**1.2.20 PENALTY FOR DELAY IN COMPLETION:**

- a) If the contractor fails to execute and complete the work within time specified in the agreement or within the period of extension granted except in so far that the delay is on the purchaser's account; the contractor shall accept reduction in the total amount payable to him by the purchaser at the rate of ½% (half percent) per week of the contract value for the actual delay occurred and until the work shall have been completed under the contract and such reduction shall be accepted by the purchaser in full satisfaction of the contractor's liability arising from delay only. The Engineer shall at his sole discretion, specify a time limit within which the unfinished portion of the work shall be completed. In the event of failure of the contractor, the purchaser shall be at liberty to take action in accordance with provision in GCC of Indian Railway, along with latest correction slips and amendments.
- b) Extension of time- If aforesaid shall have arisen from any cause which the purchaser may admit as being a responsible ground for extension of time the purchaser shall allow such additional time as he may in his absolute discretion consider to be reasonably justified by the circumstances of the case.
- c) The contractor in the presence of the purchaser or his representative shall carry out tests as required under the specification as soon as possible after commissioning. The contractor at his own expense shall carry out any other additional test that the purchaser may prescribe for testing the satisfactory operation of the plants. Necessary electrical power required in C/W the test will be supplied free of any charges by the purchaser. The contractor shall submit six copies of the results to the purchaser for acceptance. The contractor shall also submit 6 copies of the manufacturer's test certificates for equipments such as motor, cable etc
- d) Should the result of the test not be satisfactory, an extension of one month will be granted to the contractor to make good the defects and or any deficiencies pointed out by the purchaser a fresh test will then be carried out after the contractor has attended to the defects and deficiencies. If these do not yield satisfactory results, the purchaser may proceed at the contractor's expense, by all means as deemed expedient to have installation made satisfactory until they comply with the specification, approved drawings and designs.
- e) In such a case or in a case of delay in completion of the work under this contract within the time limit, the purchaser reserves the right to get the work completed by contractor as per provisions of contract. The purchaser will give to the contractor for this purpose 7 days previous notice. The contractor shall then take at his own expense all necessary steps to complete the works in accordance with the provision of the contract. In case it becomes impossible to proceed with the above mentioned taking over tests, for reason other than for which the contractor is responsible, the "Provisional Acceptance Certificate" shall be issued at or within a mutually agreed reasonable period not exceeding 6 months after completion of the work.
- f) Imposition of token penalty for delay in the completion of work- Competent authority while granting extension to the currency of contract under clause 17 (B)

of GCC may also consider levy of token penalty as deemed fit based on the merit of the case.

**1.2.21 FINAL ACCEPTANCE:**

- a) The final acceptance of the entire plant shall take effect from the date of expiration of the period of guarantee provided the installations provisionally accepted are still in perfect working order.
- b) If on the other hand the installations are not in the perfect working order at the end of the guarantee period the purchaser may either extend the period of guarantee until necessary works are carried out by the contractor, or carry out these works or have them carried out on behalf of the contractor and at his expense. A certificate of final acceptance shall then be issued by the purchaser, which will terminate the contract.

**1.2.22 Safety Gear-** During execution of the work, contractors shall ensure that all safety precautions are taken by their men to protect themselves and site to prevent any untoward incident. DFCCIL reserve the right to stop the work in the absence of proper safety gear and no claim shall be entertained in this regard; decision of the Engineer-in-charge will be final and binding upon the contractor. The cost of all the safety gear is deemed to have been included in the rates quoted and nothing extra is payable under this contract.

**1.2.23 TIME SCHEDULE: -**

- 1.2.23.1 The entire work is required to be completed in all respects within 36 (Thirty Six) month from the date of issue of acceptance letter/telegram. Time is the essence of contract. The contractor will be required to maintain steady and regular progress to the satisfaction of the engineer to ensure that the work will be completed in all respects within the stipulated time failing which action may be taken by the DFCCIL Administration in terms of GCC of Indian Railway, along with latest correction slips and amendments.
- 1.2.23.2 The Contractor shall be expected to initiate work immediately after receipt of “**Letter of Acceptance**”.

**1.2.24 RATES: -**

- 1.2.24.1 The rates quoted and accepted by DFCCIL shall be firm and final during the currency of contract.
- 1.2.24.2 All statutory taxes and liabilities levied/may be levied in future by the Central and State Government or any other governing authority/agency from time to time shall be borne by the contractor and the rate shall be inclusive of all such liabilities.
- 1.2.24.3 GST is exclusive for this tender. GST will be reimbursed by DFCCIL as per existing provisions.
- 1.2.24.4 The Work Provider will, for the purpose, aforesaid continuously monitor the Works being rendered by it to ensure that these are up to the standards required by DFCCIL.



- 1.2.24.5 The Work Provider shall indemnify and keep DFCCIL indemnified and harmless from and against all disputes, claims, fines, penalties, litigations criminal as well as civil that may be initiated against the DFCCIL on account of and/or arising out of the failure of the Work Provider to adhere to any statutory requirement, or to follow such rules regulations, guidelines or procedures as may be required under any statute or directive.

1.2.26 **QUANTITY VARIATION:**

Rates quoted in the schedule of items shall be valid for a variation of the quantity up to maximum of ( $\pm$ ) 25% for each item. In case of variation in quantities beyond  $\pm 25\%$ , the rates for the additional quantities beyond  $\pm 25\%$  variation shall be negotiated/decided on mutually acceptable terms, provided the rate so arrived does not exceed the originally accepted rate as per agreement.

1.2.27 **TERMINATION OF CONTRACT: -**

In case the work of the contractor is not found satisfactory, or there is a breach of any of the terms and conditions of the contract and/or fails/neglects to carry out any instruction issued to it by DFCCIL from time to time the same can be terminated by DFCCIL on giving of the notice as stipulated in GCC.

1.2.28 **IMPLEMENTATION OF INTEGRITY PACT IN DFCCIL :-**

As per office memorandum no F.No DPE/13(12)/11-Fin Dated 09.09.2011 issued by Ministry of Heavy Industries (DPE) all PSU should enter into Integrity pact in the required Performa in their procurement transaction/ Contracts with suitable changes specific to the situation in which the pact is to be used. The pact, entering into which would be a preliminary qualification for any bidder, essentially envisages an agreement between the prospective vendors / bidders and the DFCCIL, committing the persons/ officials on both sides not to resort to any corrupt practices in any aspect / stage of the contract.

The pact has to be implemented through a panel of independent external monitor who will review independently and objectively the compliance of the obligations by both the parties. As these IEM's are to be appointed by the CVC in consultation with the CVO and are being processed separately.

A copy of pre contract integrity pact is enclosed at Annexure IX for signature of bidder as acceptance, as and when Independent External monitor is appointed.

**1.2.29 ORDER OF PRIORITY OF CONTRACT DOCUMENTS:-**

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- i) The Contract Agreement.
- ii) Letter of Acceptance.
- iii) Tender Form
- iv) General Information
- v) Notice Inviting Tender ( with Annexes )
- vi) Instructions to Tenderers
- vii) Special Conditions of Contract
- viii) Annexures
- ix) Bill of Quantities (BOQ)/Schedule of Rate
- x) General Terms and Conditions of Contract

**1.2.30 JURISDICTION OF COURTS:-**

In case of any disputes/differences between contractor and DFCCIL the jurisdiction shall be of Chandauli(UP)/DDU Courts only.

- 1.2.31 In case of any deviation in downloaded copy of the tender documents, the Master Copy kept in the office of Chief General Manager/DDU/ DFCCIL, will prevail and the interpretation of CGM/ DDU will prevail.

- 1.2.32 **RISK PURCHASE:-** During execution of this Tender, if any delay is observed due to reasons attributable to tenderer other than force majeure conditions which may cause delay in completion of the work, DFCCIL shall be at liberty to cancel the contract, totally or partially, at any point of time without assigning any reason, whatsoever, and take alternative measures at your risk and cost.

- 1.2.33 Penalties for Safety Lapses:- Any violation in adhering to the terms and conditions stipulated in GCC would also attract to penalties payable by you as per GCC Provisions.

**1.2.34 SECURITY DEPOSIT(SD):**

Security Deposit shall be 5% of contract value. Security deposit may be deposited by contractor before release of first on account bill in cash or term deposit receipt issued from scheduled bank or may be recovered at the rate of 6% of the bill amount till the full security is recovered. Provided also that in case of defaulting contractor the railway may retain any amount due for payment to the contractor on the pending "on account bills" so that the amounts so retained (including amount guaranteed through performance guarantee ) may not exceed 10% of the total value of the contract.

Further, in case of contracts having value equal to or more than ₹ 50 crore (Rs Fifty crore) the Security Deposit may be deposited as Bank Guarantee Bond also, issued by a scheduled bank after execution of contract documents, but before payment of 1st on

account bill. Provided Further that the validity of Bank Guarantee Bond shall be extended from time to time, depending upon extension of contract granted in terms the Standard General Conditions of Contract.

Further, in case Security Deposit has been submitted as Term Deposit Receipt/Bank Guarantee Bond in full amount, the Earnest Money deposited by the Contractor with his tender will be returned by the Railways.

Note: After the work is physically completed as certified by competent authority, Security Deposit recovered from the running bills of a Contractor can be returned to him, if he so desires, in lieu of Term Deposit Receipt/irrevocable Bank Guarantee for equivalent amount from Scheduled Bank, to be submitted by him

### **1.2.35 RELEASE OF SECURITY DEPOSIT(SD):**

- 1.2.35.1 The Security Deposit mentioned above shall be returned to the Contractor along with or after, the following:
- (a) Final Payment of the Contract
  - (b) Execution of Final Supplementary Agreement or Certification by Engineer that DFCCIL has No Claim on Contractor *and*
  - (c) Maintenance Certificate issued, on expiry of the maintenance period .
- 1.2.35.2 Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 62 (1) of GCC, the Security Deposit already with DFCCIL under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of GCC, the Security Deposit shall not be forfeited.
- 1.2.35.3 No interest shall be payable upon the Earnest Money(if any) and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause 1.2.36(b) of this clause will be payable with interest accrued thereon.

### **1.2.36 PERFORMANCE BANK GAURENTEE**

The procedure for obtaining Performance Guarantee is outlined below:

- (a) The successful bidder shall have to submit a Performance Guarantee (PG) within 21 (Twenty one) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 21 (Twenty one) days and upto 60 days 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 12% per annum shall be charged for the delay beyond 21(Twenty one) days, i.e. from 22 nd day after the date of issue of LOA. Further, if the 60th day happens to be a declared holiday in the concerned office of the Railway, submission of PG can be accepted on the next working day.
- In all other cases, if the Contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit Earnest Money Deposit and

other dues payable against that contract. In case a tenderer has not submitted Earnest Money Deposit on the strength of their registration as a Startup recognized by Department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP shall be informed to this effect.

The failed Contractor shall be debarred from participating in re-tender for that work.

**(b) The successful bidder shall submit the Performance Guarantee (PG) in any of the following forms, amounting to 3% of the contract value:**

- (i) A deposit of Cash;
- (ii) Irrevocable Bank Guarantee;
- (iii) Government Securities including State Loan Bonds at 5% below the market value;
- (iv) Deposit Receipts, Pay Orders, Demand Drafts and Guarantee Bonds. These forms of Performance Guarantee could be either of the State Bank of India or of any of the Nationalized Banks;
- (v) Guarantee Bonds executed or Deposits Receipts tendered by all Scheduled Banks;
- (vi) Deposit in the Post Office Saving Bank;
- (vii) Deposit in the National Savings Certificates;
- (viii) Twelve years National Defence Certificates;
- (ix) Ten years Defence Deposits;
- (x) National Defence Bonds and
- (xi) Unit Trust Certificates at 5% below market value or at the face value whichever is less. Also, FDR in favour of FA&CAO (free from any encumbrance) may be accepted.

**(c)** The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. This P.G. shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the Contractor shall get the validity of P.G. extended to cover such extended time for completion of work plus 60 days.

**(d)** 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 3% for the excess value over the original contract value shall be deposited 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 3% of the decrease in the contract value shall be returned to the Contractor. The PG amount in excess of required PG for decreased contract value, available with Railways, shall be returned to Contractor as per his request duly safeguarding the interest of railways

- (e) The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the competent authority stating that the Contractor has completed the work in all respects satisfactorily.
- (f) Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encashed in addition to forfeiture of Security Deposit available with railway.
- (g) The Engineer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
  - (i) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee.
  - (ii) Failure by the Contractor to pay President of India any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer.
  - (iii) The Contract being determined or rescinded under clause 62 of the GCC
- (h) The tenderer who has offered lower total cost as compared to tender value by more than 10 %, shall be required to submit additional Performance Guarantee of value equal to half the percentage of tender value by which offer is lower than 10%. (e.g. in a tender costing Rs 100, if contract value is Rs 80, additional Performance Guarantee shall be  $[0.5 \times \{(100-80)-10\}]$  percentage of tender value.)

#### 1.2.37 **INSURANCE:**

The contractor shall take out and keep in force a policy or policies of insurance against all liabilities of the contractor or the purchaser at common law or under any status in respect of accidents to person who shall be employed by the contractor in or about the site of the contractor's office for the purpose of carrying out the works on the site. The contractor shall also take out and keep in force a policy or policies of insurance against all recognized risks to their offices and depots. Such insurance shall in all respects be to the approval of the purchaser and if he so requires in his name.

#### 1.2.38 **DEFECT LIABILITY PERIOD :**

The period of defect liability for the works shall be 12 (Twelve) Months starting from the date of completion of the work or as certified by the DFCCIL.

**1.2.39 ELECTRICAL CONTRACTOR LICENSE:**

Contractor must have valid Class-‘A’, Electrical Contractor License issued from appropriate government authority to execute mentioned works.

**1.2.40 Engineering Organization**

The Tenderer shall have adequate Engineering Organization required for the execution of the tendered work. The Tenderer shall submit the documents with regard to list of total personnel available and proposed to be engaged for the subject work in the Performa.

**(i) Minimum gang size:**

- (a) **One Supervisor In-charge:** He should have minimum qualification & experience as details given in table under Para 1.2.41(a) below.
- (b) **Two Technicians/Fitters (Skilled):** They should have minimum qualification & experience as details given in table under Para 1.2.41(a) below.
- (c) **Three Helpers (Un-Skilled):** They should have minimum qualification & experience as details given in table under Para 1.2.41(a) below.

However Contractor should ensure that sufficient manpower is made available during maintenance of different OHE/PSI assets as per site requirement.

Note: In case the deployed Supervisor will take leave or leaving his head quarters, contractor in position to deploy another employee having equivalent educational & experienced as “Supervisor” for the work.

**(ii) Required gang size:**

The contractor should proportionately increase the size of the gang tentatively (i.e. Technicians and Helpers) **to 0.13 staff per TKM as per site requirements. However contractor should ensure to depute sufficient gang strength such that the maintenance of OHE/PSI assets are completed as per defined periodicity for different items and there is no accumulation of significant overdue of maintenance of said assets.**

**(iii) Suitable reliever:**

Since OHE & PSI equipment maintenance work will be on all days the contractor should arrange necessary relief to the personnel working as per the labour laws from time to time for which no additional payment will be made by the DFCCIL. Each gang should work under the instruction of railway supervisor. If performance of any contractor’s staff is not found upto the mark, he should be replaced by suitable reliever within a week. If the staff is not replaced should be treated as absent and penalty should be imposed as per special conditions of contract.

**(iv) Provisions of Payments of Wages Act:**

The contractor shall comply with the provisions of the payment of wages Act 1936 with its latest amendments if any and the rules made there under in respect of all employees directly or through petty contractors or sub-contractors employed by him in the works.

**(v) Any dispute regarding labour deployment as per LABOUR ACT i.e. payment, weekly**



rest, extra work, leave, medical benefit, VDA or any other claim of deployed labour should be set right by the contractor. DFCCIL will not responsible for the same.

#### 1.2.41 **Qualification of the contractor's Personnel for 2x25kV OHE & PSI equipment Maintenance work**

- (a) Contractor is required to deploy Supervisors, Technicians and Helpers round the clock, for all maintenance and restoration of 2x25kV OHE Breakdown works & trouble free operation of PSI equipment so that failure could be avoided. The contractor shall ensure the required minimum educational qualifications & experience for his deployed Supervisors, Technicians and Helpers as tabulated below:

EDUCATIONAL QUALIFICATION	
<b>Staff Qualification: Following stipulation are made:-</b>	
<p><b>Supervisor staff:</b> The supervisory staff posted by the contractor should at least be Diploma/Degree holder in electrical Engineering discipline with minimum one year experience in execution/maintenance of OHE/PSI work <b>OR</b> should have worked at the supervisory level (SSE/JE of OHE/PSI) as relevant in Railway for a minimum period of 2 years in execution/maintenance of OHE/PSI work.</p>	
<p><b>Technician:</b> The technician posted by the contractor should at least be ITI holder with minimum one year experience in execution/maintenance of OHE/PSI work <b>OR</b> Matriculation with minimum two year experience in execution/maintenance of OHE/PSI work <b>OR</b> should have worked as OHE/PSI technician in Railway for a minimum period of 2 years in execution/maintenance of OHE/PSI work.</p>	
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Photostat copies above educational qualification Certificates shall be attested by any Gazetted Rank officer in Central /State Governments.</li> <li>2. The certificate of experience shall be countersigned by tender signing authority of the subject tender.</li> </ol>	

#### (b) **Training to the contractor's personnel:**

All the personnel desired to be deputed for this work including supervisors have to undergo a scrutinizing test conducted by GM/EL/DFCCIL or his authorized representative. Candidates found suitable shall be issued "competency certificate" by GM/EL/DFCCIL or his authorized representative and they will be finally put on job. The suitable candidates will be given an Identity card and a competency certificate valid for a period of currency of contract which they have to keep with them while on duty and for their movements in the DFCCIL work spots.

#### (c) **Medical fitness certificates:**

All the personnel whether undergone training as per Para 1.2.41(b) above OR having experienced as per Para 1.2.41(a) above shall undergo a scrutinizing test conducted by authorized representative of GM/EL/DDU of the respective section. Candidates found suitable shall be issued with competency certificate by respective authorized representative of GM/EL/DDU.

All such selected staff of contractor shall medically fit for DFCCIL's working circumstances round the clock, for all maintenance and restoration of Breakdown. The contractor's personnel shall be healthy, physically fit, eye sight normal with spectacles, BP/Diabetes etc., disabling / debilitating diseases controllable by drugs, no contagious/

infectious diseases, generally good physique.

Therefore, contractor's personnel proposed to deploy will have to pass **requisite medical** fitness test "**Category-A 3 for Supervisor/Asst. Supervisor/ Technician and Category-B 1 for Helper**" of DFCCIL Medical manual conducted by the DFCCIL Administration to ensure that the personnel medical fit to carry out the duties. The contractor shall get the operators to be deployed by him for the above medical checkup at his own cost.

**d) Police verification:**

The contractor shall ensure police verification for all the staff deployed by him against subject work and to certify to the DFCCIL administration that the "**staff is free from criminal record**".

**e) Competency Certificate for 2x25kV Isolators ( SP/DP) with or without Earthing Heel:**

The contractor's personnel who are found to be qualified and suitable in the scrutiny by authorized representative of DFCCIL shall only be allowed to work. All the Supervisory Staff & Technicians of the contractors shall attend to the nominated officer of DFCCIL to take the counseling & training to operate 2X25 kV Isolators ( SP/DP) with or without Earthing Heel. The competent staff shall be given a "Competency Certificate for 2X25kV Isolators" by the above nominated officer and it shall be carried by such staff while on duty on subject section.

**f) Commencement of O.H.E and P.S.I. equipment Maintenance Contract at field:**

The contractor shall commence OHE and PSI equipment maintenance work at field within 15 days from obtain a letter from competent authority of DFCCIL duly stating actual date of commencement of subject OHE and PSI equipment maintenance work and accordingly the completion period of contract (Twenty Four months) will be reckoned.

**g) Subletting of Contract:** The contractor shall not assign/sublet the contract in the interest therein or the part thereof to any other party or partner(s) without the consent of the DFCCIL.

**h) Photo Identity Cards, Uniform & PPE equipments to the Contractor Staff Deployed:**

The deployed staff should be taken on duty after approval of DFCCIL and necessary photo identity cards of the staff deployed shall be issued by the contractor duly attested by the DFCCIL. The Contractor shall submit a list of suitable persons to be deployed for subject OHE Maintenance work.

The personnel who are found to be qualified and suitable in the scrutiny by representative of GM/EL/DDU of the respective division shall only be allowed to work. However, the contractor shall be solely responsible for the conduct of the personnel deputed by him for the work.

The contractor shall arrange Identity cards valid only for a period of currency of contract for the suitable persons whom they have to keep with them while on duty and for their movements in the DFCCIL work spots.

The age of the contractor's personnel deputed for duty should be more than 18 years and less than 58 years as on date of commencement of work.



**UNIFORM:** Orange colour dungaree / allover with Retro reflective bond of min 2" width to be provided. Contractor will ensure minimum 3 uniforms for staff so that the staff are always in their protective uniform at work. The uniform shall bear Logo & Name of the Contracting Agency.

The contractor's staff shall not carry or display or exhibit any kind of advertisement on his person at DFCCIL/Railway premises.

The contractor's personnel should have knowledge of Local language Hindi / English for speaking/writing.

The contractor's personnel should not carry any unauthorized/dangerous/explosives in the complex and should not consume alcohol/intoxicating drugs etc. during duty hours.

These staff should reside close to the contractor's Depot for easy approach during emergencies. Residential addresses and phone numbers of specified staff should be made available with Traction Power Control and relevant OHE depot.

The DFCCIL reserves the right to ask the contractor to remove any contractor's personnel from duty without assigning any reason whatsoever. The decision of DFCCIL's Engineer- in-charge will be final and binding on the contractor.

Any changes in the list shall be done with prior approval of Railway authority/DFCCIL.

#### **1.2.42 Safety during O.H.E & P.S.I. Maintenance work atfield:**

The contractor shall ensure the safety of all the staff provided for maintenance of 2x25kV OHE & PSI equipment maintenance. In case of any injury or accident the contractor is liable for their compensation, DFCCIL will not take any responsibility to the contractor's provided labour.

