



Tender No.: DFCC-JP-EL-REJN-KSGN-T-30

Name of Work: Maintenance of 2x25kV Power Supply Installation in New Rewari- Madar section of DFCCIL including the Phulera UP & DN link lines, Kishangarh Balawas, Kathuwas connection to Indian Railways for a period of 24 (Twenty-Four) months under CGM Jaipur Unit.

**Single Packet
OPEN E-TENDER**

**TENDER DOCUMENT
(NOT TRANSFERABLE)**

**Employer:
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
(A GOVERNMENT OF INDIA ENTERPRISE)
UNDER MINISTRY OF RAILWAYS**

INDEX

PART	DESCRIPTION	PAGE NO.
PART - I	Notice Inviting Tender	03-06
PART - II	Instructions to bidders for Online bidding & Checklist	07-10
PART - III	Preamble & General Instructions to Tenderers	11-37
PART - IV	General Conditions of Contract	38-85
PART - V	Special Conditions of Contract	86-103
	Technical Condition of Contract	104-109
	PARTICULARS OF SCHEDULE OF ITEMS & EXPLANATORY NOTES	110-149
	Maintenance Schedule of Power Supply Installations (PSI), Annexure-Z	150-205
PART-VI	Milestones and Time Schedule	206-207
PART-VII	Tender Annexures	208-237
	FINANCIAL OFFER, Form-1	238-278
	Form -2 to Form -11	279-301
	Annexure-1 & Annexure-2	302-304
PART-VIII	Drawings	305-306
	End of Document	307

Total Pages: 307

Note: - Information as required as per various Forms/Annexures to tender document should be submitted by the tenderers without fail strictly as per formats. Offers submitted without Mandatory documents shall be summarily rejected.

PART-I

NOTICE INVITING TENDER



डेडीकेटेड फ्रेट कोरीडोर कॉर्पोरेशन ऑफ इण्डिया लि.
भारत सरकार (रेल मंत्रालय) का उपक्रम
Dedicated Freight Corridor Corporation of India Ltd.
A Govt. of India (Ministry of Railways) Enterprise

NOTICE INVITING TENDER (NIT)

General Manager/Co-ordination, Jaipur for and on behalf of DFCCIL invites e-tenders on Single packet system on prescribed forms from firms/Companies having requisite experience and financial capacity for execution of the following work: -

S. N	E-Tender No.	DFCC- JP-EL-REJN-KSGN-T-30
1	Name of Work	“Maintenance of 2x25kV Power Supply Installation in New Rewari- Madar section of DFCCIL including the Phulera UP & DN link lines, Kishangarh Balawas, Kathuwas connection to Indian Railways for a period of 24 (Twenty Four) months under CGM Jaipur Unit.”
2	Estimated Cost of Work	Rs. 7,42,75,008.70/- (Rs. Seven Crore Forty Two Lakh Seventy Five Thousand Eight and Seventy Paise only) including GST
3	Completion Period	Total 24 (Twenty-Four) Months
4	Tender Fee	Rs. 10,000/- (Rs. Ten Thousand only) + GST@18% = 11,800/- to be paid online through payment gateway provided at www.ireps.gov.in
5	Earnest Money	Rs. 5,21,400/- (Rs. Five Lakh Twenty One Thousand Four Hundred Only) to be paid online through payment gateway provided at www.ireps.gov.in .
6	Availability of Bid documents	From 06.02.2025 on www.ireps.gov.in
7	Download bid documents up to	15:00 Hrs. of 28.02.2025 on www.ireps.gov.in
8	Last date & time of online receipt of bid	15:00 Hrs. of 28.02.2025 on www.ireps.gov.in
9	Date and time of Online opening of bid	15.30 Hrs. of 28.02.2025 on www.ireps.gov.in
10	Validity of offer	60 Days from the date of opening of tender.
11	Security Deposit	5% of Contract value
12	Performance Bank Guarantee	Performance Guarantee (PG) have to be submitted within 21 (twenty-one) days from the date of issue of Letter of Acceptance (LOA), amounting to Five percent (5 %) of the contract value in the form as given in clause 16.4 of GCC.

13	Defect Liability Period	06 Months
14	Address of Communication	Office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Ltd.C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur - 302020. Tel: 0141-3103220, 0141-3103235, Website: https://dfccil.com
15	Help Desk for E-Tendering	For any clarification, help and registration for E-Tendering & matter relating to Digital Signature, contact at Help desk of www.ireps.gov.in and phone No.-011-23761525
16	Availability of Tender Documents	The Tender documents can be downloaded from www.ireps.gov.in . Tenderer who wishes to view free Notification and Tender Documents can visit www.ireps.gov.in . DFCCIL may issue Addendum (s)/Corrigendum (s) to the Tender document, if any, which shall be issued at least 15 days in advance of date of opening of tender and placed on the website www.ireps.gov.in only.