- (a) The contractor should maintain safety belts to his staff those authorised to work on the OHE, shockproof safety shoes, raincoats and helmets etc. to all his site staff and two red banner flags, two sets of hand flags should be maintained with each gang at his own cost.
- (b) Communication facilities (cell phones) shall have for all the technicians and supervisors by 24x7 hrs.
- (c) While working in normal maintenance, if any breakdown occurs in the section, the maintenance staff should be diverted to breakdown site immediately as per the direction of DFCCIL's representative.
- (d) If any unusual occurrence/Breakdown taken place the contractor's staff should reach the breakdown vehicle within **20 minutes in day time and 25 minutes at night** time after receipt of the information from purchaser's representative and to report the purchaser's representative. The time of receipt of information should be recorded before DFCCIL representative and the call book memo should be jointly signed by the gang supervisor and DFCCIL's representative before leaving to the breakdown site. In all such cases contractor should ensure full strength staff before leaving for the breakdown site.
- (e) Contractor shall provide for transportation of his staff by road/train for foot patrolling /AT fuse replacement/foreign body removal/any other activities specified by DFCCIL's representative.
- (f) Contractor shall be in position for arranging immediately attention of the defects noticed during various inspections for normal / emergency power block.
- (g) The arrangement for the stay of the contractor's staff shall be made by the contractor at his own cost.

- (h) Safety precautions to be followed as per safety plan/ maintenance manual.
- (i) The contractor shall have to take all precautions to prevent possible electrical accidents due to proximity of adjacent live OHE always in live condition, unless otherwise a power block is granted on the adjacent line. The contractor shall also take all precautions to protect his staff working on the line against traffic (running of trains) on the working lines/adjacent lines.

**1.2.43 Progress Monitoring of Maintenance Schedule:**

Progress of One TKM of maintenance shall cover all the equipment uniformly. Completion of total TKM of a particular depot/section should ensure completion of maintenance of all the pertaining equipment.

**1.2.44 Tools and plants management:**

- (a) Though the tools required for the maintenance shall be provided by the purchaser as part of IMD/IMSD but contractor should have minimum set of Tools & equipment to cater maintenance of OHE & PSI in DDU ERC –CPBN/SEBN section.

The proper upkeeping of tools and plants supplied to the contractor shall be responsibility of the contractor and any damage to these equipments other than normal wear & tear shall be recovered from the contractor. Any additional tools and plants required other than the tools provided by the purchaser for maintenance of the OHE/PSI shall be arranged by the contractor at his own cost.

- (b) Periodical load testing of tools, tackles, plants shall be carried out to ensure healthiness and safety of equipment duly maintaining testing record equipment wise. Meters like dynamometer, etc., shall be calibrated & maintained for periodical testing of tools & plants.
- (c) Each Technician shall maintain and carry individual tool boxes having full set of required tools and shall not resort to exchanging of tools during powerblock.

**1.2.45 Depot At Site:**

- i. The Purchaser has established Integrated maintenance depot (IMD) and Integrated maintenance Sub depot (IMSD) at various stations and tools supplied by DFCCIL has to be well maintained by gangs in respective IMD/IMSD for carrying out the maintenance. Any theft or loss of tools shall be recovered from the Contractor.
- ii. The main depot will be located at take-off station of the Siding/section. For the main and sub-depots, the Purchaser shall offer open space reasonably level and workable and suitable for storage of materials free of charge, inside DFCCIL premises which will be convenient from the point of view of operation. The depot/s shall as far as possible be located such as to be accessible by road.
- iii. Electricity may be supplied at places where spare capacity is available for running of machinery and for lighting. The Contractor shall provide his own electrical distribution system, in consultation and with the approval of the Purchaser. The cost of providing connections and of energy consumed shall be paid by the Contractor to the Purchaser in accordance with relevant rules and prevailing rates of the DFCCIL. The decision of the Purchaser in regard to supply of Electricity shall be final and binding on the Contractor.
- iv. At places where piped water supply is available the Purchaser may supply water to

the Contractor at convenient points for his office, workshops and stores if necessary in connection with the work. The Contractor shall arrange to lay his own pipe lines for distribution in consultation and with the approval of the Purchaser. The Contractor shall be charged for consumption of water at the prevailing rates. The decision of the Purchaser in regard to supply of water shall be final and binding on the Contractor.

- v. The contractor shall hand over the depot, sub-depot area complete within a period of one month from completion of the work, cleaned of all Contractors' stores unless otherwise agreed to by the Purchaser.
- vi. **Security to Purchaser's IMD/IMSD:** The requisite number of Security Guards round the clock for the IMD/IMSD depot will be the responsibility of purchaser/Employer.

#### **1.2.46 Stores Management in Depot at Site**

- (a) The consumable material for the maintenance and replacement for the defective parts shall be provided by the purchaser. The material required for the maintenance shall be issued by authorized representative of GM/EL/DDU available at IMD/IMSD. The material shall be issued to the contractor on demand as per the requirement of the maintenance in the section further the essential material issued to the contractor to attend 24x7 breakdowns shall lie with the contractor. The material shall only be issued to authorized person of the contractor.
- (b) Maintenance of record for daily material transaction and entries in ledgers for the same should be carried out by the supervisory in-charge. Shortfall of consumed stores shall be recouped periodically so as to ensure that the minimum quantity is always available. During periodic inspections by DFCCIL officers, scrutiny of this inventory should be one of the important items in order that the required stores are always made available.
- (c) OHE material/parts (spares) likely to be used during restoration of breakdown shall be systematically stocked in small bags as per the correct identification and for carrying to work spot.
- (d) Consumption of emergency OHE material/parts (spares) used during maintenance / breakdowns shall be recorded location wise in the format of work progress and should be jointly signed by contractor and DFCCIL representative for proper accountable of inventory.
- (e) DFCCIL will recoup, the consumed material/parts (spares) duly placing issue challan/voucher to the contract supervisor who shall be responsible to ensure the minimum quantity emergency spares is always available.
- (f) All released materials shall be properly accounted location wise and returned to DFCCIL by return challan at the nominated purchaser's depot.
- (g) List of spares to be maintained by the contractor at his depot is to be jointly finalized by the DFCCIL & contractor at the time of agreement. The contractor at his own cost maintain a depot for stacking of issued material in respective IMD/IMSD.
- (h) Transportation of the purchaser supply materials from the nominated stores of the purchaser to the working site and vice-versa will be the responsibility of the contractor, whether specifically mentioned or not. DFCCIL will not give any transportation expense for transportation of these materials to the working site.

The receipt of storage of materials at the main and sub-depots shall be so planned as to

avoid transport of materials between the main and sub-depot/s and vice versa to the maximum extent possible.

#### 1.2.47 **Tower Wagon:**

For carrying out maintenance and other works on Section Insulators, cross-over/Turn-outs, Overlaps, attending spark locations, staggers, etc. **Tower Wagon will be spared by DFCCIL** to the extent of requirement.

#### 1.2.48 **POWER BLOCKS AND PERMITS-TO-WORK:**

Obtaining “Power Block, Permit-To-Work” and “Restoration of Supply” after a Permit-To-Work is returned shall be carried out by the '**Authorized DFCCIL Section representative**' only with its latest correction slips if any. Contractor Supervisor shall not permitted to do the above duties.

- i. Availability of power block is dependent on traffic conditions and other operational exigencies. Hence, contractor should be prepared to mobilize staff for maintenance any time during day / night time upon one hour advance intimation from DFCCIL to ensure there is no shortfall in availability & utilization of power block.
- ii. Power blocks are premium hours permitted by regulating trains. Hence, optimum utilization requires full deployment of manpower and multiple gangs.
- iii. If work is to be carried out by contractor representative on or adjacent to any part of the electrical equipment such work shall not commence until the person in-charge of the work is in possession of a written permit-to-work in the prescribed form issued to him by an 'Authorized DFCCIL Person'.
- iv. Such permits-to-work in the prescribed form shall only be issued by an 'Authorized DFCCIL Person' of the Electric Traction Branch not below the rank of an executive.
- v. The permit-to-work shall first be taken from TPC by an 'Authorized DFCCIL Person' n who shall ensure earthing the electrical equipment specified and hand over a permit-to-work card to the person in-charge of the work getting an acknowledgment on the other copy. A duplicate copy of every permit-to-work card shall be retained in the personal possession of the 'Authorized DFCCIL Person' who issued it.
- vi. On completion of the work and when all men and materials have been withdrawn from the electric equipment and its vicinity, the person in-charge of the working party shall cancel his permit-to-work card and return it to the 'Authorized DFCCIL Person' who issued it. The 'Authorized DFCCIL Person' shall in turn issue a message to TPC to cancel permit-to-work.

#### vii. **Knowledge of Rules and Sectioning:**

1. It is very important for every contractor Supervisor who has occasion to ask for power block to know the correct method of identifying and describing any section of the OHE where shutdown is required. He should have with him the up to-date Station Working Rule Diagram for the section, showing all relevant particulars such as station names, position of all isolators, interrupters, circuit breakers, "up" and "down" tracks, cross- over section insulators, sectors, sub-sectors and elementary section numbers.
2. All contract staff shall be fully conversant with the "Rules & Safety Procedures" while working on TRD installations as laid down in maintenance

manuals.

3. Competency certificates for working in 2x25kV electrified areas will be issued by DFCCIL as per the scope of work.
4. Safety precautions to be followed as per safety/maintenance manual.

**1.2.49 Maintenance of schedules registers, records and forms:**

- (a) The contractor shall maintain records of maintenance, inspections, special checks, other works, etc., in the standard format of registers, records, and schedule forms as per the guide lines of circulated time to time. Vital OHE parameters recorded during maintenance shall be updated in the records, registers, forms for review of maintenance performance, remedial measures and further action plan to achieve high reliability.
- (b) Each two copies of Drawings such as LOP, SED, Operation & Maintenance Manual and As build documents etc. of agreement work will be spared by DFCCIL at free cost.
- (c) List of maintenance registers and forms to be maintained along with Joint procedure orders issued by DFCCIL on time to time.

**1.2.50 BREAKDOWN GANGS:**

- (a) Accidents and breakdowns involving traction installations and electric rolling-stock should normally be attended to by the nominated contract gangs themselves. It is, however, essential that the contractor shall maintain adequate number of experienced staff comprising Technician, Helpers and Supervisors, housed close to IMD/IMSD. In electrified suburban sections, however, 'breakdown gangs' of adequate strength may be located at selected points to deal promptly with OHE failures, particularly during the hours of peak traffic. The breakdown gang comprising supervisory staff, technicians, helpers, etc., shall be fully aware of different skills required to tackle OHE breakdowns of various nature.
- (b) **Summoning of Emergency Staff:** To enable the TPC to summon breakdown staff as required, a register showing the residential addresses with phone numbers of specified staff of the contract gang those residing close to depots/DFCCIL stations, shall be maintained depot-wise/station-wise by TPC.
- (c) **Importance of Expeditious Repairs:** Every breakdown of OHE, even if minor in nature, should be attended to urgently as it generally interferes with traffic. Since electrified lines carry a high density of traffic, the effect on traffic will be quite severe if restoration is not arranged expeditiously.
- (d) **Detailed Assessment by The First Supervisor Reaching Site:** The first Supervisor / staff reaching the site of the breakdown should make a quick assessment of the extent of damage and the time required for restoration. He will ascertain from TPC the details of break-down gangs and equipment directed to the site and if the circumstances warrant, ask for additional gangs and breakdown equipment to be sent to the site. On receipt of these details, TPC should arrange for additional gangs and equipment to be sent to the site expeditiously. In the meanwhile, isolation and repair works should be started at site.

**1.2.54 Power Block Working – Protection of Men Working:**

- (i) DFCCIL will arrange only power block for the works related to power block depending on the traffic and other conditions. The contractor shall ensure the removal of men and material before cancellation of power block. The contractor shall have to take full advantage of available power block by employing adequate staff for getting the maximum possible work done during the available block period. For adhering to target date of completion, the contractor may have to work during night time under power block for which the contractor is not entitled for any additional payments.
- (ii) The contractor shall take all precautions necessary to protect staff working under him. The contractor shall treat all other lines live except the line under Power block. He should ensure execution of work under the supervision of a competent person to carry out the work in electrified areas. Unless the adjacent lines are also under power block, voltage and currents will be induced in the line under power block. To protect against these induced voltages and currents, earth discharge rods are to be provided. Care should be taken by the contractor that these discharge rods are intact and not disturbed by his staff. He shall also ensure that none of the staff working under him shall work/reach beyond safe working limits
- (iii) Under all conditions the contractor shall have to arrange protection of his staff against traffic. He shall have to also take all necessary precautions to guard against any possible obstructions to traffic during working by providing necessary staff while erection/dismantling of structures, coverage of excavated foundation pits with sand filled bags to keep free of stacked materials from obstructions to traffic etc.,
- (iv) At the end of each power block work the contractor shall ensure removal of all men and material and no work inclusive of OHE should be left out in a state of obstruction to running of trains and the OHE should be made fit for electric traffic, failing which DFCCIL will remove such obstructions and the Contractor will be liable to pay cost of such removal.
- (v) If the contractor fails to execute and to work within the time of power block granted, DFCCIL shall be at liberty to take action and recover penalty for availing additional power block in accordance with standard practice of the DFCCIL. The contractor shall in consultation with the - DFCCIL submit a weekly power block programmed for work, 7 days in advance of the commencement of work.

**1.2.55 Right to Alter the Scope of Work:**

The Employer reserves the right “to alter the scope of work”.

1. **The General conditions of Contract governing the performance of the works covered by this tender are the “General conditions of Contract (July-2020) or latest” of the Engineering Department of the RAILWAY/DFCCIL as amended from time to time up to date. A copy of the book-let incorporating the above “General Conditions of Contract (July-2020)” may be perused in the Office of CGM/DDU of respective division.**
2. If there is any conflict between “Special conditions” and “General conditions of contract”, the conditions laid down in “Special conditions” will be sustained.



3. **Inspection:**

Quality of schedule maintenance and other works carried out by the contractor are subject to periodical inspections by Purchaser's Engineers of various levels as per the schedules laid down by DFCCIL. Any shortfall in the quality of work shall be subject to penalties/Recoveries as per prevailing conditions.

4. **DEDUCTION OF INCOME TAX AT SOURCE:**

In terms of new section 194-C inserted by the finance act 1972, in the income tax 1961, the DFCCIL shall at the time of arranging payments to the contractor 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 each payment.

5. **DEDUCTION OF TAX AT SOURCE:**

All statutory and govt. charges will be deducted at source in effect from time to time.

6. **Legal Charges:**

A fee of Rs. 200/- per legal document, like partnership deed or power of attorney executed before or after the execution of the contract, will be recovered from the contractor for obtaining legal Advice from Law Officer.

7. **Completion of Work:**

The contractor shall commence the work as specified in Chapter-IV of "Scope of work & Explanatory Notes" and shall complete the work in all respects as specified in tender details.

8. The DFCCIL attach utmost importance to the timely completion of the work on or before the date contracted for. In this connection, the attention of the contractor is specially invited to the clauses regarding 'Liquidated damages' and termination of contract owing to default of contractor provided for in General Conditions of Contract.

9. **Guarantee:**

Since it is for manpower of 2x25kV Overhead equipment and Power supply installation equipment maintenance, the contractor shall guarantee satisfactory working of the installation of 2x25kV OHE and PSI equipment maintained by him upto the satisfaction of engineer in charge. This being maintenance contract warranty after completion period not applicable. During the period of guarantee contractor shall keep available and attend to any defect and replace the equipment/components resulting from defective erection or defects in the equipment supplied by the contractor.

10. **Defence of Suit**

If any action in court is brought by third party against DFCCIL or Officer or agent of DFCCIL for the failure or neglect on the part of the contractor to perform any acts, matters, covenants or things under the contract, or for any damage or injury caused by the alleged omission or negligence on the part of the contractor, his agents/ representative or his sub contractor, drivers or employees, the contractor/ agency shall in such cases be responsible & indemnify & keep DFCCIL & or his representative harmless from all losses, damages, expenses or decrees arising out of such action.

1.2.56 **NON-PERFORMANCE OF THE CONTRACT CONDITIONS**

1. **Penalties**

A) **Recovery due to shortfall in staff per Supervisor, Skilled / Un-skilled staff:**

The staff should be available 24 hours X 7 days of the week. The contractor should ensure the availability of full strength gang every day. The deployed staff should give their attendance to the depot in-charge before leaving to work site. No staff should leave the work site without intimating the DFCCIL's representatives. Failing to do so will be treated as absent.

In case of absentee of staff to the provided gang, the contractor should ensure the suitable replacement to make the full strength gang. If the contractor fails to provide the suitable replacement a penalty of **1000/- per day of Supervisor and 500/- per day Skilled / Un- skilled staff** to deducted from contractor's monthly bill.

**B) Recovery Due To Poor Maintenance / Fail To Utilize Power Block / Poor Progress for every Hour of Power Block Utilized /Bursting of Power Block:**

If breakdown occurs due to poor maintenance, fail to utilize power block, poor progress for every hour of power block utilized , bursting of power block and proved in joint findings a penalty of **Rs.20,000/- on flat rate basis per occasion. For power block burst less than or more than hour, penalty shall be imposed on pro-rata basis.**

The deficiency is not checked the equipment as per standard proforma enclosed with tender book OR not carried out the upto the satisfaction of maintenance manual/DFCCIL work. Delay in the scheduled maintenance of equipments for more than a month will also call for a penalty of Rs. 500 per day after grace period of one month.

In addition of above not attending the break down maintenance of the equipments with in twelve hours from information given by TPC/APM/Incharge to the contractor, a penalty of Rs. 50000/- per break down will be levied.

**C) Recovery due to wrong operation of equipment:**

On duty contractor personnel shall follow the instructions of DFCCIL Supervisor on duty for the maintenance of 2x25kV OHE equipments. If the contractor personnel performs any wrong operation of equipment, a penalty of **Rs.5,000/- per occasion, if there is no operational delay and no financial repercussion.** However if there is any financial repercussion, in that case, penalty will in consonance with the loss as approved by tender accepting authority. Also, if the train services are affected particular operator shall be debarred from duties against subject agreement in addition to levy of penalty.

The cost of the damages/loss, if any, caused due to the negligence/fault of the contractor's personnel, to the DFCCIL property shall be recovered from the contractor. The recovery shall be made inclusive of all contingencies by the DFCCIL.

**D) Recovery due to contractor's personnel is found without Identity Card:**

If the contractor's personnel is found without Identity card, found in untidy condition, having improper conduct, found not obeying the instructions of Engineer In-Charge of DFCCIL, a penalty of **Rs. 500/-** shall be levied and recovered from Contractor's bill for each such instance. If such deficiencies are found to be more than 5 in a month, it may be a ground for termination of the contract. Also the contractor's personnel shall be dealt according to the DFCCIL rules in force from time to time.

**E) Recovery Due To Non-Returning of T&P supplied by DFCCIL:**

Any T&P items supplied to the contractor for the maintenance of OHE & POS installations "over and above" to the quantities provided under "Scope of the work and Special conditions", if supplied by DFCCIL in Break downs, the contractor should liable for safe return of the same. If the contractor fails to return such materials, the



cost of such materials will be recovered at twice the book rate or twice the market rate enhanced by 5000/- per incident for integrity breach.

**F) Recovery Due To fails to return unutilized DFCCIL supply materials:**

The material issued to the deployed staff for maintenance/replacement of existing OHE on day to day basis before leaving to the work site as per programmed assigned by the depot in-charge, the unused materials and released materials should be handed over to the depot in-charge at depot premises after completion of day's work. **If the contractor fails to return such materials, the cost of such materials will be recovered at twice the book rate or twice the market rate enhanced plus Rs 5000/-.**

**G) Recovery Due To state of Intoxication**

While working, contractor's personnel should not smoke or consume any alcohol / liquor or be in a state of intoxication. In case if it is noticed any time that they are either smoking or under influence of intoxication, penalty of **Rs. 10,000/- per occasion per incident** shall be imposed to the contractor and the particular contractor's person shall not be allowed to duties further period of subject contract.

**The penalties as mentioned above may be imposed simultaneously.**

**1.2.57 SETTLEMENT OF DISPUTES - DFCCIL ARBITRATION RULES**

**1.2.58.1 Matters finally determined by the DFCCIL**

All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after its completion and whether before or after the determination of the contract, shall be referred by the contractor to the CGM/DDU /DFCCIL shall within 120 days after receipt of the contractor's representation make and notify decisions on all matters referred to by the contractor in writing provided that matter for which provision has been made in clauses or in any special clause of the conditions of the contract shall be deemed as "excepted matters" (matters not arbitrable) and decisions of the DFCCIL authority, thereon shall be final and binding on the contractor; provided further that "excepted matters" shall stand specifically excluded from the purview of the arbitration clause

**1.2.58.2 Demand for Arbitration:-**

1. In the event of any dispute or difference between the parties hereto as to the construction or operation of this contract, or the respective rights and liabilities of the parties on any matter in question, dispute or difference on any account or as to the withholding by the DFCCIL of any certificate to which the contractor may claim to be entitled to, or if the DFCCIL fails to make a decision within 120 days, then and in any such case, but except in any of the "excepted matters" referred to in clause 18.0 of these conditions, the contractor, after 120 days but within 180 days of his presenting his final claim on disputed matters shall demand in writing that the dispute or difference be referred to arbitration.
2. The demand for arbitration shall specify the matters which are in question, or subject of the dispute or difference as also the amount of claim item wise. Only such dispute or difference, in respect of which the demand has been made, together with counter claims or set off, given by the DFCCIL, shall be referred to arbitration and other matters shall not be included in the reference.
3. a) The arbitration proceedings shall be assumed to have commenced from the day, a

written and valid demand for arbitration is received by the DFCCIL.

- b) The claimant shall submit his claim stating the facts supporting the claims along with all the relevant documents and the relief or remedy sought against each claim within a period of 30 days from the date of appointment of the Arbitral Tribunal.
  - c) The DFCCIL shall submit its defence statement and counter claim(s), if any, within a period of 60 days of receipt of copy of claims from Tribunal thereafter, unless otherwise extension has been granted by Tribunal.
  - d) The place of arbitration would be New Delhi
4. No new claim shall be added during proceedings by either party. However, a party may amend or supplement the original claim or defence thereof during the course of arbitration proceedings subject to acceptance by Tribunal having due regard to the delay in making it.
5. If the contractor(s) does/do not prefer his/their specific and final claims in writing, within a period of 90 days of receiving the intimation from the DFCCILs/DFCCIL that the final bill is ready for payment, he/they will be deemed to have waived his/their claim(s) and the DFCCIL shall be discharged and released of all liabilities under the contract in respect of these claims.

#### **1.2.58.3 Obligation during Pendency of Arbitration:**

Work under the contract shall, unless otherwise directed by the Engineer, continue during the arbitration proceedings, and no payment due or payable by the DFCCIL shall be withheld on account of such proceedings, provided, however, it shall be open for Arbitral Tribunal to consider and decide whether or not such work should continue during arbitration proceedings.

#### **1.2.58.4 Appointment of arbitrator**

- a. i). In cases where the total value of all claims in question added together does not exceed Rs.25,00,000 (Rupees Twenty five lakhs only), the Arbitral tribunal shall consist of a sole arbitrator nominated by the MD/DFCCIL. The sole arbitrator shall be appointed within 60 days from the day when a written and valid demand for arbitrator is received by MD/DFCCIL .

ii). In cases not covered by the above clause, the Arbitral Tribunal shall consist of a Panel of three officials, as the arbitrators. For this purpose, the DFCCIL will

send a panel of more than 3 names of DFCCIL officers which may also include the name(s) of Officer(s) empanelled to work as Arbitrator to the contractor within 60 days from the day when a written and valid demand for arbitration is received by the MD/DFCCIL. Contractor will be asked to suggest to MD/DFCCIL at least 2 names out of the panel for appointment as contractor's nominee within 30 days from the date of dispatch of the request by DFCCIL. The MD/DFCCIL shall appoint at least one out of them as the contractor's nominee and will, also simultaneously appoint the balance number of arbitrators either from the panel or from outside the panel, duly indicating the „presiding arbitrator“ from amongst the 3 arbitrators so appointed. MD/DFCCIL shall complete this exercise of appointing the Arbitral Tribunal within 30 days from the receipt of the names of contractor's nominees. While nominating the arbitrators it will be necessary to ensure that one of them is from the Accounts department. An officer of selection grade of accounts department shall be considered of equal status to the officers in SA grade of other department of

DFCCIL for the purpose of appointment of arbitrator.

iii). If one or more of the arbitrators appointed as above refuses to act as arbitrator, withdraws from his office as arbitrator, or vacates his/their office/offices or is/are unable or unwilling to perform his functions as arbitrator for any reason whatsoever or dies or in the opinion of the MD/DFCCIL fails to act without undue delay, the MD/DFCCIL shall appoint new arbitrator/arbitrators to act in his/their place in the same manner in which the earlier arbitrator/arbitrators had been appointed. Such re-constituted Tribunal may, at its discretion, proceed with the reference from the stage at which it was left by the previous arbitrator(s).

iv). The arbitral Tribunal shall have power to call for such evidence by way of affidavits or otherwise as the arbitral Tribunal shall think proper, and it shall be the duty of the parties hereto to do or cause to be done all such things as may be necessary to enable the arbitral Tribunal to make the award without any delay. The arbitral Tribunal should record day-to-day proceedings. The proceedings shall normally be conducted on the basis of documents and written statements.

v). While appointing arbitrator(s) under sub-clause (i), (ii) & (iii) above, due care shall be taken that he/they is/are not the one/those who had an opportunity to deal with the matters to which the contract relates or who in the course of his/their duties as DFCCIL servant(s) expressed views on all or any of the matters under dispute or differences. The proceedings of the arbitral Tribunal or the award made by such Tribunal will, however, not be invalid merely for the reason that one or more arbitrator had, in the course of his service, opportunity to deal with the matters to which the contract relates or who in the course of his/their duties expressed views on all or any of the matters under dispute.

- a. i) The arbitral award shall state item wise, the sum and reasons upon which it is based. The analysis and reasons shall be detailed enough so that the award could be inferred there from.
- ii) A party may apply for corrections of any computational errors, any typographical or clerical errors or any other error of similar nature occurring in the award of a tribunal and interpretation of a specific point of award to tribunal within 60 days of receipt of the award.
- iii) A party may apply to tribunal within 60 days of receipt of award to make an additional award as to claims presented in the arbitral proceedings but omitted from the arbitral award.

**1.2.58.5** In case of the Tribunal, comprising of three Members, any ruling on award shall be made by a majority of Members of Tribunal. In the absence of such a majority, the views of the Presiding Arbitrator shall prevail.

**1.2.58.6** Where the arbitral award is for the 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.

**1.2.58.7** The cost of arbitration shall be borne by the respective parties. The cost shall inter alia include fee of the arbitrator(s), as per the rates fixed by the DFCCIL from time to time and the fee shall be borne equally by both the parties.

**1.2.58.8** Subject to the provisions of the aforesaid Arbitration and Conciliation Act 1996 and the rules there under and any statutory modifications thereof shall apply to the arbitration proceedings under this clause.

#### **1.2.58 SAFETY PRECAUTIONS TO BE TAKEN AT WORK SITE:**

The contractor shall not allow any road vehicle belonging to his or his Contractors etc. to ply in railway land next to the Railway line. If for execution of certain works, viz., earthwork and transportation of materials etc. road vehicles are necessary to be used in railway land next to the railway line the contractor shall apply to the Engineer-in-charge for permission giving the type and number of individual vehicles, names and license particulars of the drivers location duration and timings for such works/movement. The Engineer-in-charge or his authorized representative will personally counsel, examine and certify the road vehicle drivers, contractor's flagmen and Supervisor and will give written permission giving names of road vehicle drivers, contractor's flagmen and supervisor, to be deployed on the work, location, period and timing to the work. This permission will be subject to the following obligatory conditions.

- i) Road vehicles can ply along the track after suitable cordoning of track with minimum distance as per site condition and instructed by Engineer from the center of the nearest track. For ply of road vehicles during night hours, adequate measures to be communicated in writing along with a site sketch to the contractor/contractor's representative and controlling engineers/supervisors in charge of the work including officers and the in-charge of the sections.
- ii) Nominated vehicles and drivers will be utilized for work in the presence of at least one flagmen and one supervisor certified for such work. The flagmen/supervisor as required shall be arranged by contractor and no separate payment shall be made for this.
- iii) The Contractor shall remain fully responsible for ensuring safety and in case of any accident, shall bear cost of all damages to this equipment and men and also damages to railway and its passengers.

Engineer-in-charge may impose any other conditions necessary for a particular work or site.

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**PART -I****CHAPTER -III****PRICES AND PAYMENT****1.3.1 SCOPE**

This chapter deals with prices to be paid for supply and/or erection of various items of work or for suppliers and other amounts payable in accordance with accepted schedules of prices and rates and terms and conditions of payment mentioned herein. This is a works contract. The total prices for the completed items of work are the actual prices payable to the Contractor as per the terms and conditions of the contract.

**1.3.2 SCHEDULE OF PRICES**

(a) The unit rates given against various items of work in tender papers are the standard schedule of rates. The tenderers are required to quote uniform percentage below / at par / above against the total estimated cost of work. The actual payment to be made against any item of schedule of rates, shall be derived after loading the schedule of rates with the tenderer's quoted percentage. The prices so obtained shall be the unit prices for the various items of work given in schedule of rates.

**(b) UNIT PRICES FOR MATERIALS.**

The unit prices for supply indicated in the schedule of rates are inclusive of the prices of materials including all incidental charges for transport, loading/unloading and handling of materials, commission for arranging dispatch by rail/road direct from manufacturer's factory and completing all necessary formalities in this respect, such as submission of forwarding notes, arranging placement of wagons, collection of railway/DFCCIL receipt, conservancy charges as applicable from time to time, all insurance premium, bankers charges for bank guarantee, indemnity bonds inclusive of cost of stamps, etc. as also siding or shunting charges, if any levied by the Railway/DFCCIL. The unit prices includes all taxes, duties and levies (include Works Contract Tax) applicable on this works contract. Therefore, they should quote their prices taking into account the rate of taxes as leviable in the event of sale through works contract to the Central Railway Organization in that state and present tax structure applicable. Necessary, Sales Tax concessional Form A/D and Octroi exemption certificate will be issued by DFCCIL/Railways on written request of the contractor. No reimbursement on account of Octroi duty will be entertained by the purchaser. The price are inclusive of provision for losses and wastages in transit and erection.

**(c) OTHER PRICE ADJUSTMENT**

The price adjustment of unit prices or prices of fittings, materials, equipment or components on account of prices fluctuation of raw materials will be permitted as per para-1.3.18. No adjustment on account of variation in insurance and freight charges (Road or Rail) will be permitted.

**(d) QUANTITIES**

The approximate estimated quantities of various items or works are included in Schedule. However, the contractor will work out the quantities based on approved drawing for schedule and get it approved from the purchaser before placing order.

**(e) EXPLANATORY NOTES**

Explanatory notes for various items of work included in Schedule, are given in Part-I, Chapter-IV.

**1.3.3 NON-SCHEDULE & ADDITIONAL SUPPLIES:****1.3.3.1 NON-SCHEDULE ITEMS:**

i) If during the execution of the work, the contractor is called upon to carry out any new item of work not included in Schedules, the contractor shall execute such works at such price as may be mutually agreed with the Purchaser before commencement after obtaining the

competent authority's approval and sanction. The rates will be based on the Rly's LOA/rate analysis as per the current market / prevalent rates of such or similar items available with the DFCCIL/Railway Administration in that or nearby areas.

ii) Provided that if the Contractor commence work or incurs any expenditure in regard thereto before the rates are determined and agreed upon as lastly hereon-to-fore mentioned, then and in such a case the Contractor shall only entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of determination of the rates as aforesaid according to the rates as shall be by the Purchaser. However, if the contractor is not satisfied with the decision of the Purchaser in this respect, he may appeal to Chief General Manager within 30 days of getting the decision of the Purchaser, supported by analysis of the rates claimed. The Chief General Manager's decision after hearing both the parties in the matter would be final and binding on the contractor and the DFCCIL.

#### **1.3.3.2 PRICE OF ADDITIONAL SUPPLIES:**

The additional supplies of individual scheduled items, if necessary, will be taken over from the contractor at the rate of the bid received.

#### **1.3.4 PAYMENTS AND RECOVERIES:**

a) No advance payment shall be made to the contractor. However, on account payment will be made against receipt of materials at site and also progressive payments will be made for each item of work during the erection stage.

b) Subject to any deductions or recoveries which the purchaser be entitled to make under the Contract, the contractor shall unless otherwise agreed to been titled to get the following payments subject to conditions stipulated in subsequent paragraphs.

i) Progress payments for supply and erection

iii) Payments for additional supplies

iv) Payment for provisional acceptance

v) Payment for surplus materials taken over

vi) Payment for T&P and Maintenance Spares.

vi) Final settlement.

#### **1.3.5 INVOICING PROCEDURE:**

(a) The contractor shall submit his invoicing procedure for approval by the purchaser's representative within two months from the date of receipt of letter of acceptance of tender. Separate invoices shall be submitted for different type of payments mentioned above. All invoices shall be submitted with original supporting documents or certified true copies of supporting documents wherever these are acceptable to the purchaser's engineer. Where copies of original documents are required in support of several invoices, true certified copies of the original documents may be forwarded to the purchaser's engineer with his consent.

(b) Invoices shall be submitted only on the basis of agreed principles and prices, quantities and measurement of works completed shall be approved by the purchaser's engineer prior to the submission of invoices. For this purpose, the Schedule of quantities and measurements submitted by the contractor for approval of the purchaser's engineer may be only up to the extent of work.

(c) All invoices /Bills shall be accompanied by the following

1. Supplier Challans

2. Commissioning certificate granted by the concern Engineer Incharge's authorized representative

3. Certificate of receipt of material duly accepted by the concern Engineer Incharge's authorized representative

#### **1.3.6 TERMS OF PAYMENT**

##### **A. Payment**

**A.1** Payments for erection and commissioning included in schedule shall be made in stages as under;



- a. **100%** payment as per rates indicated in schedule along with percentage accepted will be made after Execution of work (Schedule-1 & Schedule-2).

**1.3.7 Payment for additional supplies:**

The contractor shall receive payment for additional supplies and erection in accordance with conditions stipulated in Para 1.3.3.1.

**1.3.8 Final settlement:** On Successful completion of guarantee period and issue of certificate of final acceptance of entire installations, the security deposit will be refunded /returned to the contractor after adjustment of any dues payable by the contractor to the purchaser.

**1.3.9 MEASUREMENTS:**

(a) Payments for field work shall be made in accordance with approved designs and drawings and measured in relevant units, except where provided for otherwise. In case the dimensions of the work are more than those shown in approved designs and drawings, the contractor will not be entitled to any

extra payment, unless dimensions were increased on account of physical impossibility of carrying out the work in accordance with approved drawings and designs. In case the dimensions of the work are less than those shown in the approved designs and the drawings and the work is accepted without being rejected, payment will be made as per work actually done.

(b) The measurement will be made generally in accordance with standard engineering practice conformity with the Explanatory notes for Schedule in Part-I, Chapter- IV of the tender documents.

**1.3.10 TAXES:**

(a) The Contractor and all personnel employed by him shall pay such taxes like income tax as are payable under statutory laws of India and the Purchaser will not accept any liability for the same.

(b) Deduction of income tax at source as per provision of finance act and income tax act in force may be made from the Contractor/sub-Contractor and the amount so deducted may be credited to the Central Government.

(c) Tenderers will examine the various provisions of the Central Goods and Services Tax Act 2017 (CGST) goods and Services Tax Act, 2017 (IGST)/ Union territory Goods and services Tax Act, 2017 (UTGST)/ respective state's State Goods and Services Tax Act (SGST)also as notified by Central/State Govt & as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.

(d) The successful tenderer 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 railway immediately after 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 the concerned authority.

(e) In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the railway shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority.

**1.3.11RELEASE OF PERFORMANCE GUARANTEE:**

The Performance Guarantee (PG) shall be **released after physical completion of the work** based on 'Completion Certificate' issued by the competent authority stating that the Contractor has completed the work in all respects satisfactorily.

**1.3.12 RELEASE OF SECURITY DEPOSIT:**

Security Deposit shall be returned to the Contractor after the following:

- (a) Final Payment of the Contract as per relevant GCC clause and
- (b) Signature of Final Supplementary Agreement or Certification by Engineer that DFCCIL has No Claim on Contractor and
- (c) Issue of Maintenance Certificate on expiry of the maintenance period as per relevant GCC clause.

**Forfeiture of Security Deposit:**

Whenever the contract is rescinded as a whole under relevant GCC clause, the Security Deposit already with Railways/DFCCIL under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under relevant GCC clause the Security Deposit shall not be forfeited.

No interest shall be payable upon the Earnest Money (if any) and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited, will be payable with interest accrued thereon as per relevant GCC –Clause.

**1.3.13 RATES FOR ITEMS OF WORKS:**

(i) The rates, entered in the accepted Schedule of Rates of the Contract are intended to provide for works duly and properly completed in accordance with the General and Special (if any) Conditions of the Contract and the Specifications and drawings together with such enlargements, extensions, diminutions, reductions, alterations and without prejudice to the generality thereof and shall be deemed to include and cover superintendence and labour, supply, including full freight of materials, stores, patterns, profiles, moulds, fittings, centerings, scaffolding, shoring props, timber, machinery, barracks, tackle, roads, pegs, posts, tools and all apparatus and plant required on the works, except such tools, plant or materials as may be specified in the contract to be supplied to the Contractor by the Railway, the erection, maintenance and removal of all temporary works and buildings, all watching, lighting, bailing, pumping and draining, all prevention of or compensation for trespass, all barriers and arrangements for the safety of the public or of employees during the execution of works, all sanitary and medical arrangements for labour camps as may be prescribed by the DFCCIL, the setting of all work and of the construction, repair and upkeep of all centre lines, bench marks and level pegs thereon, site clearance, all fees duties, royalties, rent and compensation to owners for surface damage or taxes and impositions payable to local authorities in respect of land, structures and all material supplied for the work or other duties of or expenses for which the Contractor may become liable or may be put to under any provision of law for the purpose of or in connection with the execution of the contract and all such other incidental charges or contingencies as may have been specially provided for in the Specifications.

However, if rates of existing GST or cess on GST for Works Contract is increased or any new tax /cess on Works Contract is imposed by Statute after the date of opening of tender but within the original date of completion/date of completion extended under relevant GCC clause and the Contractor thereupon properly pays such taxes/cess, the Contractor shall be reimbursed the amount so paid.

Further, if rates of existing GST or cess on GST for Works Contract is decreased or any tax/cess on Works Contract is decreased / removed by Statute after the date of opening of tender, the reduction in tax amount shall be recovered from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.

**PRICE VARIATION CLAUSE** in Works Contracts is dealt with in accordance with provisions of **GCC July 2020 with latest amendments & correction slips.**

**1.3.14 Maintenance of Works:** The Contractor shall at all times during the progress and continuance of the works and also for the period of maintenance specified in the Tender Form



after the date of issue of the certificate of completion by the Engineer or any other earlier date subsequent to the completion of the works that may be fixed by the Engineer, be responsible for and effectively maintain and uphold in good substantial, sound and perfect condition all and every part of the works and shall make good from time to time and at all times as often as the Engineer shall require, any damage or defect that may during the above period arise in or be discovered or be in any way connected with the works, provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil riot, and the Contractor shall be liable for and shall pay and make good to the Railway/DFCCIL or other persons legally entitled thereto whenever required by the Engineer so to do, all losses, damages, costs and expenses they or any of them may incur or be put or be liable to by reasons or in consequence of the operations of the Contractor or of his failure in any respect.

**1.3.14.1 Certificate of Completion of Works:** As soon as in the opinion of the Engineer, the work has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Engineer shall issue a certificate of completion duly indicating the date of completion in respect of the work and the period of maintenance of the work shall commence from the date of completion mentioned in such certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to Railways/DFCCIL against the contract concerned.

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

**1.3.14.2 Contractor not Absolved by Completion Certificate:** The Certificate of Completion in respect of the works referred to in Sub-Clause (1) of this Clause shall not absolve the Contractor from his liability to make good any defects imperfections, shrinkages or faults which may appear during the period of maintenance specified in the tender arising in the opinion of the Engineer from materials or workmanship not in accordance with the drawings or specifications or instruction of the Engineer, which defects, imperfections, shrinkages or faults shall upon the direction in writing of the Engineer be amended and made good by the Contractor at his own cost; and in case of default on the part of Contractor, the Engineer may employ labour and materials or appoint another Contractor to amend and make good such defects, imperfections, shrinkages and faults and all expenses consequent thereon and incidental thereto shall be borne by the Contractor and shall be recoverable from any moneys due to him under the contract.

**1.3.14.3 Final Supplementary Agreement:** After the work is completed and taken over by the DFCCIL as per terms and conditions of the contract agreement or otherwise concluded by the parties with mutual consent and full and final payment is made by the DFCCIL to the Contractor for work done, and there is unequivocal no claim on either side under the contract, the parties shall execute the final supplementary agreement annexed as **Annexure IV**.

**1.3.15 Approval only by Maintenance Certificate:** No certificate other than maintenance certificate referred to in relevant Clause of GCC of the Conditions shall be deemed to

constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the contract or any part thereof.

**1.3.15.1 Maintenance Certificate:** The Contract shall not be considered as completed until a Maintenance Certificate shall have been signed by the Engineer stating that the works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the Engineer upon the expiration of the period of maintenance or as soon thereafter as any works ordered during such period.

The Competent Authority to issue above Maintenance Certificate shall normally be the authority who is competent to sign the contract. If this Competent Authority is of the rank lower than JA Grade, then a JA Grade Officer (concerned with the work) should issue the certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to Railway/DFCCIL against the contract concerned.

**1.3.15.2 Cessation of Railway's/DFCCIL's Liability:** The Railway/DFCCIL shall not be liable to the Contractor for any matter arising out of or in connection with the contract for execution of the works unless the Contractor has made a claim in writing in respect thereof before the issue of the Maintenance Certificate under this clause.

**1.3.15.3 Unfulfilled Obligations:** Notwithstanding the issue of the Maintenance Certificate the Contractor and the Railway/DFCCIL shall remain liable for the fulfillment of any obligation incurred under the provision of the contract prior to the issue of the Maintenance Certificate which remains unperformed at the time such certificate is issued and for the purposes of determining the nature and extent of any such obligations, the contract shall be deemed to remain in force between the parties thereto.

**1.3.16.1 Final Payment:** On the Engineer's certificate of completion in respect of the works, adjustment shall be made and the balance of account based on the Engineer or the Engineer's representative's certified measurements or Engineer's certified "contractor's authorized engineer's measurements" of the total quantity of work executed by the Contractor upto the date of completion and on the accepted schedule of rates and for extra works on rates determined shall be paid to the Contractor subject always to any deduction which may be made under these presents and further subject to the Contractor having signed delivered to the Engineer enclosing either a full account in detail of all claims he may have on the Railway/DFCCIL in respect of the works or having delivered No Claim Certificate. and the Engineer having after the receipt of such account given a certificate in writing that the whole of the works to be done under the provisions of the Contracts have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, that all properties, works and things, removed, disturbed or injured in consequence of the works have been properly replaced and made good and all expenses and demands incurred by or made upon the Railway/DFCCIL for or in the respect of damage or loss by from or in consequence of the works, have been satisfied agreeably and in conformity with the contract.

**1.3.16.2 Post Payment Audit:** It is an agreed term of contract that the DFCCIL reserves to itself the right to carry out a post-payment audit and/ or technical examination of the works and the final bill including all supporting vouchers, abstracts etc. and to make a claim on the Contractor for the refund of any excess amount paid to him till the release of security deposit or settlement of claims, whichever is later, if as a result of such examination any over-payment to him is discovered to have been made in respect of any works done or alleged to have been done by him under the contract.

### **1.3.17 PRODUCTION OF VOUCHERS ETC BY THE CONTRACTOR:**

(i) For a contract of more than one crore of rupees, the Contractor shall, whenever required, produce or cause to be produced for examination by the Engineer any quotation, invoice, cost or other account, book of accounts, voucher, receipt, letter, memorandum, paper of writing or any copy of or extract from any such document and also furnish information and returns verified in such manner as may be required in any way relating to the execution of this contract or relevant for verifying or ascertaining cost of execution of this contract (the decision of the Engineer on the question of relevancy of any documents, information or return being final and binding in the parties). The Contractor shall similarly produce vouchers etc, if required to prove to the Engineer, that materials supplied by him, are in accordance with the specifications laid down in the contract.