Note-1. Tender documents should be downloaded from the website address www.ireps.gov.in. Payment of Tender Document fee in respect of e-tendering, should accept through net banking or payment gateway only. The Bid Security shall be deposited either in cash through e-payment gateway or submitted as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. Any tender received without Bid Security or cost of tender documents in the form as specified in the tender documents shall not be considered and shall be summarily rejected.

2. Eligibility shall be assessed on applicants, fulfilling the technical capability and competence as well as for financial and organizational resources as specified in clause no. 10 of part III of Preamble & General Instruction to tenders.
3. The Offer shall be valid **for 60 days** from the date of opening of the tender, and extended further if required from time to time. The Contractor cannot withdraw their offer within the period of validity/extended validity The Bid Security of such tenderers shall be forfeited.
4. Notice Inviting Tender (NIT), Tender Document and Corrigendum/Addendum if any, will be posted on the E Tendering website www.ireps.gov.in Tenderers are advised to complete all submission related work well before Time and Date for Submission of Tender Online. Any request for modification in the time/date of submission of tender due to tenderer's failure to submit his offer, will not be accepted. No request for extension of the Tender Due Date shall be considered.
5. The tender documents shall be submitted in online mode only through website www.ireps.gov.in. Detailed credential as per the requirement of eligibility criteria and all Schedule are to be submitted in online mode.

6. No tender document will be available offline. Downloading tender documents online and submission of tender online is mandatory for this tender.
7. Any further addendum/Corrigendum for this tender will be posted in DFCCIL tendering portal website <https://www.ireps.gov.in> only. Interested bidders are advised to check website regularly for any Addendum/ Corrigendum.
8. DFCCIL reserves right to cancel the tender before submission / opening of tender, postpone the tender submission / opening date and to accept / reject any or all tenders without assigning any reason thereof. DFCCIL's assessment of suitability as per eligibility criteria shall be final and binding.
9. DFCCIL reserves the right to pre-qualify the bidder(s) provisionally based on the documents submitted by them, 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. 8 of Notice Inviting Tender.
10. Information as required as per various Forms to tender document should be submitted by the tenderers without fail strictly as per formats.

**General Manager/Co-ordination
DFCCIL, Jaipur**

PART-II

Instructions to Bidders for Online Bidding & Check List

A. Instructions to bidders for online bidding

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

E-tendering site- <https://www.ireps.gov.in> / its link at www.dfccil.com (Help desk of IREPS: 011 -23761525). The tenderer/bidders must have Class-III Digital Signature Certificate & must be register on IREPS portal. Only registered tenderer/bidders can participate on e-Tendering. All relevant documents must be uploaded at the time of participating in e-Tendering.

Instructions:-

1. **Bidding Methodology:** Online Bid System
2. Broad outline of activities from Bidders perspective:-
 - a. Procure a Digital Signing Certificate (DSC)
 - b. Register on Electronic Tendering System (ETS)
 - c. Create Users and assign roles on ETS
 - d. View Notice Inviting Tender (NIT) on (ETS)
 - e. Download Official copy of Tender Documents from ETS.
 - f. Clarification to Tender Documents on ETS - Query to DFCCIL (Optional) - view response to queries posted by DFCCIL through addenda.
 - g. Bid Submission on ETS: Prepare & arrange all documents/ papers for submission of bid online.
 - h. Attend Public Online Tender Opening Event (TOE) on ETS.
 - i. Post TOE clarification on ETS (Optional). Respond to DFCCIL's post – TOE queries. 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.
3. **Digital Certificate:**

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 Authority (CCA) (refer <http://www.cca.gov.in>).
4. The Tender documents can be downloaded from the website: ireps.gov.in and to be submitted in the e - format, before the schedule date & time of submission of the tender otherwise the Bid will not be considered.
5. Physical copy of the tender documents would not be sold /accepted.