(ii) If any portion of the work in a contract of value more than one crore of rupees be carried out by a sub-contractor or any subsidiary or allied firm or company, the Engineer shall have power to secure the books of such sub-contract or any subsidiary or allied firm or company, through the Contractor, and such books shall be open to his inspection.

(iii) The obligations imposed by Sub Clause (i) & (ii) above is without prejudice to the obligations of the Contractor under any statute rules or orders binding on the Contractor.

### **1.3.18 LABOUR:**

**1.3.18.1 Wages to Labour:** The Contractor shall be responsible to ensure compliance with the provision of the Minimum Wages Act, 1948 (hereinafter referred to as the “said Act”) and the Rules made there under in respect of any employees directly or through petty Contractors or sub-contractors employed by him for the purpose of carrying out this contract.

If, in compliance with the terms of the contract, the Contractor supplied any labour to be used wholly or partly under the direct orders and control of the Railways whether in connection with any work being executed by the Contractor or otherwise for the purpose of the Railway such labour shall, for the purpose of this Clause, still be deemed to be persons employed by the Contractor.

If any moneys shall, as a result of any claim or application made under the said Act be directed to be paid by the Railway, such money shall be deemed to be moneys payable to the Railway by the Contractor and on failure by the Contractor to repay the Railway any moneys paid by it as aforesaid within seven days after the same shall have been demanded, the Railways shall be entitled to recover the same from Contractor’s bills/Security Deposit or any other dues of Contractor with the Government of India.

**1.3.18.2 Apprentices Act:** The Contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act, 1961 and the Rules and Orders issued thereunder from time to time in respect of apprentices directly or through petty Contractors or sub-contractors employed by him for the purpose of carrying out the Contract.

If the Contractor directly or through petty Contractors or sub-contractors fails to do so, his failure will be a breach of the contract and the Railway may, in its discretion, rescind the contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the Act.

**1.3.18.3 Provisions of Payments of Wages Act:** The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 or latest and the rules made there under in respect of all employees employed by him either directly or through petty Contractors or sub-contractors in the works. If in compliance with the terms of the contract, the Contractor directly or through petty Contractors or sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer, such labour shall nevertheless be deemed to comprise persons employed by the Contractor and any moneys which may be ordered to be paid by the Engineer shall be deemed to be moneys payable by the Engineer on behalf of the Contractor and the Engineer may on failure of the Contractor to repay such money to the Railways deduct the same from any moneys due to the Contractor in terms of the contract. The Railway shall be entitled to recover the same from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India all moneys paid or payable by the Railway by way of compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this Clause shall be final and binding upon the Contractor.

**1.3.18.4 Provisions of Contract Labour (Regulation and Abolition) Act, 1970:**

- (1) The Contractor shall comply with the provision of the contract labour (Regulation and Abolition) Act, 1970 and the Contract labour (Regulation and Abolition) Central Rules 1971 as modified from time to time, wherever applicable and shall also indemnify the Railway from and against any claims under the aforesaid Act and the Rules.
- (2) The Contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill the requirement shall attract the penal provision of the Act.
- (3) The Contractor shall pay to the labour employed by him directly or through sub-contractors the wages as per provision of the aforesaid Act and the Rules wherever applicable. The Contractor shall notwithstanding the provisions of the contract to the contrary, cause to be paid the wages to labour, indirectly engaged on the works including any engaged by sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- (4) In respect of all labour directly or indirectly employed in the work for performance of the Contractor's part of the contract, the Contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and Rules wherever applicable.
- (5) In every case in which, by virtue of the provisions of the aforesaid Act or the rules, the Railway is obliged to pay any amount of wages to a workman employed by the Contractor or his sub-contractor in execution of the work or to incur any expenditure on account of the contingent, liability of the Railway due to the Contractor's failure to fulfill his statutory obligations under the aforesaid Act or the rules, the Railway will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred and without prejudice to the rights of the Railway under the Section 20, Sub-Section (2) and Section 2, Sub-Section (4) of the aforesaid Act, the Railway shall be at liberty to recover such amount or part thereof from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India. The Railway shall not be bound to contest any claim made against it under Sub-Section (1) of Section 20 and Sub-Section (4) of Section 21 of the aforesaid Act except on the written request of the Contractor and upon his giving to the Railway full security for all costs for which the Railway might become liable in contesting such claim. The decision of the Chief Electrical Engineer regarding the amount actually recoverable from the Contractor as stated above shall be final and binding on the Contractor.

**1.3.18.5 Provisions of Employees Provident Fund and Miscellaneous Provisions Act, 1952:**

The Contractor shall comply with the provisions of Para 30 & 36-B of the Employees Provident Fund Scheme, 1952; Para 3 & 4 of Employees' Pension Scheme, 1995; and Para 7 & 8 of Employees Deposit Linked Insurance Scheme, 1976; as modified from time to time through enactment of "Employees Provident Fund & Miscellaneous Provisions Act, 1952", wherever applicable and shall also indemnify the Railway from and against any claims under the aforesaid Act and the Rules.

**1.3.18.6** Contractor is to abide by the provisions of Payment of Wages act & Minimum Wages act in terms Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/ updation of Portal shall be done as under:

- (a) Contractor shall apply for one time registration of his company/firm etc. in the **Shramikkalyan portal** with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration in the portal within 7 days of receipt of such request.
- (b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
- (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LOA) / Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
- (d) After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
- (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
- (f) While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or 'Performance Guarantee / Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at '[www.shramikkalyan.indianrailways.gov.in](http://www.shramikkalyan.indianrailways.gov.in)' till\_Month,\_Year."

**1.3.18.7 Provisions of "The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996" and "The Building and Other Construction Workers' Welfare Cess Act, 1996":**

The tenderers, for carrying out any construction work, shall get themselves registered with the Registering Officer under Section-7 of the Building and Other Construction Workers Act, 1996 and rules made thereto by the concerned State Govt., and submit certificate of Registration issued from the Registering Officer of the concerned State Govt. (Labour Dept.). The Cess shall be deducted from contractor's bills as per provisions of the Act.



**1.3.18.8 Reporting of Accidents:** The Contractor shall be responsible for the safety of all employees directly or through petty Contractors or sub-contractor employed by him on the works and shall report serious accidents to any of them however and wherever occurring on the works to the Engineer or the Engineers Representative and shall make every arrangements to render all possible assistance.

**1.3.18.9 Provision of Workmen's Compensation Act:** In every case in which by virtue of the provisions of Section 12 Sub-Section (1) of the Workmen's Compensation Act 1923, Railway is obliged to pay compensation to a workman directly or through petty Contractor or sub-contractor employed by the Contractor in executing the work, Railway will recover from the Contractor the amount of the compensation so paid, and, without prejudice to the rights of Railway under Section 12 Sub-section (2) of the said Act, Railway shall be at liberty to recover such amount or any part thereof from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India. Railway shall not be bound to contest any claim made against it under Section 12 Sub-Section (1) of the said Act except on the written request of the Contractor and upon his giving to Railway full security for all costs for which Railway might become liable in consequence of contesting such claim.

**1.3.18.10 Provision of Mines Act:** The Contractor shall observe and perform all the provisions of the Mines Act, 1952 or any statutory modifications or re-enactment thereof for the time being in force and any rules and regulations made thereunder in respect of all the persons directly or through the petty Contractors or sub-contractors employed by him under this contract and shall indemnify the Railway from and against any claims under the Mines Act, or the rules and regulations framed thereunder, by or on behalf of any persons employed by him or otherwise.

**1.3.19 DETERMINATION OF CONTRACT:**

**1.3.19.1 Right of Railway/DFCCIL to Determine the Contract:** The Railway/DFCCIL shall be entitled to determine and terminate the contract at any time, should in the Railway's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the Railway of such determination and the reasons therefore shall be conclusive evidence thereof.

**1.3.19.2 Payment on Determination of Contract:** Should the contract be determined under sub clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the Railways/DFCCIL shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The Railway's/DFCCIL's decision on the necessity and propriety of such expenditure shall be final and conclusive.

**1.3.19.3** The Contractor shall have no claim to any payment of compensation or otherwise, howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.

**1.3.19.4 Determination of Contract owing to Default of Contractor:**

If the Contractor should:

- (i) Becomes bankrupt or insolvent, or
- (ii) Make an arrangement for assignment in favour of his creditors, or agree to carry out the contract under a Committee of Inspection of his creditors, or
- (iii) Being a Company or Corporation, go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or
- (iv) Have an execution levied on his goods or property on the works, or

- (v) Assign the contract or any part thereof otherwise than as provided in Clause 7 of these Conditions, or
- (vi) Abandon the contract, or
- (vii) Persistently disregard the instructions of the Engineer, or contravene any provision of the contract, or
- (viii) Fail to adhere to the agreed program of work by a margin of 10% of the stipulated period, or
- (ix) Fail to execute the contract documents.
- (x) Fails to submit the documents pertaining to identity of JV and PAN. Form available in the Regulations for Tenders and Contracts.
- (xi) Fail to remove materials from the site or to pull down and replace work after receiving from the Engineer notice to the effect that the said materials or works have been condemned or rejected.
- (xii) Fail to take steps to employ competent or additional staff and labour as required.
- (xiii) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required.
- (xiv) Promise, offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of the Railway/DFCCIL or to any person on his or on their behalf in relation to the execution of this or any other contract with this Railway.
- (xv)(A) At any time after the tender relating to the contract, has been signed and submitted by the Contractor, being a partnership firm admit as one of its partners or employee under it or being an incorporated company elect or nominate or allow to act as one of its directors or employee under it in any capacity whatsoever any retired Engineer of the gazetted rank or any other retired gazetted officer working before his retirement, whether in the executive or administrative capacity, or whether holding any pensionable post or not, in the Railways/DFCCIL for the time being owned and administered by the President of India before the expiry of one year from the date of retirement from the said service of such Engineer or Officer unless such Engineer or Officer has obtained permission from the President of India or any officer duly authorized by him in this behalf to become a partner or a director or to take employment under the contract as the case may be, or
- (xv)(B) Fail to give at the time of submitting the said tender:
  - (a) The correct information as to the date of retirement of such retired Engineer or retired officer from the said service, or as to whether any such retired Engineer or retired officer was under the employment of the Contractor at the time of submitting the said tender, or
  - (b) The correct information as to such Engineers or officers obtaining permission to take employment under the Contractor, or
  - (c) Being a partnership firm, the correct information as to, whether any of its partners was such a retired Engineer or a retired officer, or
  - (d) Being in incorporated company, correct information as to whether any of its directors was such a retired Engineer or a retired officer, or
  - (e) Being such a retired Engineer or retired officer suppress and not disclose at the time of submitting the said tender the fact of his being such a retired Engineer or a retired officer or make at the time of submitting the said tender a wrong statement in relation to his obtaining permission to take the contract or if the Contractor be a partnership firm or an incorporated company to be a partner or director of such firm or company as the case may be or to seek employment under the Contractor.

(f) Submits copy of fake documents / certificates in support of credentials, submitted by the tenderer

Then and in any of the **said Clause**, the Engineer/Authorised representative on behalf of the Railway/DFCCIL may serve the Contractor with a notice in writing to that effect and if the Contractor does not within seven days after the delivery to him of such notice proceed to make good his default in so far as the same is capable of being made good and carry on the work or comply with such directions as aforesaid of the entire satisfaction of the Engineer, the Railway shall be entitled after giving 48 hours' notice in writing under the hand of the Engineer to rescind the contract as a whole or in part or parts (as may be specified in such notice) and after expiry of 48 hours' notice, a final termination notice should be issued.

**1.3.19.5 Right of Railway/DFCCIL after Rescission of Contract owing to Default of Contractor:** In the event of any or several of the clauses, referred to in Sub-Clause (1) of this Clause, being adopted:

(a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and Contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under the contract unless and until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.

(b) In the contract which has been rescinded as a whole, the Security Deposit already with railways under the contract shall be encashed/ forfeited and the Performance Guarantee already submitted for the contract shall be encashed. The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.

Further the authorized representative of failed Contractor cannot be accepted as authorized representative in new contract.

(c) In the contract rescinded in part or parts,

(i) The full Performance Guarantee for the contract shall be recovered. No additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract. The contract value of part terminated contract stands reduced to the balance value of work under the contract.

(ii) The Security Deposit of part terminated contract shall be dealt as per relevant clause of GCC.

(iii) The defaulting Contractor shall not be issued any completion certificate for the contract.

(iv) The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.



(v) Further the authorized representative of failed Contractor will not be accepted as authorized representative in new contract.

(d) The Engineer or the Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.

(e) The Engineer shall as soon as may be practicable after removal of the Contractor fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) had at the time of rescission of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract and what was the value of any unused, or partially used materials, any constructional plant and any temporary works upon the site. The legitimate amount due to the Contractor after making necessary deductions and certified by the Engineer should be released expeditiously.

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## PART – I

### CHAPTER- IV

#### SCOPE OF WORK & EXPLANATORY NOTES

##### 1.4.1 Scope of Work :

The scope of work covers “**Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO/DDU**”.

##### 1.4.2 Explanatory Notes on the schedule items :

Explanatory notes are given below for all items given in schedule of prices for the guidance of tenderer.

##### : GENERAL :

a)	Wherever an item of work covers erection, such item shall include all bolts, nuts and washers of GI/SS etc. as per DFCCIL latest specification & drawing. No separate payment for fabrication of materials for using in maintenance / replacement purpose is admissible.
b)	Erection of any item of equipment, which is supplied by the contractor, will include testing, commissioning and bringing the equipment into operation to the entire satisfaction of the purchaser.
c)	The basic quantity of components and materials required to make up a unit of work for the selected items are indicated for guidance only. There may be minor variation to suit erection but no adjustment in prices shall be made on that account. Prices quoted shall be inclusive of all incidental charges viz. freight, handling, taxes, duties, insurance, GST if any and works contract tax as a applicable etc.
d)	All OHE & PSI components are to be supplied by the DFCCIL. However loading/unloading of the components/spares/T&P etc should be done by Contractors staff.
e)	All works shall be carried out strictly in accordance to the DFCCIL drawings, specifications and guidelines if any. However, any modified arrangement if in vogue in DFCCIL or suggested by CGM/DDU, the work shall be executed accordingly without any alteration in accepted rates.
f)	Explanatory note for various items of works in the Schedule of item, quantities and prices are given below. The Checking and maintenance of all items of 2x25kV OHE including AOH & POH as case may be shall be carried out in line with maintenance manual and as per Latest Maintenance Manual of Railway/DFCCIL. No additional payment will be made for any additional man power deployment in attending to latest maintenance instructions, if any. In-case of disputes between above standards if any, the decision of concerned CGM/DDU is the final and contractor is bound to act accordingly.
g)	Contractor shall get tested each insulators for tensile strength at DFCCIL’s testing machine based on maintenance manual of DFCCIL. However, no charge will be levied for usage of machine for testing. All tested insulator shall marked “T” with date with “RED” paint.
h)	The special condition & Technical specifications for schedule items are enclosed and Tenderer shall go through them thoroughly before submitting offer.
i)	Power cum Traffic block for various maintenance activities shall be arranged by DFCCIL either in daytime / nighttime as per slot available in the section. During Power and Traffic Block of OHE/PSI necessary discharging/earthing of system/equipment shall be done by Contractor Staff under the supervision of DFCCIL representative. No additional payment will be made for night working.
k)	<i>Tax/GST if claimed by the contractor will be processed separately after finance concurrence and sanctioned by the competent authority.</i>

## PARTICULARS OF SCHEDULE OF ITEMS

### Schedule 1: Part A

<b>Sch.1 SI. No. 1</b>	<b>Checking &amp; Maintenance of Cantilever assembly</b>
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The Checking and Maintenance of Cantilever assembly shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL with its latest correction slips, if any

The price shall cover checking & maintenance of Cantilever assembly including all components, Stay & Bracket insulators, dropper wires and copper wires include small parts steelwork and carrying out periodic over hauling work of cantilever along with Zylot testing of non-ferrous parts. However, this does not include the anti creep arrangement at masts / structures.

Price shall also cover erection of new cantilever assembly including Stay & Bracket insulators. Price shall cover measurement and recording of all OHE parameters, make, Sr.No., batch no. etc. of various OHE components. Cantilever Maintenance sheets to be signed by both DFCCIL and contract representatives. The work shall be carried out as and when required by Engineer in-charge during the contract period.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI. No. 2</b>	<b>Checking &amp; Maintenance of 2x25kV OHE Conductors</b>
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The Checking and maintenance of 2x25kV OHE Conductors shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL with its latest correction slips, if any.

The price shall include checking of 2x25kV OHE Masts, Portal structures, Bridge masts, Special masts if any etc, OHE Conductors for final adjustment & inspection of OHE stagger, heights of conductors at turnout / crossover, removal of kinks and knots, adjustment of OHE as per SED. Tower wagon will be provided by DFCCIL.

The price shall include Checking and adjustment of contact wire parallel clamp, contact wire dropper clip, catenary wire dropper clip complete with bolts, nuts etc., catenary ending clamp, large span wire clamp, adjuster, anchor double strap assembly, compensating plate / equalizing plate, caution boards, number plates etc.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge/DFCCIL and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No. 3</b>	<b>Checking &amp; Maintenance of all types of 2x25kV OHE Jumpers</b>
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The Checking and maintenance of 2x25kV OHE Jumpers shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL with its latest correction slips, if any.

The price shall cover checking and maintenance of all types of 2x25kV OHE Jumpers including special arrangement at support & terminal fittings for conductors including adjustable and Jumper

wires. The price shall cover adjustment of all components including PG clamp and Jumper wires on the OHE& shaping etc. Price shall also cover replacement of any jumper assembly complete if required, and no extra payment will be made for this replacement.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge//Authorised representative/DFCCIL and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No. 4</b>	<b>Checking &amp; Maintenance of Overlaps (IOL/UIOL)</b>
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The Checking and maintenance of Overlaps (IOL/UIOL) shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL with its latest correction slips, if any.

The price shall cover checking and maintenance of all components and fittings with fasteners installed at Overlaps (insulated or uninstalled) including overlaps for jumper connections between two sets of overhead equipment conductor at overlaps or neutral section good length of sweeping zone to be achieved. The price shall also cover checking and maintenance of all materials including different types of jumpers, insulator and all adjustments required at crossing, overlaps and neutral section whenever required. The price shall cover checking of potential equalizer jumpers at insulated overlaps. The price shall also cover replacement of different types of jumpers complete, if required and no extra payment will be made for this replacement.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No. 5</b>	<b>Checking &amp; Maintenance of Anti creep arrangement</b>
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The Checking and maintenance of Anti creep arrangement shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL with its latest correction slips, if any.

The price shall cover checking and maintenance of all materials for anti creep including adjusters, mast anchor fittings with bolts & nuts etc. at its termination on either side on structures ending clamps, Guy rod assembly and other fitting viz single clevis assembly, anchor double strap assembly, double suspension clamp, double eye distance rod and 9 ton insulator, anti-creep wire. The price shall also cover checking/cleaning of muffing of anchor block of guy rod assembly.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No. 6</b>	<b>Checking &amp; Maintenance of 2x25kV Isolator (SP/DP) including earthing heel arrangement if any</b>
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The Checking and maintenance of Motorised Isolator assembly shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips, if any

The price shall cover checking and maintenance of 2x25kV Isolator ( SP/DP) switch complete with post insulators, bus bar and related small part steel, operating rod, operating rod guides and operating rod insulator, mounting base, arcing horns, integral lock etc. including earthing heel arrangement and motorized unit if any. The earthing heel provision if any or earth electrode, including all fastenings at both ends. Inspection of earths pits, watering of all earth pits and recording earth resistance. Earths

having resistance of over 10 ohms should be attended to as per the provisions made in maintenance manual of DFCCILs with its latest correction slips if any. The required coke, crushed coal and salt will be supplied by DFCCILs at no cost to the contractor.

The price shall include for making jumper connection with OHE, if required. The price shall also cover erection of the new 2x25kV Isolator (SP/DP) assembly complete on OHE mast / structure gantries including erection of jumper, bus bar, if required and no extra payment will be made for this replacement.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No. 7</b>	<b>Checking &amp; Maintenance of 2x25kV OHE at Turnouts</b>
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The Checking and maintenance of 2x25kV OHE at Turnouts shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips, if any

The price shall cover checking and maintenance of all components and fittings with fasteners installed in 25kV OHE at turnouts including knuckle or crossing equipment at a turnout and parallel clamps for jumper connections between two sets of overhead equipment conductor at a turnout. The price shall also cover maintenance of jumper wire and all adjustments required at turnouts, crossing whenever required. Turnouts Maintenance sheets to be signed by both Railway and contract representatives.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No. 8</b>	<b>Checking &amp; Maintenance of 2x25kV OHE on a crossover</b>
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The Checking and maintenance of 2x25kV OHE on a crossover shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips, if any

The price shall cover checking and maintenance of all components and fittings with fasteners installed in 25kV OHE on a crossover including knuckle or crossing equipment at both side turnouts or a diamond crossing and parallel clamps for jumper connections between two sets of overhead equipment conductor. The price shall also cover maintenance of jumper wire, section Isolator assembly on crossover and all adjustments required at both turnouts of cross over, crossing whenever required. Cross over Maintenance sheets to be signed by both Railway and contract representatives.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's Representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No.9</b>	<b>Checking &amp; Maintenance of Section Insulator assembly</b>
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The Checking and maintenance of Section Insulator assembly shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips, if any.

The price shall cover checking and maintenance of all components including the core insulating rod installed section insulator assembly including special arrangement at support & terminal fittings for conductors including adjustable dropper wire. The price shall cover adjustment of all components including 9 ton insulator on the catenary & leveling of runners etc. Price shall also cover replacement of section insulator assemble complete, if required and no extra payment will be made for this replacement.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No. 10</b>	<b>Checking &amp; Maintenance of Auto Tensioning Device (ATD)</b>
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The Checking and maintenance of Auto Tensioning Device (ATD) shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips, if any.

The price shall cover checking and overhauling of Auto Tensioning Device (ATD) provided in the section including 9 ton adjuster with double strap assembly and normal/anti-theft guide tube assembly, stainless steel wire rope, Guy rod assembly and small parts of steel works and also replacement of bearing if ATD jammed including transportation. Price shall also cover adjustment of "X & Y" value either by mechanism provided or by cutting of conductors, if required. The price also covers adjustment of the entire regulating equipment. The price shall also cover cleaning of muffing of Anchor block of Guy Rod. The work shall be carried out as and when required by Engineer, in-charge during the contract period.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No.11</b>	<b>Checking &amp; Maintenance of Aerial earth wire, Feeder wire &amp; Feeder Termination / Fixed Anchor Termination.</b>
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The Checking and maintenance of Aerial earth wire, Feeder wire & Feeder Termination / Fixed Anchor Termination by Foot Patrolling shall be carried out in line with Maintenance Manual/Specifications of DFCCILs.

The price shall cover checking and maintenance all materials required for ACSR Aerial earth wire, AAAC feeder wire and the termination of 25KV feeder including Guy rod assembly, appropriate mast anchor fittings, adjuster, strain clamp and end fitting, splices, fasteners and all other components as required. The price shall also cover cleaning of muffing of anchor block of Guy Rod.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 SI.No.12</b>	<b>Foot patrolling to be carried out along with schedule with one DFCCIL staff.</b>
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The Checking and maintenance of 2x25kVOHE by Foot Patrolling shall be carried out in line with Maintenance Manual/Specifications of DFCCILs.

The price shall cover foot to foot visual checking of complete of OHE and oncompletion of the



foot patrolling the report should be submitted to the depot-in-charge as per prescribed Performa. The Performa should to be arranged by the contractor as advised by DFCCILs. The foot patrolling is to be carried for each section every fortnight.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 1 Sl.No.13</b>	Checking & maintenance of all type of bonds including cleaning of muffs at OHE mast (Structure/longitudinal/transverse bonds & earth electrode)
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The price shall cover Checking & Maintenance of Bonds of various types structure bond, cross bond, continuity bond, impedance bond & rail bond etc. and bond connection required for connecting a traction mast or structures to the nearest non-track circuited rail, or earth electrode, including all fastenings at both ends.

The price shall include cutting, shaping, painting and drilling of the bond and erection of all materials including the bond. The price shall also cover the drilling of the hole to rail for fixing the bond with suitable GI bolts and nuts, washer etc. and provision of PVC insulating sleeve over the portion of bond passing under the track circuited rail of length 350mm each wherever required. Price also covers cleaning of area of around muff of OHE/portal by removing the vegetation and condition of structure muff are to be checked once in month & also recasting of damaged muff with white wash. Recasting of new muff, disconnection of structure bond, drilling of hole in mast/portal and reconnection/replacement of bonds wherever the muff height needs to be raised. Price also covers transportation of release bond to the concerned OHE depot.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 Sl.No.14</b>	Removal of & Re erection of bonds of various type during track machine working or Erection of missing/new bonds (Paint etc. supplied by DFC)
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The work shall include the erection of the bond in place of the any missing bond or removal of during track machine working.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 Sl.No. 15</b>	Checking & Maintenance of all additional insulators
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The Checking and maintenance of this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The price shall cover rectification & replacement all additional Insulators (9 Ton) such as Cut-in- insulator in a head span, cross span or in-span wire or an anti-creep wire not provided for in other items as and when required immediately after receiving the failure message by first available train or by other means.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 Sl.No. 16</b>	Checking & Maintenance of leaning of OHE mast till a new mast erected and erection of new mast if required
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The Checking and maintenance of this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The price shall covers checking and maintenance of leaned masts till a new mast is erected. The price shall also covers packing and ramming with pieces of stone and strengthening by pouring cement concrete. Price shall cover for OHE foundation casting including drilling of hole in mast/portal as per the directives of engineer and after recasting of foundation, muff shall be provided including white wash. A temporary structure or guy as convenient / as per railway requirement to be provided. The work must be so done that when the Tirfor is released the mast remains reasonably vertical with the allowance of reverse deflection as required. The price includes releasing & reloading of OHE load from / to the OHE mast.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 Sl.No.17</b>	Checking & Maintenance of PTFE type neutral section (Quarterly)
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The Checking and maintenance of this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The price shall covers checking and maintenance of PTFE rod, bracket of neutral section, insulating rod, arching horns, length of skid' bulb, turnbuckles, condition of adjuster, earthing jumper, splices, lock nut pins & droppers etc.

The price shall also cover cleaning, adjustment, checking of tightness and replacement, if required at any stage.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's Representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch.1 Sl.No.18</b>	Checking & Maintenance of Portal boom, drop arms and fabricated Masts free from Bird Nests
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The price shall cover Checking & Maintenance of Portal boom, drop arms and fabricated masts free from Bird Nests and removal of bird nest as identified by foot patrolling staff / during other inspection. Requirement of power block will be jointly decided by the contractor and the



sectional DFCCIL supervisor, Necessary power block will be obtained from authorized DFCCIL's representative and no extra payment will be made for this removal of bird nests under Power block.

<b>Sch.1 Sl.No.19</b>	<b>Trimming of tree branches.</b>
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The price shall cover trimming of tree branches as identified by foot patrolling staff / during other inspection / checking. No part of the tree shall be nearer than 4 meters from the nearest live conductor. Requirement of power block will be jointly decided by the contractor and the sectional DFCCIL supervisor. Necessary power block will be obtained from authorized DFCCIL's representative only for trimming of tree branches. The accountal & disposal of trimmed braches will be the responsibility of DFCCIL department.

<b>Sch.1 Sl.No.20</b>	<b>Manning and housekeeping in the IMD/IMSD</b>
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The manpower shall be provided for proper up-keeping of the OHE depot. They shall be responsible for stacking of the material in the IMD/IMSD and different kind of works by the staff provided for 8 hours in a day.

<b>Sch.1 Sl.No.21</b>	<b>Erection of 2x25 kV Over Head equipment as per requirement</b>
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The Price shall cover erection of 2x25kV overhead equipment's and fabrication of cantilever assembly of different size & tubes including catenary, contact, dropper, cut in insulator & jumper wires. The price shall also cover erection of all components and wires / conductors including contact wire, catenary wire, cut in insulator droppers, jumpers and terminating wire, if any but excluding small part steel work if any. The price shall also include erection of structure identification plates/number plates with bolt & nut with GI fasteners and also include replacing/attending the damaged/bent/faded plates by the contractor with the cost of cleaning & painting the setting distance of mastor structures.

The price shall cover erection of 25kV caution boards, 25 kV caution notice board and warning board in Hindi & English language wherever required with mild steel galvanized clamps, required washers and bolts & nuts etc. The price shall include GI fasteners with GI fixtures for erection of enameled number plates, contact height, rail level and location of emergency sockets on mast / structures. No additional payment will be made for manual stringing of conductor viz. catenary, contact wire etc.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

### **Schedule 1: Part B**

<b>Sch.1 Sl.No. 22</b>	<b>Loading, unloading of DFCCIL supplied material to places directed by Engineer in-charge (i.e. From station to tower wagon, station to station etc.)</b>
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Price shall cover loading and unloading activity for transportation of all DFCCIL supplied materials for execution of the work and dismantled materials to consignee's depot. Also safe handling and shifting of DFCCIL materials during the breakdown. Price shall also cover collection of materials from store depot, loading and unloading of materials from depot to site

and site to depot.

<b>Sch. 1 Sl.No.23</b>	Erection of Catenary wire splicing or Contact wire splicing or feeder wire splicing or earth wire splicing.
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

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

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 1 Sl.No. 24</b>	Replacement / Re-erection of various types of insulators
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Any insulator found defective or broken shall be replaced under this item. The price shall cover erection of insulators of various types with all components required for the insulators assembly including small parts steel work with bolts & nuts etc. as per the relevant drawing.

<b>Sch. 1 Sl.No.25</b>	Breakdown attention by a gang for restoration of 2x25 kV OHE during accidents/ unusual occurrence for checking OHE parameters- (one gang consisting of 7 staff)
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The price shall cover Supply of Man Power for restoration of 2x25kV OHE during Break down round the clock on hourly basis for all restoration of 2x25kV OHE during Break down. The Contractor is required to deploy one Supervisor, Three Technicians and Three Helpers who were conversant with rules and procedures of working on 2x25 kV A.C. Traction Overhead Equipment installations and medically fit for DFCCIL's working circumstances.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

The price against this item is applicable for Supply of Man Power on hourly basis consisting of the above staff in one Gang.

Note: The contractor should deploy additional gangs as per the requirement of DFCCIL for restoration of 2x25kV OHE during Break down.

<b>Sch. 1 Sl.No. 26</b>	Erection of traction masts & portal other than boom
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The price shall cover the erection of masts or portal other than boom. The price shall be paid on each location basis. The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

### **Schedule 1: Part C**

<b>Sch. 1 Sl.No. 27</b>	Casting of all types of foundation (The rate includes supply of the material- ballast, sand, cement, mixture & reinforcement etc.)
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There are 2 types of foundation in DFCCIL in which RDSO foundation PCC type and Circular foundation RCC type. The volume of RDSO type foundation is higher than circular type foundations which are reinforced. There will be liberty with the contractor to cast any type of foundation. The applicable volumes and drawings shall be provided in the drawing as part of CSD. In case the contractor opts for circular foundation the required steel for the reinforcement shall be supplied by the DFCCIL.

The RDSO type foundation shall be cast in M-15 grade and the Circular type foundation shall be cast in M-20 grade. The price shall cover the supply of the cement, sand, water, ballast, mixing, curing, arrangement of scroll, grouting and mugging the mast with required shuttering as per maintenance manual.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

### **Schedule 2: Part A**

<b>Sch. 2 Sl.No.1</b>	Monthly Bay Maintenance of Traction Substations
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 Sl.No.2</b>	Half yearly Bay Maintenance of Traction Substations
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 Sl.No.3</b>	Yearly Bay Maintenance of Traction Substations
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings) /Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 Sl.No.4</b>	Half yearly 25 kV bay Isolator maintenance in Traction Substations
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.5</b>	Half yearly maintenance of Feeding post gantry TSS and associated equipments
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings(As Build Drawings)//Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.6</b>	Quarterly Maintenance of 25 kV bay equipments other than isolators and maintenance of feeding post CB in TSS
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings(As Build Drawings)//Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.7</b>	Half yearly maintenance of Earthing station in TSS/SP/SSP
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.8</b>	Monthly panel maintenance in TSS/SP/SSP
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.9</b>	Fortnightly battery & battery charger maintenance of TSS
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.10</b>	Quarterly maintenance of CB in SP/SSP As in DFCC CB is installed in place of interrupter/BM
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.11</b>	Fortnightly maintenance of battery & battery charger and SP/SSP yard cleaning.
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.12</b>	Half yearly gantry maintenance of SP/SSP
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.13</b>	Quarterly maintenance of AT (Auxilliary transformer) at TSS/SP/SSP and OHE at stations & open section
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

### **Schedule 2: Part B**

<b>Sch. 2 SI.No.14</b>	Maintenance of 25 kV dropout fuse of AT for TSS/SP/SSP and OHE at stations & open section
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.15</b>	Breakdown attention of PSI equipment.
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

<b>Sch. 2 SI.No.16</b>	Removal and re-erection of PSI equipment.
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

The Joint Report/Maintenance sheets to be signed by Engineer in-charge and Contractor's representative which will be submitted by contractor to DFCCIL centralized office.

### **Schedule 2: Part C**

<b>Sch. 2 SI.No.17</b>	Regular House Keeping of TSS.
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest correction slips if any as per instruction of DFCCIL representative.

<b>Sch. 2 SI.No.18</b>	Manning of TSS
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The manpower shall be provided for proper up-keeping of the TSS. They shall be responsible for stacking of the material in the TSS and different kind of works by the staff provided for 8 hours in a day.

### **Schedule 2: Part D**

<b>Sch. 2 SI.No.19</b>	Transformer oil Testing
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The Checking and maintenance against this item shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCILs with its latest

correction slips if any as per instruction of DFCCIL representative.

### 3.4.1 The detailed scope of work is as under :-

#### 3.4.1.1 The 2x25kV OHE installations maintenance schedule:-

##### 1. Cantilever: (As per DFCC Maintenance Manual)

- i. Check rail level and setting distance against markings on the masts and entries in the Register. Variation above 30mm in setting distance and 20mm in rail level should be notified for correction. Variations, even within the above limits, should not be permitted if the Schedule of Dimensions are infringed.
- ii. Check all tightness of bolts, nuts and check nuts and pins.
- iii. Check all galvanized pipes and fittings. Where galvanization is found to be chipped off, the fitting of pipe should be replaced. Minor chippings may be repaired using 'cold galvanizing paint'.
- iv. Examine register arm and all hooks and fittings for cracks. Check for cracks on steady arm tube also.
- v. Clean all insulators and carefully check as per approved drawing.
- vi. Check and adjust heights and staggers on the basis of setting distance and rail level marked. Close coordination with track works is required for keeping the permanent way at the correct location.
- vii. Check carefully condition of contact and catenary wires, particularly for kinks and twists in contact wire and broken strands of catenary wire. Any stranded conductor (catenary wire, negative feeder wire, aerial earth wire etc.) should be spliced if more than 20 per cent of the strands are broken.
- viii. Check droppers and tighten bolts wherever required.
- ix. Clean insulators and replace defective insulators as per approved maintenance plan.
- x. Check staggers carefully on Tangent and Curved lines.
- xi. Check and ensure exact Encumbrance and steady clearance as per site.
- xii. Check kinks and twist on contact wire and removed.
- xiii. Check all bolts, nuts, check nuts, pins etc.
- xiv. Checking of RRA clamps and contact wire at double cantilevers.
- xv. Miscellaneous, if any.

##### 2. Turn Outs & Crossovers: (As per DFCC Maintenance Manual)

- a. With OHE Inspection Car running on main line check up if pantograph glides smoothly under the loop line OHE.
- b. With OHE Inspection Car running on loop line check up if pantograph glides smoothly under the main line OHE.
- c. Check stagger of both the OHEs at turn outs. (It shall not normally exceed 300mm).
- d. Check that the main line OHE of overlap type turn out is about 50mm below that of the turnout OHE.
- e. Checkup cross contact bar, if any, for displacement and distortion.
- f. Check up for hit marks, if any.



- g. Checkup rail level and setting of the obligatory mast.
- h. Check up for hard spots near rigid droppers, if any.
- i. Miscellaneous, if any.

**3. Isolators (As per DFCC Maintenance Manual)**

- a. Check number plates for cleanliness and security.
- b. Check correctness of operation, alignment of contacts and arcing horns.
- c. Check earth continuity where applicable.
- d. Lubricate moving parts and locks.
- e. Check interlocks where provided.
- f. Check that the distance between male and female contacts in open position as per drawing depending upon the type of isolator.
- g. Miscellaneous, if any.

**4. Section Insulators:(As per DFCC Maintenance Manual)**

- a. Replace defective insulators as per maintenance manual.
- b. Check runners for flash-marks, hit marks and proper adjustment,
- c. Check for excessive contact wire wear near anchor clamps,
- d. Check the level of the assembly and adjust if necessary,
- e. Tighten PG clamps of droppers and stiffeners.
- f. Miscellaneous, if any

**5. Overlaps:(As per DFCC Maintenance Manual)**

- a) Check height and stagger of OHE in the overlap section.
- b) Check whether the lifting of out-of-run OHE is correct.
- c) Check that parallel running of contact wires in the overlap for a minimum 2m in the panto sweep region.
- d) Miscellaneous, if any.

**6. ATDs:(As per DFCC Maintenance Manual)**

Regulating Equipment:

- a) Check 'X' and 'Y' dimensions in the case of pulley block type equipment against prescribed values for the temperature at the time of checking. Make use of turn-buckles to adjust as required.
- b) Check that the compensating plate is vertical. If not, adjust as required.
- c) Lubricate pulleys and other moving parts.
- d) Check if 20mm wide bands in black colour are painted on the mast to indicate upper and lower limits of movement of counter weight.
- e) Check condition of stainless steel wire rope for any signs of corrosion and breakage of strands.
- f) Ensure the availability of correct length sleeves, if not available same are to be provided.
- g) Miscellaneous, if any.

## 7. Insulators: (As per DECC Maintenance Manual)

Checking the insulators at regular intervals as per maintenance manual and approved drawings.

## 8. Jumpers: (As per DECC Maintenance Manual)

All kinds of Jumpers with broken strands should be invariably replaced as per maintenance manual and approved drawings. Broken strands are most likely at the point of entry into PG clamps, possibly due to sharp edges in the clamp. PG clamps should have properly rounded off edges to prevent the cutting of strands. The clamps should be checked for signs of overheating and proper tightness.

## 9. Splice: (As per DECC Maintenance Manual)

The splice in OHE becomes necessary when a small length requires replacement as a result of excessive wear or restoration after breakdown as per maintenance manual.

The main points requiring attention during inspection of splice fittings are :

1. Careful examination for cracks or other casting defects or abnormalities.
2. In case of catenary splice fitting tightness of the right-hand and left-hand joint sockets.
3. Check to see if any slipping of the ends of two contact wires has taken place. When viewed through the top window, there should be no gap between the two contact wire ends.
4. Tightness of the stainless steel studs.

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

## 10. Leaning Mast: (As per DECC Maintenance Manual)

Masts which appear to be out-of-plumb should be checked with a plumb bob. Since the normal height of the contact wire is 5.80m above rail level, the extent of deflection of the masts at this height would be measured by conventional method and If the mast is out-of-plumb, by more than 3cm upto 5cm, it should be kept under watch after making sure that there is enough earthwork all-round.

During patrolling and inspection, make a particular check of the condition of earthwork around foundations of masts on embankments. If the earthwork has been or is likely to be eroded away, same shall be strengthened.

Note: To eliminate excess/abnormal leaning mast suitable foundation to be cast and new mast to be provided.

## 11. Foot patrolling: (As per DECC Maintenance Manual)

- I. The object of foot-patrolling is to make visual inspection of every part of the OHE (including feeder line) so that any defects and abnormalities noticed are recorded and reported to the the maintenance gangs for attention.
- II. The engaged staff on foot-patrol should be equipped with signal flags, an emergency telephone instrument and essential tools required for attending to defects on the spot e.g., spanners for tightening bond connections.
- III. The staff/labour on patrol duty should particularly look for the following:
  - (a) Damaged insulators.
  - (b) Displaced fittings and droppers.
  - (c) Excessive sagging or hogging of contact wire.
  - (d) Whether equalizing plate is tilted.
  - (e) Free movement of auto-tensioning device and position of with counterweight reference to upper and lower limits of movement marked on the mast.

- (f) Presence of protective screens, caution and warning boards and ant climbing devices.
- (g) Structural soundness of height gauges at level crossings.
- (h) Bird-nests and pieces of stray wire likely to cause short circuits and branches of trees likely to infringe the OHE;
- (i) Defective bonds and earth connections;
- (j) Any obstructions including tree branches in the way of free movement of pantograph and trains;
- (j) Signs of heavy sparking when trains pass;
- (k) Isolators blades being fully in and for signs of sparking or overheating of isolators also condition of locks;
- (l) General condition of switching stations en-route;
- (m) Tilting of masts especially on high banks and masts with sand-core foundations;
- (n) Number plates.
- (o) Any other abnormal/unusual situation.
- (p) Miscellaneous, if any.

## **12. Anti-Creep:(As per DFCC Maintenance Manual)**

- i. Check the tightness of suspension clamps bolts.
- ii. Check the healthiness of double suspension clamps.
- iii. Ensure availability of every part.
- iv. Miscellaneous, if any.

## **13. OHE Conductors by Tower car: (As per DFCC Maintenance Manual)**

- i. Ensure smooth passage of pantograph.
- ii. Recording of contact wire height and staggers, and adjust to be done if required.
- iii. Checking and tightening of all kinds of PG clamp available. Contact & Catenary splices are to be provided if required.
- iv. Contact & Catenary splices are to be provided if required.
- v. Checking of in span droppers and if found no load taken are to be replaced.
- vi. Replacement of catenary and dropper clips if required.
- vii. Miscellaneous, if any.

## **14. Rail level and setting distance: (As per DFCC Maintenance Manual)**

During periodical checking rail level and setting distance should be found out against the GPS Coordinates as per executed works and the same shall be rectified by the concerned party.

## **15. Checking and Maintenance of Portal Booms: (As per DFCC Maintenance Manual)**

Check all steel parts and remove rust, if any, from painted steel works. Rusty portions, after cleaning must be given two coats of Zinc chromate primer followed by Aluminium paint.

### **3.4.1.2 Maintenance Schedule of Power Supply Installations(PSI):-**

#### **FORTNIGHTLY SCHEDULE:-**

##### **a. Battery & Battery Charger (As per DFCC Maintenance Manual)**

<b>Sl. No.</b>	<b>Item</b>	<b>Inspection And Work to be Carried Out</b>	<b>Remarks</b>
1.	Specific gravity	Check & record the specific gravity of each cell. At 27°C, 1210 in charged condition and 1150 means discharged condition.	
2.	Distilled water	Check the level of electrolyte of the cells. Top up to the maximum mark, if required.	
3.	Temperature	Check & record the temperature of each cell.	
4.	Sulphation	Check & connectors required. clean and Sulphation on apply petroleum terminal jelly, if any	
5.	Condition of Plate	Check & clean physical condition such as cracks, distortions and accumulation of whitish deposit on +ve plates. Replace cell, if required.	
6.	Cell voltage	Check & record the voltage of each cell, it should be in the range of 2.0V to 2.2V.	
7.	Total voltage	Check & record the total voltage of battery, it should not be less than 110 Volts.	
8.	Vent plugs	Check for clear passage of gases. If hole is blocked, clean it.	
9.	Sedimentation and any internal damage	Check the cells for undue sedimentation and any internal damage. If observed, clean it. If damage can not be attended, replace the cell.	
10.	Inter cell connections	Check & clean with dry cloth. Replace defective nuts, bolts & washers.	
11.	Battery charger	Check smooth operation of all switches of battery charger. Note the charging rate and AC & DC voltage.	
12.	Battery room	Clean the room and ensure proper ventilation.	
13.	Miscellaneous, if any.		