6. List of Contact persons for this tender details of DFCCIL

DFCCIL Contact- 1	Sh. Rajender Singh Choudhary, GM/Elect
Telephone/Mobile No.	7877089475
E-mail ID	rajendersingh76@dfcc.co.in

DFCCIL Contact- 2	Sh. Manoj Kumar Chaudhary, PM/Elect
Telephone/Mobile No.	9602276276
E-mail ID	mkchaudhary@dfcc.co.in

Name	CPM DFCCIL Jaipur
Bank account number	369201010054636
IFSC code	UBIN0536920
Bank Name	Union Bank of India
Bank Branch	Bapu Nagar, Jaipur (Rajasthan)

7. Modification / Withdrawal of bids:

- (i) The Bidder may modify/ withdraw its e- bid after submission prior to the Bid Due Date & time. No Bid shall be modified / withdrawn by the Applicant on or after the Bid Due Date & time.
- (ii) Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.
- (iii) For modification of e-bid, applicant has to detach its old bid from e-tendering portal and upload / resubmit digitally signed modified bid.
- (iv) For withdrawal of bid, applicant has to click on withdrawal icon at e-tendering portal and can withdraw its e-bid.

8. DFCCIL may issue addendum(s) / corrigendum(s) to the tender documents. In such cases the addendum(s)/corrigendum(s) shall be placed on ireps.gov.in and www.dfccil.gov.in. The tenderer who have downloaded the tender documents from the website before issue of addendum(s)/ corrigendum(s) 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 tenders. Any tender submitted without addendum(s) / corrigendum(s) (if any) shall be summarily rejected.

9. Other instructions

- a) It is recommended that the Tenderer/vendor should visit the portal (www.ireps.gov.in), peruse the information provided under the relevant links and login to it and upload documents of bid.
- b) DFCCIL reserves right to cancel the tender before submission / opening of tender, postpone the tender submission / opening date and to accept / reject any or all tenders without assigning any reason thereof. DFCCIL's assessment of suitability as per eligibility criteria shall be final and binding.

B. Check list for Mandatory Documents:-

CHECK LIST			
CHECK LIST OF ITEMS TO BE COMPLIED BY TENDERER(S)S BEFORE SUBMITTING THEIR TENDERS. THE TENDERER(S) SHALL ENSURE THAT THE FOLLOWING ARE COMPLIED BEFORE SUBMITTING THE TENDER DOCUMENT:-			
S. N	Clause in tender document	Documents	Done or Not
1.	Para 1.8 of Part III page no. 13 & 211	Tender form (Annexure no. I)	
2.	Para 2.14 of Part-III page no.16 & 214	Format for certificate to be submitted / uploaded by tenderer along with the tender documents (Annexure no V)	
3.	Para 5 of Part-III page no. 20 & 218	Bid security in accordance with Para 5 with Part –III of Preamble and General Instructions to Tenderers. Bid security (bank guarantee bond) from any scheduled commercial bank of India. (Annexure –VIA)	
4.	Para 10.2 of Part III Page no. 24 & Annexure- VIB page no. 220	Annual contractual turnover data for the previous 3/4 years	
5.	Para 10.1 of Part III page no. 23 & 280	Technical eligibility criteria details (Form no-2A)	
6.	page no. 282	Applicant's party information form (Form no-2C)	
7.	page no. 283	ECS/ NEFT / RTGS mandate form (Form no-3)	
8.	page no. 285	Pre contract integrity pact (Form no-5)	
9	page no. 291	Anti-profiteering declaration to whomsoever it may concern (Form no-6)	
10.	Para- 4.1 Part-III page no. 19	Certificate for provision for medium & small enterprises (MSE) (If applicable)	
11.	Para-14 of Part-III page no. 28	The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc.	
12.	Para 11 of part III page no. 26	Relevant documents as per para 11 of part III of Preamble and General Instructions to Tenderers.	
13.	Para 10.1 (c) of Part-III page no. 23	Electrical Contractor License	
14.	Page No. 4	Scanned copy of proof of money deposited against Earnest money.	
15.		Scanned copy of proof of money deposited against Tender Document Cost.	
16.	-	GST Registration Certificate	
17.	Annexure 1 & 2, Page No. 302-304	Sign Copy to be submitted, without this offer shall be summarily rejected.	
18.	All the Annexures & Forms are properly filled up and relevant documents attached and <u>indicated in Forms, (If applicable).</u>		
19.	Rates to be quoted on rate sheet online only as per offer Sheet Page no. 277		

PART - III

**PREAMBLE & GENERAL INSTRUCTIONS TO
TENDERERS**

PART-III

PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS

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

Ministry of Railways (MOR), Government of India has planned to construct Dedicated Freight Corridor (DFC) covering about 3338 route Kilometres on Eastern and Western Corridors. The coverage of Eastern Corridor is from Ludhiana to Dankuni and Western Corridor is planned from Jawaharlal Nehru Port, Mumbai to Rewari /Tughlakabad /Dadri near Delhi. There will be a linkage between two corridors at Dadri.