# MONTHLY SCHEDULE :-

## i. General Works on TSS, SSP & SP (As per DFCC Maintenance Manual)

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	General cleanliness	Check surface of the roadway, proper drainage, rail access and pathways in the substation. Roadway and pathway should be firm and sufficiently elevated to prevent water-logging and proper drainage.	
2.	Vegetation	Check & clean vegetation near and around equipment in yard.	
3.	Tree and branches	Check & trim tree branches likely to come in the vicinity of live lines.	
4.	Caution, danger board, shock treatment chart and other boards	Check & clean the boards for damages, availability and well secured, replace if any damage is observed.	
5.	Fire extinguishers, fire buckets and first aid box	Check for expiry of fire extinguisher and first aid box and refill with necessary medicines. Fill up/replace sand in fire buckets, if required.	
6.	Structure and plant foundations	Check for any sinking or cracking and go round the structural work for checking tightness of various bolts and nuts.	
7.	All indication lamps on control panels	Check loose connections, fuse indication etc. Tighten the same and replace the fuse, if required.	
8.	State electricity board meter readings	Check & record meter reading, MD, variation in voltage, frequency and power factor and important data parameters.	
9.	All jumpers & other connections	Check visually for flash/spark marks on jumper, nuts & bolts. Tighten the respective bi-metallic clamp/connections. Replace, if required.	
10.	Discharge rod	Check for cable strands broken and damages. If strands 20% broken, replace the cable.	
11.	Miscellaneous, if any.		

## ii. Power transformer (As per DFCC Maintenance Manual)

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	Maximum temperature of transformer oil on dial indicator	Check and compare it with the previous values. Abnormal change in the temperature should be further investigated and reset indicator.	
2.	Maximum temperature of transformer winding on Dial indicator	Check and compare it with the previous values. Abnormal change in the temperature should be further investigated and reset indicator	
3.	Oil level in conservator (MOLOG)	Check as per transformer oil temperature indication. If low, top up with the filtered oil.	
4.	Buchholz Relay	Check for gas collection. In case gas is collected, the DGA test of oil must be carried out.	DGA report must be examined for any abnormality.
5.	Oil level in Oil Immigrated Paper(OIP) condenser bushing	Check for oil level with reference to the oil level indicator:- <ul style="list-style-type: none"> <li>In case of sealed bushing, if no oil./less than minimum level indication. Measure Tan-Delta &amp; capacitance and compare the test values recorded earlier.</li> <li>In case of oil filled bushing, if any leakage is observed, the same shall be attended.</li> </ul>	Max Allowable tan-Delta-0.007 and capacitance is 110% of the factory set value respectively or as per OEM manuals.
6.	Tap changer	Check & record the position of tap changer in standby and service transformer.	
7.	Tank, radiators, conservator, Bushing, Oil level indicator, gauges	Check & clean dirt deposits, leakage and crack. If crack/leakage is observed, replace/attend it.	
8.	Dehydrating breather	<ul style="list-style-type: none"> <li>Check breather for choking due to insect/dirt. If breather is choked, remove the dirt etc.</li> <li>Check the intactness of gasket and color of silica gel. If gasket is damaged and silica gel is pink, replace the same with new gasket and dry silica gel or recondition the old silica gel. If silica gel is too wet, check the BDV of transformer oil.</li> <li>Check oil level in oil cup. Fill up oil in cup,</li> </ul>	If BDV is less than 50 kV, filter the oil till it reaches 50 kV.

		if required.	
9.	Heater in marshalling box	Check for proper functioning. In case not working, the connection should be checked and rectified.	
10.	Sound	Check abnormal humming, observe and arrest the humming sound.	Find out the reason
11.	All external connection	Check visually that all connections are normal without any discoloration due to local heating. In case of any sign of heating, clean and tighten the bolts and nuts.	
12	NIFPS	Visually Check for any abnormality. In the Nitrogen Injection Fire Protection System (NIFPS).	
13.	Miscellaneous, if any.		

iii. **Auto Transformer (12/8 MVA):-**  
(As per DFCC Maintenance Manual)

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	Maximum temperature of transformer oil on dial indicator	Check and compare it with the previous values. Abnormal change in the temperature should be further investigated and reset indicator	
2.	Maximum temperature of transformer winding on Dial indicator	Check and compare it with the previous values. Abnormal change in the temperature should be further investigated and reset indicator	
3.	Oil level in conservator (MOLOG)	Check as per transformer oil temperature indication. If low, top up with the filtered oil	
4.	Buchholz Relay	Check for gas collection. In case gas is collected, the DGA test of oil must be carried out.	DGA report must be examined for any abnormality.
5.	Oil level in Oil Immigrated Paper (OIP) condenser bushing	Check for oil level with reference to the oil level indicator:- <ul style="list-style-type: none"> <li>In case of sealed bushing, if no oil./less than minimum level indication. Measure Tan-Delta &amp; capacitance and compare the test values recorded earlier.</li> <li>In case of oil filled bushing, if any leakage is observed, the same shall be attended.</li> </ul>	Max. allowabletan-Delta-0.007 and capacitance is 110% of the factory set value respectively or as per OEM manual.



6.	Tank, radiators, conservator, Bushing, Oil level indicator, gauges	Check & clean dirt deposits, leakage and crack. If crack/leakage is observed, replace/attend it.	
7.	Dehydrating breather	<ul style="list-style-type: none"> <li>Check breather for choking due to insect/dirt. If breather is choked, remove the dirt etc.</li> <li>Check the intactness of gasket and color of silica gel. If gasket is damaged and silica gel is pink, replace the same with new gasket and dry silica gel or recondition the old silica gel. If silica gel is too wet, check the BDV of transformer oil.</li> <li>Check oil level in the oil cup. Fill up oil in cup, if required.</li> </ul>	If BDV is less than 50 kV, filter the oil till it reaches 50 kV.
8.	Heater in marshalling box	Check for proper functioning. In case not working, the connection should be checked and rectified.	
9.	Sound	Check abnormal humming, observe and arrest the humming sound.	Find out the reason
10.	All external connection	Check visually that all connections are normal without any discoloration due to local heating. In case of any sign of heating, clean and tighten the bolts and nuts.	
11	NIFPS	Visually Check for any abnormality in Nitrogen Injection Fire Protection System (NIFPS).	
12	Miscellaneous, if any.		

**iv. 132/145 KV Triple Pole SF-6 Circuit Breaker:- (As per DECC Maintenance Manual)**

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	Surface of Porcelain pole insulator unit	Check for damages, flash mark, chipping of insulator. Replace, if required. Clean with dry cotton cloth for dirtiness.	
2.	Counter reading	Check operation of counter and record counter reading of Circuit Breaker: <ul style="list-style-type: none"> <li>Before maintenance</li> <li>After maintenance</li> </ul>	

3.	Gas pressure	Check & record gas pressure With temperature	7.0Kg/cm sq. at 20°C temp or as per OEM manual.
4.	Mechanism box	Open the cover, check & clean mechanism box for condensation rain water, gasket of door, dust and hinges. Arrest the reason and attend it.	Clean & apply weather sealant material as per OEM manual.
5.	Heater, thermostat & lamp	Check function of heater, thermostat & lamp. If any defect, attend it.	Working & setting of thermostat is 25 – 30 <sup>0</sup> C
6.	Control circuit	Record operating voltage, check control circuit wiring and all connections should have proper lugs and ferule number in terminal box.	
7.	Local/Remote switch operation	Check the operation of breaker on local and remote switch. Breaker should have open & close on selected position.	
8.	Local and Remote switch	Check the function of local and remote switch.	
9.	Position of indicator	Check the proper alignment of breaker operation indicator with its position.	
10.	Shock observer	Check the oil leakage from shock absorber. Repair or replace, if necessary.	
11.	Limit switch & auxiliary contact	Check & clean the function of auxiliary limit switch, auxiliary contact and connection for tightness.	
12.	Condenser tripping device, if provided	Check the function of CTD for proper operation. If defective, attend the same.	
13.	Anti pumping device for CB	Check the function of APD for proper operation. If defective, attend the same.	
14.	Interlocking	Check the proper interlocking with isolator.	
15.	Miscellaneous, if any.		

**v. 25 kV Double Pole/Single Pole Vacuum Circuit Breaker / Interrupter:-**

**(As per DFCC Maintenance Manual)**

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	Surface of porcelain pole insulator unit	Check for damages, flash mark, chipping of insulator. Replace, if required. Clean with dry cotton cloth for dirtiness.	

2.	Magnetic actuator operating mechanism and Drivelink assembly, if applicable	Check presence of dust, looseness of bolt and distortion in the operating mechanism. Clean the same with dry cloth tighten the bolts and investigate the problem in mechanism & rectify.	
3.	Counter reading	Check operation of counter and record counter reading of CB: - Before maintenance - After maintenance	
4.	Mechanism box	Open the cover, check & clean mechanism box for condensation rain water, gasket of door, dust and hinges. Arrest the reason and attend it.	Clean & apply weather sealant material as per OEM manual.
5.	Heater, thermostat & lamp	Check function of heater, thermostat & lamp. If any defect, attend it.	
6.	Position of indicator	Check alignment and missing indicator	
7.	Control circuit	Record operating voltage, check control circuit wiring and all connections should have proper lugs and ferule number in terminal box.	
8.	Tripping mechanism	Check & correct operation of tripping Mechanism.	
9.	Shaft of pole assembly	Check visibility of red band on shaft of the pole assembly.	
10.	Auxiliary circuits	Check the connections & function of auxiliary control circuit.	
11.	Local/Remote switch operation	Check the operation of breaker on local and remote switch. Breaker should have open & close on selected position.	
12.	Connections	Check loose/overheating connections. Tight, if found loose.	
13.	Earth connections & foundation bolts	Check & tight the earth connections & foundation bolts.	
14.	Condenser tripping device for CB, if provided.	Check the function of CTD for proper operation. If defective, attend the same.	
15.	Anti pumping device for CB	Check the function of APD for proper operation. If defective, attend the same.	
16.	Interlocking	Check the proper interlocking with isolator.	
17.	Miscellaneous, if any.		

vi. **132 KV TRIPLE POLE ISOLATOR in TSS :-**(As per DFCC Maintenance Manual)

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	Isolator	Check visually the conditions of the support insulator. If observe any abnormality, attend it.	
2.	Mechanism & earthing	Check & clean mechanism, ensure proper operation, tightness of earthing connection and lubricate the moving parts.	
3.	Operation of Isolator	Check operation of isolator for correct adjustment of blade and smoothhand operation.	
4.	Interlock	Check working of interlock without obstruction.	
5.	Earthing connections	Check & tight earthing of the frame with its fittings. Check tightness and condition of lead of earthing heel, if provided.	
6.	D C Motor	Check the working of DC Motor	
7.	Miscellaneous, if any.		

vii. **132 kV Triple Pole Motorized Bus Coupler in TSS :-**

(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Motorized Bus Coupler	Check visually the conditions of the support insulator. In case of any abnormality, attend it.	
2.	Mechanism	Check & clean mechanism, ensure proper operation, tightness of earthing connection and lubricate the moving parts.	
3.	Operation of Bus Coupler	Check operation of isolator for correct adjustment of blade and smooth hand operation.	
4.	Interlock	Check working of interlock without obstruction.	
5.	D C Motor	Check the working of DC Motor	
5.	Miscellaneous, if any.		

viii. **25 kV DOUBLE POLE MOTORIZED / MANUAL ISOLATOR:-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Main contacts	Check overheating and clean main contacts and lightly wipe with petroleum jelly	
2.	Small parts	Check all nuts, bolts, split pins for good condition. Replace if rusted or defective.	
3.	Simultaneous operation of blades(double pole)	Check the simultaneous operation of blades for correct alignment. In case of any variation, adjust it.	
4.	Locking arrangement	Check the condition of locking arrangements to the operating handle and provision of padlocks.	

5.	Arcing horn, if provided.	Check arcing horn for correct alignment & working, if provided.	
6.	Earthing of operating handle	Check earthing of operating handle with copper flexible wire.	
7.	D C Motor	Check the working of DC Motor	
8.	Miscellaneous, if any.		

ix. **132kV/25kV Current Transformer :-** (As per DFCC Maintenance Manual)

**Type- Single phase, oil filled natural air cooled**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Surface of porcelain pole insulator unit	Check damages, flash mark, chipping of insulators. Replace, if required. Clean with dry cotton cloth for dirtiness.	
2.	Terminal connectors	Check overheated/rusted terminal connectors. Replace, if any sign of overheating/rusted	
3.	Terminal bolts, Nuts & washers	Check tightness of terminal bolts, nuts & washers. Replace, if any sign of rusting/oxidation.	
4.	Oil level	Check Oil level for leakage. Top up oil, if required and arrest the leakage.	
5.	Earthing connections	Check & tight the earth connections, if founds loose.	
6.	Arching horn, if provided	Check flash mark on horn tips	

x. **132 kV/120 kV & 42 kV/25 kV Lightning Arrester:-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Visual inspection of lightning arrestor	Check sign of overheating. If observed, find out the reason and attend it.	
2.	Surface of porcelain pole insulator unit	Check damages, flash mark, chipping of insulators. Replace, if required. Clean with dry cotton cloth for dirtiness.	
3.	Lightning counter, if provided	Check & record the number of discharges of lightning counter, if meter is provided.	
4.	Miscellaneous, if any.		

xi. **BATTERY CHARGER:-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remark
1.	Carry out following work in addition to fortnightly schedule		
2.	Charger	Check & clean the charger outside and inside with dry cloth	
3.	Voltmeter & Ammeter	Check the proper function of voltmeter & ammeter.	

4.	Overheating	Check any sign of overheating inside the charger. Find out the reason and attend it.	
5.	Miscellaneous, if any.		

**xii. CONTROL AND RELAY PANEL:-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Cleaning of panel	Check and clean accumulated dust externally& internally with dry cloth	
2.	Indicating and recording instrument	Check all indicating and recording instrument are working normally	
3.	Relay	Check & clean outer terminals of relay for any abnormality	
4.	Cable connections	Check & tighten all cable connections, if found loose	
5.	Terminal board	Check & clean terminal board, cable damage and cable leads with dry cotton cloth and attend the damage cable	
6.	Fuses	Check all fuses for proper rating & overheating, replace if necessary	
7.	Earthing connections	Check & tight the earth connections. If founds loose.	
8.	Doors	Check doors & hinges for intactness	
9.	Holes in panel	Check & plug the holes to avoid entry of moisture and insects.	
10.	Miscellaneous, if any.		

**QUARTERLY SCHEDULE:-**

**1. General Works on TSS, SSP &SP:-**

(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remark
1.	Carry out following work in addition to monthly schedule		
2.	Bus bar, clamps & connectors bythermovision camera	Check nut, bolt & washers for overheating. Replace, if necessary.	

**2. Auxiliary Transformer (10 KVA, 25 KVA, 50 KVA & 100 KVA):-**

(As per DFCC Maintenance Manual)

**Type-Double wound, single phase, oil immersed natural air cooled and step down transformer for outdoor installation**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Visual inspection of transformer	Check any sign of oil leakage, overheating. If observed, attend it.	
2.	Cleaning of transformer	Clean the transformer, conservator, bushing and	

		tank externally with clean cotton cloth.	
3.	Silica gel	<ul style="list-style-type: none"> <li>Check the condition of silica gel. If color is pink reactivate/replace.</li> <li>Check oil in the cup of breather. Top up the oil in cup, if required.</li> </ul>	
4.	Connection	Check, clean & tight all connections of HT and LT bushing terminals.	
5.	Oil level in conservator	Check & top up oil level in conservator with new filtered oil up to mark, if required.	
6.	AT enclosure	Check & clean AT enclosure for vegetation and other materials.	
7.	Condition of pole mounted ICDP(MCCB) switch, control panel and its fuses	Check condition of pole mounted ICDP (MCCB) switch, control panel and its fuses. Replace overheated lugs, fuses and tighten loose connections. Note: Use fuse wire 20 SWG for 34 Amp, 22 SWG for 24 Amp	
8.	Cautionboard And anti-climbing device	Check caution board and anti-climbing device for availability and proper condition.	
9.	Earthing connections	Check & tight the earth connections, if found loose.	
10.	Arcing horn HV busing	Check flash mark on arcing horn. Attend, if flashover marks observed & check the arcing horn gap.	Attend
11.	Drop out (DO) fuse	Check the condition of DO fuse barrel and fuse element. Replace the breakage, overheated and non-standard fuse wire, if any.	
12.	Miscellaneous, if any.		

### 3. **132 kV & 25 kV Potential Transformer/CVT:-**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Inspection of PT/CVT	Check oil leakage, chip or insulator broken and any sign of overheating. If observed, attend it.	
2.	Terminal	Check any overheating of terminals. Replace, if found overheated.	
3.	Terminal bolts. Nuts & washers	Check & replace terminal bolts, nuts & washers, if any sign of rusting/oxidation is found.	
4.	Oil level	Check the oil level in PT & top up with new oil up to mark, if required & measure BDV of oil.	BDV of oil More than 40KV
5.	Fuse	Check fuse and neutral link for proper rating and tightness. Replace the fuse, if necessary	
6.	Earthing connections	Check & tight the earth connections, if found loose.	
7.	Miscellaneous, if any.		



**4. 25 kV Motorized Isolator Type– Double Pole:-**  
**(As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	Door gasket and hinges	Check weather proof gasket and hinges for good condition. Replace/repair, if damaged.	
3.	Manual operation	Check the operation manually in local and remote, keeping the control door open. Observe whether the mechanism and operating rod functions smoothly without any rubbing or obstruction.	
4.	Electrical operation	Check the operation electrically in local and remote, keeping the control door open. Observe whether the mechanism and operating rod functions smoothly without any rubbing or obstruction.	
5.	Wiring connection	Check & tight wiring connections for loose, overheating or any defect.	
6.	Relays and contactors	Check & clean healthiness of relays, contactors and its contacts.	
7.	Heater	Check working condition of heater, if defective, attend it.	
8.	Grease and lubrication	Check & clean and apply grease and lubricate in all moving parts.	
9.	Earthing connections	Check & tight the earth connections, if found loose.	
10.	Locking arrangement	Check working of locking arrangement for Smooth functioning.	
11.	Miscellaneous, if any.		

**5. 132 kV/120 kV & 42 kV/25 kV Lightning Arrester:-**  
**(As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	Earthing terminal&earthing strip	Check & tight earthing terminal strip, tighten if loose.	
3.	Guarding ring, if provided	Check guarding ring, connections, tighten, if loose	

**6. Battery Charger:- (As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	Terminal connection	Check the terminal connection on the disconnecting link. Replace any overheating of terminal connectors, if found overheated or rusted.	
3.	Earth terminals	Check & tight the earth connections, if found loose.	
4.	MCB	Check visually for proper functioning and rating.	

5.	Three pin plug with socket	Check & replace overheating or defective three pinplug/socket.	
6.	Termination ends of the cable	Check & tight all termination ends of the cable, if loose.	
7.	Miscellaneous, if any.		

**7. AC/DC Distribution Panel:-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Distribution panel	Check & clean the panel outside and inside with dry cloth.	
2.	Voltmeter	Check function of voltmeter	
3.	Earth terminals	Check & tight earth termination points on both ends. Attend, if any deficiency observed.	
4.	MCB	Check visually for proper functioning and rating	
5.	Temperature at termination points	Measure & record the temperature at termination points. If variation is more than 5 deg. With room temp, ensure the tightness.	
6.	LED	Check & replace the defective LED with tested LED.	
7.	Fuses	Check all fuses for proper rating & overheating, replace, if necessary	
8.	Holes in panel	Check & plug the holes to avoid entry of moisture and insects	
9.	Miscellaneous, if any.		

**HALF YEARLY SCHEDULE:-**

**a. General Works on TSS, SSP & SP :-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly and quarterly schedule		
2.	Fencing	Inspect all around switching station to observe any abnormality. If seen, attend the same.	
3.	Door and bonding between metal fencing panels and earth	Check hinges of all doors and bonding between metal fencing panels and earth, lubricant the hinges of all doors. If bonding deficient in metal fencing panels and earth, attend it.	
4.	Boards	Check and ensure proper painting of all caution, danger board, shock treatment board, schematic diagram, key box and other boards, if faded. Replace or repaint again by enamel paint	
5.	Fire extinguisher, buckets, first aid boxes	Inspect expiry date of fire extinguisher, fill buckets with sand, Refill first aid boxes with necessary medicine with valid date of expiry.	

6.	Oil sump, if available	Check & clean oil sump for dirtiness	
7.	Miscellaneous, if any.		

**b. Power Transformer:-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	Test oil sample with oil test kit	Test for BDV and acidity. Compare and take action.	
3.	Insulation resistance of Winding and polarization. Index (PI) with 2.5kV or 5kV megger for HV-L HV-E LV-E.	<p>Insulation resistance is to be measured for 10sec., 60sec. and 600sec. for HV-LV, HV-E and LV-E. Calculate PI (Polarization index)</p> <ul style="list-style-type: none"> <li>Insulation resistance values should be compared with the last recorded value.</li> <li>Compare PI values with values at the time of commissioning/ last recorded.</li> <li>PI Insulation/condition <ul style="list-style-type: none"> <li>&lt; 1.0 Dangerous</li> <li>Poor</li> <li>1.25 Questionable</li> <li>1.25 - 2.0 Satisfactory</li> <li>&gt; 2.0 Good</li> </ul> </li> <li>If PI value is less than 1.1, oil should be filtered. In case the value does not improve even after filtrations, periodic overhauling should be under taken.</li> </ul>	<p>Ensure that transformer is disconnected. Ensure bushing are clean and free from moisture and temperature on which IR value is recorded. The OEM's manual may also be referred.</p>
4.	PRD/explosion vent	Check & investigate for operation of PRD/explosion vent for any damage and presence of oil. Check connection and operation of PRD/explosion vent. Replace the damaged PRD with new PRD, if required.	
5.	Miscellaneous, if any.		

**c. Auto Transformer (12/8 MVA):-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	Test oil sample with oil test kit	Test for BDV and acidity. Compare and take action as indicated in enclosed ANNEXURE-1	

3.	Insulation resistance of Winding and polarization. Index (PI) with 2.5kV Or 5kV megger for HV-L HV-E LV-E.	Insulation resistance is to be measured for 10sec.,60sec.and600sec.forHV-LV, HV-E and LV-E. Calculate PI (Polarization index) <ul style="list-style-type: none"> <li>• Insulation resistance values should be compared with the last recorded value.</li> <li>• Compare PI values with values at the time of commissioning/ last recorded.</li> <li>• PI Insulation/condition <ul style="list-style-type: none"> <li>▪ &lt; 1.0Dangerous</li> <li>▪ Poor</li> <li>▪ 1.25Questionable</li> </ul> </li> </ul>	Ensure that transformer is disconnected. Ensure busbar are clean and free from moisture and temperature on which IR value is recorded The OEM's manual may also be
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		<ul style="list-style-type: none"> <li>1.25 - 2.0 Satisfactory</li> <li>&gt;2.0 Good</li> </ul> <p>• If PI value is less than 1.1, oil should be filtered. In case the value does not improve even after filtrations, periodic overhauling should be under taken.</p>	referred.
4.	PRD/explosion vent	Check & investigate for operation of PRD/explosion vent for any damage and presence of oil. Check connection and operation of PRD/explosion vent. Replace the damage PRD with new PRD, if required.	
5.	Miscellaneous, if any.		

**d. 25kV Double Pole Vacuum Circuit Breaker:-  
(As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	All the moving part of the mechanism	Check, clean & lubricate the gear, bearing cum shaft rollers and latches	Lubricate
3.	All cir clip, split clip and dowel pin	Check for availability and damages. Replace, if any damages.	
4.	Spring stroke	Measure & record spring stroke contact pressure.	Minimum 4 mm and max 5 mm.
5.	Contact wear indication	Check contact wear mark. If green indication is not visible under the bottle, then contacts may be worn off.	Change bottle or contact manufacturer/OEM
6.	Insulation Resistance of pole unit (when breaker in open position)	Check & record IR value of pole unit as per OEM: i. Top-Bottom ii. Top-Earth iii. Bottom-Earth Check with 2.5/5.0 KV megger.	More than 5000 MΩ
7.	Insulation Resistance of pole unit (when breaker in open position)	Check & record continuity & IR value of pole unit as per OEM: i. Top-Bottom- for continuity ii. Top & Bottom-Earth Check with multimeter & 2.5/5 KV megger.	IR More than 5000 MΩ
8.	Insulation Resistance of i. Motor ii. Closing coil iii. Tripping coil iv. AC & DC wiring	Check & record IR value of: i. Motor ii. Closing coil iii. Tripping coil iv. AC wiring & DC wiring Check with 500 V megger	i. Motor- more than 2MΩ ii. Closing coil- More than 2 MΩ iii. Tripping coil- More than 2 MΩ iv. AC wiring & DC wiring more than 2 MΩ
9.	Motor, if applicable	Check carbon brushes & clean commutator. Replace carbon brushes, if worn out.	

10.	Top cover	Check sealing of top cover for any Moisture trapping.	
11.	Wipe & travel measurement	Measure & record the wipe & travel measurement as per OEM manual.	

**e. 132 kV Triple Pole SF-6 Circuit Breaker:-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	All the moving part of the mechanism	Check, clean & lubricate the gear, bearing cum shaft rollers and latches	Lubricate as per annexure 'III'
3.	Insulation Resistance of pole unit (when breaker in open position)	Check & record IR value of pole unit i. Top-Bottom ii. Top-Earth iii. Bottom-Earth Check with 2.5/5.0 KV megger.	IR More than 1500 MΩ
4.	Insulation Resistance of pole unit (when breaker in open position)	Check & record continuity & IR value of pole unit as per OEM: iii. Top-Bottom- for continuity iv. Top & Bottom-Earth Check with multimeter & 2.5/5.0 KV megger.	IR More than 1500 MΩ
5.	Insulation Resistance between control circuit to ground	Measure & record the Insulation Resistance between control circuits to ground by 500 V megger	IR More than 2 MΩ
6.	Closing/Trip coil	Check & record closing coil parameter: i. Voltage ii. Resistance iii. IR values Check with measuring instrument (megger & multimeter)	i. Voltage 110V DC+/-10% ii. Resistance 32 Ohm iii. IR value more than 2MΩ
7.	Mechanism box	Check penetration of rain water, rust and door hinges. Arrest the reason and rectify.	Weather sealant as per annexure 'V'
8.	Mainterminal connector	Check overheated & rusted nuts, bolts, washers and bi-metallic strips. Replace, if required.	
9.	Shock observer	Check for oil leakage, if leakages attend it.	
10.	Charging time of closing spring	Check and record charging time of closing spring	15 sec. or as per OEM manual.
11.	Miscellaneous, if any.		

In case of any variation in measured value of above parameters, OEM's manual for above parameter may be referred to.

**f. Auxiliary Transformer**

(As per DFCC Maintenance Manual)

**TYPE**-Double wound, single phase, oil immersed natural air cooled and stepdown transformer for outdoor installation

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to quarterly schedule		
2.	BDV oil	Take sample of oil from bottom of tank and check the BDV of oil with BDV tester.	BDV more than 30 kV (with 2.5 mm spindle gap)
3.	Additional arching horn on fixed 9-ton insulator	Check for any flash mark on arching horn and measure the gap of arching horns.	Maintain gap 165 mm (min) & record.
4.	Measure & record the Insulation Resistance between		
(i)	HV-Earth	200 M ohm. Minimum (use 2.5 KV megger)	
(ii)	HV-LV	200 M ohm. Minimum (use 2.5 KV megger)	
(iii)	LV-Earth	2 M ohm. Minimum (use 500 KV megger)	
5.	Earth resistance	Check earth connections, measure & record the earth resistance by earth tester.	Not more than 10 ohm.
6.	LT cable	Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: i. Between AT to ICDP (MCCB) switch. ii. Between ICDP (MCCB) switch to control panel by 500 V megger.	2 M ohm min. at 30 <sup>0</sup> Temperature.
7.	Miscellaneous, if any.		

#### h) **132/25 kV Potential Transformer/CVT** (As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to quarterly schedule		
2.	Measure Insulation Resistance between		
(i)	HV-Earth, if possible	200 M ohm. Minimum (use 2.5 KV megger)	
(ii)	HV-LV	200 M ohm. Minimum (use 2.5 KV megger)	
(iii)	LV-Earth	2 M ohm. Minimum (use 500 KV megger)	
3.	Rod gap, if provided	Check & record rod gap setting	
4.	Miscellaneous, if any.		

#### i) **132 & 25 kV Current Transformer** (As per DFCC Maintenance Manual)

Type- Single phase, oil filled natural air cooled.

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	Earth link	Check & tight earth link in secondary box.	
3.	Measure Insulation Resistance between:		
(i)	HV-Earth	i. 2000MΩmin.for220/132kV(use2.5kVmegger) ii. 200 MΩ min. for 25 kV (use 2.5 kV megger)	



	HV-LV	i. 2000 MΩ min. for 220/132 kV (use 2.5 kV megger) ii. 200 MΩ min. for 25 kV (use 2.5 kV megger)	
	LV-Earth	i. 200MΩMin.for220/132kV(use2.5kVmegger) ii. 2 MΩ min. for 25 kV (use 500 V megger)	
4.	Fuses	Check fuse for proper rating & overheating, replace, if necessary.	
5.	Arching horn, if provided	Check arching horn for flash mark and measure the gap of arching horns.	
6.	Miscellaneous, if any.		

**j) 132 kV Triple Pole Isolator:-**  
(As per DFCC Maintenance Manual)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	Small parts	Check all nuts, bolts, split pins for good condition. Replace, if rusted or defective.	
3.	Jaws	Check the spring of jaws for proper gripping	
4.	Main contacts	Check overheating and clean main contacts and lightly wipe with petroleum jelly.	
5.	Articulated joints, sliding and bearing surface	Check & clean all articulated joints, sliding and bearing surface with kerosene oil and lubricate.	
6.	Interlock	Check interlock operation and lubricate all moving parts.	
7.	Arching horn, if provided	Check arching horn for flash mark and measure the gap of arching horns.	
8.	HV connections	Check & tight HV connections for overheating/rusting. Replace, if required	
9.	Earthing of operating handle	Check earthing of operating handle with copper flexible wire.	
10.	Miscellaneous, if any.		

**k) 25 KV Double Pole Motorized Isolator**  
(As per DFCC Maintenance Manual)

S N	Item	Inspection And Work to be Carried Out	Remark
1.	Carry out following work in addition to quarterly schedule		
2.	Clearance of blades in open condition	Check, measure & record the distance between male and female contacts in fully open position.	Minimum 500mm
3.	Electrical operation	Check the isolator for smooth operation and correct alignment of male and female contacts.	

4.	Alignment of isolator	Check the correct alignment of isolator for its firm grip, while isolator is in closed condition.	
5.	Blade tips and contact fingers	Check blade tips for overheating and contact fingers and apply petroleum jelly on the contact surface.	
6.	Earthing of operating handle	Check earthing of operating handle with copper flexible wire.	Intact
7.	Miscellaneous, if any.		

**l) 120/42 kV Lightning Arrester (As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly & quarterly schedule		
2.	Leakage current, if monitor provided	Measure & record of leakage current	Less than 500 Micro Amps
3.	Miscellaneous, if any.		

**m) Control and Relay Panel (As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly schedule		
2.	Indication and recording instrument	Check all indication and recording instrument for healthiness. Replace if defective.	
3.	Relay	Check & clean outer terminals of relay	
4.	Door gasket & hinges	Check & replace gasket for damages. Replace with new, if necessary	
5.	All connections	Check all connections. Tighten, if found loose.	
6.	Miscellaneous, if any.		

**n) Condition Based Maintenance through Thermovision Camera (Traction Substation)**

**AC TRD (Traction Sub-Station) (As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Cable Termination of cable isolators ends connection	- Check thermal scanning by thermo vision camera. - The temperature of hot spots is compared with adjacent/nearby similar components.	
2.	All joints, commotions, Jumpers PG Clamps of incoming Switchyard	- Check thermal scanning by thermo vision camera. - The temperature of hot spots is compared with adjacent/nearby similar components.	

	And outgoing switch gear		
3.	Transformers bushing connection	- Check thermal scanning by thermo vision camera. - The temperature of hot spots is compared with adjacent/nearby similar components.	
4.	Bus bar joints	- Check thermal scanning by thermo vision camera. - The temperature of hot spots is compared with adjacent/nearby similar components.	
5.	LA,CT,PT connections from bus bar and PG clamps	- Check thermal scanning by thermo vision camera. - The temperature of hot spots is compared with adjacent/nearby similar components.	
6.	HV side bi-polar isolators. Single pole isolator contact and bus bar	- Check thermal scanning by thermo vision camera. - The temperature of hot spots is compared with adjacent/nearby similar components.	
7.	Power cable terminations And joints Provided in sub-stations	- Check thermal scanning by thermo vision camera. - The temperature of hot spots is compared with adjacent/nearby similar components.	
8.	Miscellaneous, if any.		

**o) Earthing & Bonding (As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Bonding & earth connection with structure	Check physical soundness & tightness of bonding & earth connection with structure, Lightning arrestor and electrical equipment inter panel connections.	
2.	Earth resistance of electrical equipment body, fencing and Structure with electrode	Measure & record the earth resistance of electrical equipment body, fencing, structures by earth tester.	
3.	Shielding wire	Check termination of shielding wire condition and bonding with structures.	
4.	Earth resistance of each electrode after disconnection	Measure & record the earth resistance of each electrode after disconnecting it from common earth system by earth tester.	
5.	Combined earth resistance of TSS/SP/SSP with rail	Measure & record the earth resistance of combined electrode without disconnecting it from common earth system by earth tester.	For TSS<0.5 ohm and SP and SSP <2.0 ohm
6.	Miscellaneous, if any.		

**o. Battery Charger (As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly & quarterly schedule		
2.	Cleaning	Check and clean battery charger from outside and inside with soft wire brush.	
3.	i. Rectifier ii. Coarse, fine/ control switch, iii. Trickle/Boost changeover switch	Check & tight connection of all terminal connectors and working: i. Rectifier, ii. Coarse/fine control switch iii. Trickle/Boost change over switch	
4.	Miscellaneous, if any.		

**Note:** In case battery charger is of SMPS type, OEM's manual may be referred to for the scheduled maintenance.

**p. AC/DC Distribution Panel (As per DFCC Maintenance Manual)**

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to quarterly schedule		
2.	Panel	Check & clean the panel inside and outside by soft wire brush.	
3.	MCB, rotary switches	Check & clean for smooth operation & working without obstruction	
4.	Tightness	Check & tight cable termination of MCBs, rotary switch and bus bar	
5.	Miscellaneous, if any.		

**For Any Clarification on Schedule of Maintenance the DFCCIL Maintenance Manual for OHE and PSI can be referred.**

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### **GENERAL CONDITIONS OF CONTRACT**

The General Conditions of Contract July 2020 of the Indian Railway/DFCCILs shall be followed with its latest correction slips and amendments issued from Indian Railway/DFCCILs.

The General Conditions of Contract July 2020 of the Indian Railway/DFCCILs, along with its latest correction slips and amendments, will form part of the tender/contract documents.

In case, there is an ambiguity in any definition, the decision of DFCCIL regarding the interpretation shall be final and binding.

Wherever there is conflict in any condition between GCC and special condition mentioned in tender documents. The condition mentioned in special condition of contract will prevail. However, DFCCIL decision in this connection shall be final and binding.

A copy of the book-let incorporating the above “General Conditions of Contract (July-2020)” may be perused in the Office of CGM/DDU or respective division.

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# ***ANNEXURES***

**ANNEXURE-I**

**Performa for Experience Certificate. {on the letter head of the issuing department}**

M/s.....has executed the following work to this department and has completed the work successfully. The details are as under:

1. Name of work:
2. Agreement/contract number:
3. Date of start of work:
4. Date of completion of work:
5. Total value of work during the contract period (if completed):
6. In case of on-going work, please indicate the annual payment for
  - a) F.Y. 2021-22
  - b) F.Y. 2020 -21
  - c) F.Y.2019-20

(Name and Signature of the officer with seal of the department and phone no.)



**ANNEXURE-II****Performa for Affidavit. {on the letter head of the bidder}**

I \_\_\_\_\_ Proprietor/Director/Partner of the firm M/s. \_\_\_\_\_ do hereby solemnly affirm that the firm M/s. \_\_\_\_\_ has never been black listed/debarred by any organization/office and there has not been any work cancelled against them for poor performance in the last three years reckoned from the date of invitation of Tender.

**Signature of  
Proprietor/Director/Partner**

**CERTIFICATION OF FAMILIARISATION**

- A.** I/We hereby solemnly declare that I/We have visited the site of work and have familiarized myself/ourselves of the working conditions there in all respects and in particular, the following:
- a) Topography of the Area.
  - b) Climatic condition and law and order situation in project area.
- B.** I/We have kept myself/ourselves fully informed of the provisions of this tender document comprising Instructions to the Tenderers, General Conditions of the Contract, Special Conditions, special terms and conditions apart from information conveyed to me/us through various other provisions in this tender document.
- C.** I/We have quoted my / our rates as “Percentage above / below / at par” of costs as per Schedule of items Rates **in Offer Sheet**, taking into account all the factors given above.

**(Signature of Tenderer/s)**

**ANNEXURE – IV**

**SUPPLEMENTARY AGREEMENT**

Articles of Agreement made on this ..... in the year.....and  
between DFCCIL acting through the Chief General Manager hereinafter called as one party  
and..... of the second part.

Where the party hereto of the second part executed an agreement with the party hereto of the  
first part being agreement No. .... dated.....for the  
performance of.....herein called the principal agreement.

And whereas it was agreed by and between the parties hereto that the works would be  
completed by the party hereto of the second part on.....“date last extended” and  
whereas the party hereto of the second part has executed the work to the entire satisfaction of  
the party hereto of the first part and whereas the party hereto of the first part already made  
payments to the party hereto of the second part diverse sums from time to time aggregating to  
**Rs.** ..... including the final bill bearing voucher No.....dated.....  
(the receipt of which is hereby acknowledged by the party hereto of the second part) in full  
and final settlement of all his claim under the principal agreement.

Now it is hereby agreed by and between the parties in the consideration of sums already paid  
by the party hereto of the first part to the party hereto of the second part against all  
outstanding dues and claims for all works done under the aforesaid principal agreement  
including / excluding security deposit, the party hereto of the second part have no further dues  
/ claims against the party hereto of the first part under the said principal agreement.

It is further agreed by and between the parties that they party hereto of the second part has  
accepted the said sums mentioned above in full and final satisfaction of all its dues and  
claims under the said principal agreement.

It is further agreed and understood by and between the party that in consideration of the  
payment already made under the agreement the said principle agreement shall finally  
discharged and rescinded all the terms and conditions including the arbitration clause.

It is further agreed and understood by and between the parties that the arbitration clause  
contained in the said principal agreement shall cease to have any effect and / or shall seems to  
be nonexistent for all purposes.

Signature of the Tenderer/s

For and on behalf of

Witness of the signatures

Witness .....

.....

1.

2.

**ANNEXURE-V**

**AFFIDAVIT**

**FORMAT FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS**

*(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs. 100/-. The stamp paper has to be in the name of the tenderer) \*\**

I.....(Name and designation)\*\* appointed as the attorney/authorized signatory of the tenderer (including its constituents),M/s.....(hereinafter called the tenderer) for the purpose of the Tender documents for the work of .....as per the **E- Tender No.: -----** **Date-----** of (DFCCIL ), do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

- 1) I/we the tenderer (s), am/are signing this document after carefully reading the contents.
- 2) I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
- 3) I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website www.ireps.gov.in . I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the DFCCIL shall be final and binding upon me/us.
- 4) I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
- 5) **I/ We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding uponme/us.**
- 6) **I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.**
- 7) I/we undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides banning of business for five year on entire IR. Further, I/we (insert name of the tenderer )\*\*.....and all my/our constituents understand that my/our offer shall be summarily rejected.
- 8) I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD/SD and Performance guarantee besides any other action provided in the contract including banning of business for five year on entire IR.

DEPONENT  
SEAL AND SIGNATURE  
OF THE TENDERER

**VERIFICATION .**

I/We above named tenderer do hereby solemnly affirm and verify that the contents of my/our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT

SEAL AND SIGNATURE  
OF THE TENDERER

Place:

Dated:

**\*\*The contents in Italics are only for guidance purpose. Details as appropriate, are to be filled in suitably by tenderer. Attestation before Magistrate/Notary Public .**

**ANNEXURE-VI**

(Guarantee –Bond offered by bank to DFCC in connection with the execution of Contracts)  
(SD)

**GUARANTEE BOND FORMAT**  
(To be used by approved Schedule Banks)

1. In consideration of the Employer DFCCIL (herewith called “ The Employer”) having agreed to exempt\_\_\_\_\_ (hereinafter called “The said Contractor(s)”) from the demand, under the terms and conditions of an Agreement No..... dated\_\_\_\_\_ made between \_\_\_\_\_ and \_\_\_\_\_ for \_\_\_\_\_ (hereinafter called the “The Said Agreement”) of **security deposit** for the due fulfillment by the said contractor(s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only), we, \_\_\_\_\_ (indicate the name of the bank) (hereinafter referred to as “ The Bank”) at the request of contractor(s) do hereby undertake to pay to the Employer an amount not exceeding Rs. \_\_\_\_\_ against any loss or damage caused to or suffered or would be caused to or suffered by the Employer by reason of any breach by the said contractor(s) of any of the terms and conditions contained in the said Agreement.
2. We \_\_\_\_\_ (indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur merely on a demand from the DFCCIL stating that the amount claimed is due by way of loss or damages caused to or would be caused to or suffered by the DFCCIL by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_.
3. We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s)/ Supplier(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present is being absolute and unequivocal. The payment so made by us under this Bond shall be valid discharges of our liability for payment hereunder the Contractor(S)/Supplier(s) shall have no claim against us for making such payment.
4. We \_\_\_\_\_ (indicate the name of Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Agreement have been fully paid and its claims satisfied

or discharged or till \_\_\_\_\_ the Employer/DFCCIL certify that terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges the Guarantee. Unless a demand or claim under this Guarantee is made on us in writing on or before the \_\_\_\_\_, we shall be discharged from all liability under this Guarantee thereafter.

5. At any time during the period in which this guarantee is valid the Employer may request for its extension and the Bank will extend this guarantee under the same condition for the required time at the cost of the Contractor.
6. We \_\_\_\_\_ (indicate the name of Bank) further agree with the DFCC that the DFCC shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extent time of performance by the said Contractor(s) from time to time any of the powers exercisable by the DFCCIL against the said Contractor(s) and to forbear or enforce any of terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the DFCCIL or any indulgence by the DFCCIL to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties for the said reservation would relieve us from the liability.
7. This Guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s)/Supplier(s).
8. We \_\_\_\_\_, (indicate the name of Bank) lastly undertake not to revoke this Bank Guarantee during its currency except with the previous consent of the DFCCIL in writing.

IN WITNESS WHEREOF we of the Bank have signed and stamped this guarantee on this day of.....being herewith duly authorized.

Bank Seal Signature of Bank Authorize Official with Seal

Name:.....  
Designation:.....  
Address:.....

Witness:

1. Name:.....  
Designation:.....  
Address:.....
2. Name:.....  
Designation:.....  
Address:.....

**ANNEXURE-VII**

**Format of Bank Guarantee for Performance Security**

Bank Guarantee No. : .....

Dated : .....

To,

Dedicated Freight Corridor Corporation of India Limited, Metro Station Building Complex  
5<sup>th</sup> Floor, Pragati Maidan, New Delhi

Acting through Chief General Manager, DDU, DFCCIL, Manas Nagar Railway Colony, Pt.  
Deen Dayal Upadhyay Nagar (Mughalsarai), Chandauli-232101

Reference: - Contract No. ...., Awarded on .....

This deed of guarantee made this day of \_\_\_\_\_ Between \_\_\_\_\_ (Name of Bank) having registered office at \_\_\_\_\_ (hereinafter referred to as “Bank”) of the one part, and Dedicated Freight Corridor Corporation of India Limited (hereinafter called the “Client”) of the other part.

Whereas Dedicated Freight Corridor Corporation of India Limited has awarded the contract no. \_\_\_\_\_ for \_\_\_\_\_ (hereinafter called “the Contract”) to \_\_\_\_\_ (Name of the Firm/ Consultant) having its registered office at \_\_\_\_\_ (hereinafter called the Firm/ Consultant).

AND WHEREAS the Firm/ Consultant is bound by the said Contract to submit to the Client an irrevocable performance security guarantee bond for a total amount of Rs. \_\_\_\_\_ (Rupees Amount in words).

Now, we the undersigned (name of the Bank official), of the Bank being fully authorized to sign and to incur obligations for and on behalf of the Bank hereby declare that the said Bank will guarantee the Employer the full amount of Rs. ----- (Rs. In words) as stated above.

After the Contractor has signed the aforesaid contract with the Employer, the Bank further agrees and promise to pay the amount due and payable under this guarantee without any demure merely on a demand from the Employer stating that the amount claimed is due by way of loss or damage cause to or would be caused or suffered by the Employer by reason of any breach by the said contractor of any of the terms or conditions contained in the said agreement or by reason of the contractor failure to perform the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However our liability under this guarantee shall be restricted to an amount not exceeding Rs. ----- (in words) only.