1.1 Dedicated Freight Corridor

Eastern DFC Route will be approximately 1839 Km long from Dankuni to Ludhiana via Dankuni – Asansole – Dhanbad – Gaya – Sonnagar - Mughalsarai - Allahabad - Kanpur - Tundla - Aligarh - Khurja - Bulandshahr – Meerut – Saharanpur – Ambala - Ludhiana.

Western DFC Route will be approximately 1520 Km long from Dadri to JNPT via Rewari – Iqbalgarh - Vadodara- JNPT.

Proposed alignment of DFC has been generally kept parallel to existing Indian Railway line except provision of detours at some stations where the existing yards /cities are congested . Level Crossings (LC's) are generally unsafe locations and also a congestion points for road/rail's users. These LC's are operational bottlenecks for Railways /DFCCIL in terms of loss in punctuality and reduction in line capacity. Construction of ROB(s)/ RUB(s) is financially and operationally beneficial apart from the fact that it improves the safety of Rail / Road users.

1.2 Scope of Work

On behalf of President of India, Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur-302020, India herein after referred to as 'DFCCIL' is inviting e-tenders from Firms/ Companies/Joint Ventures having requisite experience and financial capacity for execution of the following work:

“Maintenance of 2x25kV Power Supply Installation in New Rewari- Madar section of DFCCIL including the Phulera UP & DN link lines, Kishangarh Balawas, Kathuwas connection to Indian Railways for a period of 24 (Twenty-Four) months under CGM Jaipur Unit.”

1.3 The tenderer shall be governed by General Conditions of Contract (GCC), Preamble and General Instructions to Tenderers (ITT) and Special Conditions of Contract (SCC). Wherever, there is a conflict in any condition between GCC and Special Conditions of Contract mentioned in the tender documents, the condition mentioned in Special Conditions of Contract will prevail. However, Engineer's decision in this connection shall be final and binding. Tender document contains General Conditions of Contract and Special Conditions of Contract specific to this work and shall be applicable in the contract.

1.4 Location- Works are to be executed from New Rewari to Madar in Rajasthan and Haryana under the jurisdiction of Chief General Manager /DFCCIL/Jaipur Unit. However, DFCCIL reserves right to change the site of work anywhere in adjacent / adjoining area of the work, the contractor shall be bound to execute the work without any extra cost.

1.5 Drawings for the Work: The Drawing for the work can be seen in the office of the Chief General Manager/ DFCCIL/Jaipur at any time in working hours during working days. The drawings are only for the guidance of Tenderer(s). Detailed working drawings (if required) based generally on the drawing mentioned above, will be given by the Engineer or his representative from time to time.

(As per Clause No. 2 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

1.6 Quantum of work and materials: The indicative schedule of quantities of various items of works is included in form no 1of tender Annexures & Forms of the tender documents.

1.7 Schedule of Prices form no 1of tender Annexures & Forms of BID DOCUMENTS lists out the Schedule of Prices for various items. Based on these, the total tender value has also been worked out.

1.8 Instructions to Tenderers and Conditions of Tender: The following documents form part of Tender / Contract:

- (a) Tender Forms – First Sheet
- (b) Special Conditions (enclosed)
- (c) Bill(s) of quantities (enclosed)
- (d) Standard General Conditions of Contract and Standard Specifications (Works and Materials) of Indian DFCCIL/Railways as amended/corrected upto latest correction slips, copies of which can be seen in the office of Chief General Manager/ DFCCIL/Jaipur or obtained from the office of the Chief General Manager/ DFCCIL/Jaipur on payment of prescribed charges.
- (e) Standard Schedule of Rates (SSOR) as amended / corrected up to latest correction slips, copies of which can be seen in the office of Chief General Manager/ DFCCIL/Jaipur or obtained from the office of the Chief General Manager/ DFCCIL/Jaipur on payment of prescribed charges.
- (f) All general and detailed drawings pertaining to this work which will be issued by the Engineer or his representatives (from time to time) with all changes and modifications.

(As per Clause No. 1 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

1.9 Cost of Tender documents downloaded from internet

For submitting the tender, the Tender documents and Amendment(s), if any, is/are available on www.ireps.gov.in and the same can be downloaded and used as tender documents for submitting the offer. The cost of the tender document is indicated in NIT. The cost of the tender document shall be deposited through e-payment mode at www.ireps.gov.in only. In case, the cost of the tender document as detailed above is not deposited, tender will be summarily rejected.