We ----- (indicate the name of Bank), further undertake to pay to the Employer any money so demanded notwithstanding any dispute or dispute raised by the contractor in any suit or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.

The Payment so made by us (name of Bank) under this bond shall be a valid discharges of our liability for payment there under and the Contractor shall have no claim against us for making such payment.



We------(indicate the name of bank), to further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till at all the dues of the Employer under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by -----

(Designation and address of contract signing authority) on behalf of Employer certify that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor and accordingly discharges this guarantee.

Not with standing anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the Employer or until (date of validity/extended validity) whichever is earlier and no claim shall be valid under the guarantee unless notice in writing , thereof is given by the Employer within validity/extended validity period of guarantee from the date aforesaid.

Provided always that we .....(name of bank) un conditionally undertakes to renew this guarantee or to extend the period of guarantee from year to year before the expiry of the period or the extended period of guarantee, as the case may be on being called upon to do so by the Employer. If the guarantee is not renewed or the period extended on demand, we----- (name of bank) shall pay the Employer the full amount of the guarantee on demand without demur.

We------(indicate the name of Bank), to further agree with the Employer that the Employer shall have the fullest liberty without our consent and without effecting in any manner out of obligation hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to power exercisable by the Employer against the said contractor and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liabilities by reason of such variation, or extension being granted to the said contractor for any forbearance act or omission on the part of the Employer or any indulgence by the Employer to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties for the said reservation would relieve us from the liability.

The Guarantee hereinbefore contained shall not be affected by any change in the constitution of Bank or of the Contractor.

The expression “The Employer”, “The Bank” and “The Contractor” hereinbefore used shall include their respective successors and assigns.

We----- (name of the bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing. Notwithstanding anything to the contrary contained hereinbefore:

- i) Our liability under this Bank Guarantee shall not exceed and restricted to Rs. ---  
----- (in words).

- ii) This Bank Guarantee shall be valid up to----- , unless extended on demand by Employer.
- iii) The Bank is liable to pay the Guaranteed amount or any part thereof under this Bank Guarantee only if Employer serve a written claim or demand on or before---  
-----

IN WITNESS WHEREOF we of the Bank have signed and stamped this guarantee on this day of----- being herewith duly authorized.

Bank Seal

Signature of Bank Authorize Official with Seal

Name :.....

Designation:.....

Address :

Witness:

1. Name :.....  
Designation :.....  
Address :

2. Name  
:.....  
Designation:.....  
Address :.....

**ANNEXURE-VIII**

***FORM OF AGREEMENT***

(To be executed on requisite value of stamp Papers)

**AGREEMENT**

**THIS AGREEMENT made on \_\_\_\_\_ day of \_\_\_\_\_ (Month/year) between, DFCCIL , \_\_\_\_\_ (address). (Hereinafter called “the Employer”) of the one part and \_\_\_\_\_ (name and address of the Contractor) (hereinafter called “the Contractor”) of the other part.**

WHEREAS the Employer is desirous that certain works should be executed by the Contractor viz. **Contract No.** \_\_\_\_\_ (hereinafter called “the works, and has accepted a Bid by the Contractor for the execution and completion of such works and the remedying of any defects therein.

**NOW THIS AGREEMENT WITNESSETH as follows:**

- 1.0 In this Agreement, words and expressions shall have the same meaning as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
- 2.0 The following documents shall be deemed to form and be read and construed as part of this Agreement: -
  - i) The Contract Agreement.
  - ii) Letter of Acceptance.
  - iii) Tender Form
  - iv) General Information
  - v) Notice Inviting Tender ( with Annexes )
  - vi) Instructions to Tenderers
  - vii) Special Conditions of Contract
  - viii) Annexures
  - ix) Bill of Quantities (BOQ)/Schedule of Rates
  - x) General Terms and Conditions of Contract
- 3.0 In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
- 4.0 The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement executed the day and year first before written.

(Name, Designation and address of the  
authorized signatory)

Signed for and on behalf of the  
Contractor in the presence of:

*Witness:*

1.

2.

(Name, Designation and address of  
the authorized signatory)

Signed for and on behalf of the  
Employer in the presence of:

*Witness:*

1.

2.

**PRE CONTRACT INTEGRITY PACT****General**

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on-----  
-----day of the month of-----20xx, between, on one hand, the DFCCIL acting  
through Shri----- Designation of the officer, (hereinafter  
called the CLIENT, which expression shall mean and include, unless the context otherwise  
requires, his successors in office and assigns) of the First Part and M/s-----  
----- represented by Shri -----Chief Executive Officer (hereinafter called the  
"BIDDER/SELLER" which expression shall mean and include, unless the context otherwise  
requires, his successors and permitted assigns) of the Second part.

WHEREAS the CLIENT proposes to procure (Name of the Stores/Equipment/Item, Name of the  
Consultancy Service, Name of Works Contract, Name of Services) and the [A] is willing to  
Offer/has offered for stores or works.

WHEREAS the [A] is a private company/ public company/ Government undertaking/ partnership/  
registered export agency, constituted in accordance with the relevant law in the matter and the  
CLIENT is a PSU performing its functions or behalf of the President of India.

NOW, THEREFOR,

To avoid all forms of corruption by following a system that is fair, transparent and free from any  
influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be  
entered into with a view to:-

Enabling the CLIENT to obtain the desired said (Name of the Stores/Equipment/Item, Name of the  
Consultancy Service, Name of Works Contract, Name of Services) at a competitive price in  
conformity with the defined specifications by avoiding the high cost and the distortionary impact  
of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure  
[B] by providing assurance to them that their competitors will also abstain from bribing and other  
corrupt practices and the CLIENT will commit to prevent corruption, in any form, by its Officials  
by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

**Commitments of the CLIENT**

- 1.1 The CLIENT undertakes that no official of the CLIENT, connected directly or indirectly  
with the [B], will demand, take a promise for or accept, directly or through intermediaries,  
any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any  
other advantage from the [A] either for themselves or for any person, organization or third  
party related to the [B], in exchange for an advantage in the bidding process, bid evaluation,  
contracting or implementation process related to the [B].
- 1.2 The CLIENT will, during the pre-contract stage, treat all BIDDERS alike, and will provide  
to all BIDDERS the same information and will not provide any such information to any  
particular BIDDER which could afford an advantage to that particular [A] in comparison to  
other BIDDERS.

- 1.3 All the officials of the CLIENT will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the [A] to the CLIENT with full, and verifiable facts and the same is prima facie found to be correct by the CLIENT, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the CLIENT and such a person shall be debarred from further dealings related to the [B] process. In such a case while an enquiry is being conducted by the CLIENT the proceedings under the [B] would not be stalled.

### **Commitments of BIDDERS**

3. The [A] commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage) in order to secure the [B] contract or in furtherance to secure it and in particular commit itself to the following:-
  - 3.1 The [A] will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission fees, brokerage or inducement to any official of the CLIENT, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the [B] in exchange for any advantage in the bidding, evaluation, contracting and implementation of the [B].
  - 3.2 The [A] further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any Material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the CLIENT or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the [B] or any other [B] with the Government for showing or forbearing to show favour or disfavor to any person in relation to the [B] or any other [B] with the Government.
  - 3.3 \* [A] shall disclose the name and address of agents and representatives and Indian [A] shall disclose their foreign principals or associates.
  - 3.4 \* [A] shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
  - 3.5 The [A] further confirms and declares to the CLIENT that the [A] is the original manufacturer/integrator/authorized government sponsored export entity of the defense stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the CLIENT or any of its functionaries, whether officially or unofficially to the award of the [B] to the [A] nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
  - 3.6 The [A] either while presenting the bid or during pre-contract negotiations or before signing the [B] shall disclose any payments he has made, is committed to or intends to make to officials of the CLIENT or their family members, agents, brokers or any other intermediaries in connection with the [B] and the details of services agreed upon for such payments.

- 3.7 The [A] will not collude with other parties interested in the [B] to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the [B].
- 3.8 The [A] will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The [A] shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the CLIENT as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The [A] also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The [A] commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The [A] shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the, [A] or any employee of the [A] or any person acting on behalf of the [A], either directly or Indirectly, is a relative of any of the officers of the CLIENT, or alternatively, if any relative of an officer of the CLIENT has financial. Interest/stake in the Bidder"s firm, the same shall be disclosed by the [A] at the time of filling of tender.

The term „relative“ for this purpose would be as defined in section 6 of the companies act 1956.

- 3.13 The [A] shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the CLIENT.

#### **4. Previous Transaction**

- 4.1 The [A] declares that no previous transgression occurred in the last three years immediately before signing of this integrity Pact, with any other company in any country in respect of any corrupt practices envisage hereunder or with any public sector enterprise in India or any Government department in India that could justify BIDDER"s from the tender process.
- 4.2 The [A] agrees that if it makes incorrect statement on this subject, [A] can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

## 5. **Security Deposit**

- 5.1 While submitting commercial bid, the [A] shall deposit an amount\_\_\_\_(to be specified in RFP) as Earnest Money(if any)/Security Deposit, with the CLIENT through any of the following instruments:-
- Bank draft/TDR or a pay order in favor of\_\_\_\_\_.
  - A confirmed guarantee by an Indian nationalized bank, promising payment of the guaranteed sum to the CLIENT on demand within three working days without any demur whatsoever and without seeking any reasons whatsoever. The demand for payment by the CLIENT shall be treated as conclusive proof or payment.
  - Any other mode or through any other instrument (to be specified in the RFP).
- 5.2 The earnest money/Security deposit shall be valid up to a period of five years or the contractual obligations to the complete satisfaction of both the BIDDER and the CLIENT, including warranty period, whichever is later.
- 5.3 In case of the successful [A] a clause would also be incorporated in the article pertaining to performance Guarantee in the [B] that the provisions of sanctions for violation shall be applicable for forfeiture of performance bond in case of a decision by client to forfeit the same without assigning any reason for imposing sanction for violation of this pact.
- 5.4 No interest shall be payable by CLIENT to the [A] on earnest Money/Security Deposit for the period of its currency.

## 6. **Sanctions for Violations**

- 6.1 Any breach of the aforesaid provisions by the [A] or any one employed by it or acting on its behalf (whether with or without the knowledge of the [A] shall entitle the CLIENT to take all or any one of the following actions, wherever required :-
- To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the [A]. However, the proceedings with the other BIDDER(s) would continue.
  - The earnest money(if any) deposit (in pre-contract stage) and/or security Deposit/performance Bond (after the [B] is signed) shall stand forfeited fully and the CLIENT shall not be required to assign any reason therefore.
  - To immediately cancel the [B], if already signed, without giving any compensation to the [A].
  - To recover all sums already paid by the CLIENT, and in case of an Indian [A] with interest thereon at 2% higher than the prevailing prime lending rate of state bank of India, while in case of a [A] from the country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to [A] from the CLIENT in connection with any other [B], such outstanding payment could also be utilized to recover the aforesaid sum and interest.



- (v) To encash the advance bank guarantee and performance bond, if furnished by the [A], in order to recover the payments, already made by CLIENT, along with interest.
- (vi) To cancel all or any other contracts with the [A]. The [A] shall be liable to pay compensation for any loss or damage to the Client resulting from such cancellation/rescission and the client shall be entitled to deduct the amount so payable from the money(s) due to the [A].
- (vii) To debar the [A] from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the CLIENT.
- (viii) To recover all sums paid in violation of this pact by [A]) to any middleman or agent or broker with a view a view to securing [B] the contract.
- (ix) In cases where irrevocable letters of credit have been received in respect of any [B] signed by the client with the [A], the shall not be opened.
- (x) Forfeiture of Performance Bond in case of a decision by the client to forfeit the same without assigning any reason for imposing sanction for violation of this pact.

6.2 The client will entitled to take all or any of the actions mentioned at para 6.1(i) to (x) of this pact also on the commission by the [A] or any one employed by it or acting on its behalf (whether with or without the knowledge of the [A], of an offence as defined in chapter IX of the Indian penal code, 1860 or prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

6.3 The decision of the CLIENT to the effect that a breach of the provisions of this pact has been committed by the [A] shall be final and conclusive on the [A]. However, the [A] can approach the Independent Monitor(s) appointed for the purposes of this Pact.

## **7. Fall Clause**

7.1 The [A] undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar product/system or sub systems way supplied by [A] to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the [A] to the CLIENT, if the [B] has already been concluded

## **8. Independent Monitors**

8.1 The CLIENT has appointed Independent Monitors (hereinafter referred to as Monitors) for this pact in consultant with the central vigilance commission (Names and addresses of the Monitors to be given)

8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.

- 8.3 The monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 8.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings.
- 8.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the CLIENT.
- 8.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the CLIENT including that provided by the BIDDER. The [A] will also grant the Monitor, upon his request and demonstration of a valid Interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the [A] with confidentiality.
- 8.7 The client will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.
- 8.8 The monitor will submit a written report to the MD/DFCCIL within 8 to 10 weeks from the date of reference or intimation to him by the CLIENT/BIDDER and, should the occasion arise, submit proposal for correcting problematic situations.

**9. Facilitation of Investigation**

In case of any allegation of violation of any provisions of this Pact or payment of commission, the CLIENT or its agencies shall be entitled to examine all the documents including the Books of Accounts of the [A] and the [A] shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

**10. Law and Place of Jurisdiction**

This pact is subject to Indian law. The place of performance and jurisdiction is the seat of the CLIENT.

**11. Other Legal Actions**

The actions stipulated in this integrity pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

**12. Validity**

- 12.1 The validity of this integrity pact shall be from date of its signing and extend upto 5 years or the complete execution of the [B] to the satisfaction of both the CLIENT and the [A] including warranty period, whichever is later. In case [A] is unsuccessful, this integrity pact shall expire after six months from the date of the signing of the [B].

12.2 Should one or several provisions of this pact turn out to be invalid; the remainder of this pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

13. The parties hereby sign this integrity pact at ..... on .....

CLIENT

Name of the officer

Designation

Deptt./Ministry/PSU

Witness

1.....

BIDDER

CHIEF EXECUTIVE OFFICER

Witness

2.....

Note:

[A]- To be replaced by  
BIDDER/Seller/Consultant/Consultancy  
firm/Service provider as the case may be

[B]- To be replaced by contract/supply  
contract/consultancy contract/works  
contract as the case may be.

# ***FINANCIAL OFFER***

## Annexure - A

## SCHEDULE OF RATES

**NAME OF WORK:- Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU- Chiraila Pauthu / New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO DDU.**

## Schedule 1: OHE Maintenance Activity

## Part A - Regular Maintenance Activity

S.No	Description of Work	Unit	Total Qty.	Rate (Rs)		Total Amount (Rs.)
				Supply	Erection	
1	Checking and Maintenance of Cantilever assembly	Each	18000	0	783	14094000
2	Checking and maintenance of 25 kV OHE conductors	TKM	900	0	5010	4509000
3	Checking & maintenance of all type of 25 KV OHE Jumpers	Each	1800	0	458	824400
4	Checking & maintenance of Overlaps (IOL) & (UIOL)	Each	2250	0	1670	3757500
5	Checking & Maintenance of Anti Creep arrangement	Each	720	0	1253	902160
6	Checking & Maintenance of 25 KV Isolator (SP/DP) including earthing heel arrangement if any	Each	240	0	1340	321600
7	Checking & Maintenance of 25 KV OHE at Turnouts	Each	576	0	1285	740160
8	Checking & Maintenance of 25 KV OHE on a cross over	Each	480	0	2567	1232160
9	Checking & Maintenance of Section Insulator Assembly	Each	450	0	1285	578250
10	Checking & Maintenance of Auto tension Device (ATD)	Each	2700	0	2713	7325100
11	Checking & Maintenance of Aerial earth wire, Feeder wire & Feeder Termination / Fixed Anchor Termination	Km	1800	0	10	18000
12	Foot patrolling to be carried out along with schedule with one DFCCIL staff	TKM	10800	0	150	1620000
13	Checking & maintenance of all type of bonds including cleaning of muffs at OHE mast (Structure/longitudinal/transverse bonds & earth electrode)	Each	5400	0	30	162000

14	Removal & Re erection of bonds of various type during track machine working or Erection of missing/new bonds Paint etc. supplied by DFC)	Each	2700	0	78	210600
15	Checking & Maintenance of all additional Insulators	Each	3600	0	357	1285200
16	Checking & maintenance of leaning of OHE mast till a new mast erected	Each	100	0	3572	357200
17	Checking & Maintenance of PTFE type neutral section (Quarterly)	Each	192	0	5446	1045632
18	Checking and Maintenance of Portal boom drop arms and fabricated Masts free from bird nests	Each	900	0	323	290700
19	Trimming of tree branches	Each	900	0	44	39600
20	Manning and housekeeping in the IMD/IMSD	Man days	9855	0	674	6642270
21	Erection of 25 KV over head equipment as per requirement	TKM	30	0	43347	1300410
	Schedule 1 - Total Part A					47255942
Part B -Emergency & other maintenance activities						
S.No	Description of Work	Unit	Total Qty.	Rate (Rs)		Total Amount (Rs.)
				Supply	Erection	
22	Loading, unloading of DFCCIL supplied material to places directed by Engineer incharge (i.e. From station to tower wagon, station to station etc.)	Each occasion	300	0	4046	1213800
23	Erection of Catenary wire splicing or Contact wire splicing or Feeder wire splicing or Earth wire splicing	Each	300	0	3125	937500
24	Replacement / Re-erection of various types of insulators	Each	1350	0	893	1205550
25	Breakdown attention by a gang for restoration of 25 KV OHE during accidents/ unusual occurance for checking OHE parmeters- (one gang consisting of 7 staff)	Hour	600	0	1584	950400
26	Erection of traction masts & portal	Nos	30	0	2953	88590
	Schedule 1 - Total Part B					4395840
Part C - Foundation item						
S.No	Description of Work	Unit	Total Qty.	Rate (Rs)		Total Amount (Rs.)
				Supply	Erection	
27	Casting of all types of foundation (The rate includes supply of the material- ballast, sand, cement, mixture & reinforcement etc.)	CuM	300	7530		2259000
	Schedule 1 - Total Part C					2259000
	Total Schedule 1					53910782

Schedule 2: PSI Maintenance Activity						
Part A TSS & SP/SSP maintenance						
S.No	Description of Work	Unit	Total Qty.	Rate (Rs)		Total Amount (Rs.)
				Supply	Erection	
1	Monthly Bay Maintenance of Traction Substations	Each	120	0	5454	654480
2	Half yearly Bay Maintenance of Traction Substations	Each	60	0	8391	503460
3	Yearly Bay Maintenance of Traction Substations	Each	10	0	11115	111150
4	Half yearly 25 KV bay Isolator maintenance	Each	65	0	12106	786890
5	Half yearly maintenance of Feeding post gantry TSS and associated equipments.	Each	10	0	15788	157880
6	Quarterly Maintenance of 25 KV bay equipments other than isolators and maintenance of feeding post CB in TSS	Each	20	0	12864	257280
7	Half yearly maintenance of Earthing station in TSS/SP/SSP	Each	660	0	146	96360
8	Monthly panel maintenance in TSS/SP/SSP	Each	375	0	2726	1022250
9	Fortnightly battery & battery charger maintenance of TSS	Each	144	0	1744	251136
10	Quarterly maintenance of CB/BM in SP/SSP.	Each	540	0	3103	1675620
11	Fortnightly maintenance of battery & battery charger at SP/SSP and yard cleaning.	Each	648	0	1253	811944
12	Half yearly gantry maintenance of SP/SSP	Each	54	0	10907	588978
13	Quarterly maintenance of AT (Auxiliary transformer) at TSS/SP/SSP and OHE at stations & open section	Each	720	0	894	643680
Schedule 2 -Total Part A						7561108
Part B -Emergency & other maintenance activity						
S.No	Description of Work	Unit	Total Qty.	Rate (Rs)		Total Amount (Rs.)
				Supply	Erection	
14	Maintenance of 25 KV dropout fuse AT TSS/SP/SSP and OHE at stations & open section	Nos	300	0	981	294300
15	Breakdown attention of PSI equipment	Per hour	300	0	586	175800
16	Removal and re erection of PSI equipment	Each	100	0	5454	545400
Schedule 2 -Total Part B						1015500
Part C –TSS/SP/SSP Manning & House Keeping						
SN	Item Description	Unit	Total Qty.	Rate (Rs)		Total amount (Rs.)
				Supply	Erection	

Signature of Tenderer

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17	Regular Housekeeping of TSS	Man day	1825	0	674	1230050
18	Manning of TSS	Man day	1095	0	2945	3224775
Schedule 2 -Total Part C						4454825
Part D –Transformer Oil Testing by Accredited Agency						
19	Transformer Oil Testing	Occasion	45	0	22600	1017000
Schedule 2 -Total Part D						1017000
Total Schedule 2						14048400
Grand Total of Schedule 1 & 2						679592156
Total estimated value is Rs.6,79,59,215.00 (Rs. Six Crore Seventy Nine Lakh Fifty Nine Thousand Two Hundred Fifteen only).						
Note: 1. GST and other statutory taxes as applicable shall be paid extra. 2. Contractor shall not change any description rate as published in tender.						

Signature of tenderer with seal

Offer sheet			
Offer to be filled by tenderer(s) in below table			
NAME OF WORK:- Maintenance of 2x25 KV Overhead Equipment along with Power Supply Installation maintenance on DDU-Chiraila Pauthu/New Sonnagar section of DFCCIL including IR connecting lines for a period of 03 Years under GM/CO DDU.			
Column 1	Column 2	Column 3	Column 4
S.N.	Description of Work	Estimated Rate	Offered Rate in % Below, Above & At Par On Estimated Rate
1	Schedule 1: OHE Maintenance Activity	53910782	
2	Schedule 2: PSI Maintenance Activity	14048433	
Note: 1. Offered rate shall be quoted in % below, above & at par in numbers as well as in words.			
2. GST as applicable shall be paid at actual on production of challans by contractor.			

#### Quoting of rates

1. Tenderer should quote for each schedule of items in above table.
2. Tenderer must sign the following certificate.

I/We offer and agree to execute the above work at rate uploaded online at [www.ireps.gov.in](http://www.ireps.gov.in) through digital Signature.

Signature of tenderer with seal

***End of Document***

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