- 1.10** Complete tender documents must be submitted online duly completed in all respect upto the scheduled date and time mentioned in the Notice Inviting E-Tender. In case the intended date for opening of tenders is declared a holiday, the tenders will be opened on the next working day at the same time. Any modified date and time for submission of tenders shall be uploaded on DFCCIL website www.dfccil.com and www.ireps.gov.in.
- 2.1 Form of Tender** - The Tender documents shall be in Single packets viz:- “containing All tender papers & Schedule of Prices. Detailed credentials as per the requirement of eligibility criteria and all tender papers including Summary of Prices and Schedule of Prices are to be submitted in "BID”.
- 2.2 Tender Bid** - The Tender Bid shall be submitted through online only on website www.ireps.gov.in as Eligibility/Qualifying element of the Tender Bid along with other documents mentioned in tender document.
- 2.3 Single Packet Tender-** In case of tenders costing less than Rs. 10 Crore single packet tender system will be followed and technical & financial offer of the tenderer/s shall be opened and evaluated at the same time.
- 2.4 Two Packets System of Tendering (Not Applicable for this tender):** With a view to assess the tenders technically without being influenced by the financial bids, 'Two Packets System of tendering' shall be adopted wherein tender documents provide for the same.
(As per Clause No. 7A of Part-I of GCC APRIL-2022, with up to date correction slip)
- 2.5 Pre Bid Conference (Not Applicable for this tender):** Intenders having advertised value more than Rs 50 Crore or as mentioned in the tender document, DFCCIL/Railways shall conduct Pre Bid Conference(s) with the prospective bidders.
(As per Clause No. 7B of Part-I of GCC APRIL-2022 , with up to date correction slip)
- 2.6 Permission to Bid for a bidder from a country which shares Land boundary with India:** Any bidder from the countries sharing a land border with India will be eligible to bid in any procurement of works (including turnkey projects) only if the bidder is registered with the Competent Authority. The Competent Authority for registration will be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India. For interpretation of this para, Department of Expenditure, Ministry of Finance, Government of India letter F.No.6/18/2019-PPD dated 23/07/2020 shall be referred.
(As per Clause No. 7D of Part-I of GCC APRIL-2022 , with up to date correction slip)
- 2.7** Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his/their entries must be attested by him / them.
(As per Clause No. 4 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)
- 2.8** All communication between the Employer and the tenderer shall be in writing. For the purposes of seeking clarification, the Employer's address is: **Chief General Manager , Dedicated Freight Corridor Corporation of India Limited, C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur-302020, India** Telephone: +91-141-3103200, +91-141-3103220. Electronic mail address: rajendersingh76@dfcc.co.in and mkchaudhary@dfcc.co.in

- 2.9 Omissions & Discrepancies:** Should a tenderer find discrepancies in or omissions from the drawings or any of the Tender Forms or should he be in doubt as to their meaning, he should at once notify the authority inviting tenders. The tender inviting authority may, if deemed necessary, clarify the same to all tenderers. It shall be understood that every endeavour has been made to avoid any error which can materially affect the basis of tender and successful tenderer shall take upon himself and provide for the risk of any error which may subsequently be discovered and shall make no subsequent claim on account thereof.
(As per Clause No. 4 of Part-I of GCC APRIL-2022 , with up to date correction slip)
- 2.10 Conditional tenders are liable to be rejected straightway. DFCCIL reserves the right to reject such tenders summarily without assigning any reasons whatsoever. In case tenderer/s still decides to have conditional offer, all such conditions are required to be listed separately and shall be supplemented by the details of exact financial implications, if applicable. DFCCIL will not take cognizance of any other conditions / variations from the tender stipulations mentioned at any other place in the tender documents.
- 2.11 The 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 tender in which bidder has participated and Bid Security of all such tenderers shall stand forfeited.
- 2.12 **Withdrawal of Tender:** No tender can be withdrawn after scheduled date and time of submission and during tender validity period.
- 2.13 Care in Submission of Tenders:**
- (a) (i) Before submitting a tender, the 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 forms are adequate and all-inclusive to accord with the provisions in Clause-37 of the Standard General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer.
- (a)(ii) Tenderers will examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services 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.
- (a)(iii) 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 DFCCIL/Railways 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.
- (a)(iv) In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the DFCCIL/Railways shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority.
- (b) When work is tendered for by a firm or company, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.

- (c) The DFCCIL/Railways \ will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.
(As per Clause No. 6 of Part-I of GCC APRIL-2022 , with up to date correction slip)

2.14 The tenderers shall submit a copy of certificate stating that all their statements/documents submitted along with bid are true and factual. Standard format of certificate to be submitted by the bidder is enclosed as **Annexure-V**. Non submission of above certificate by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self-attested/digitally signed by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.

(As per Clause No. 6.1 of Part-I of GCC APRIL-2022 , with up to date correction slip)

2.15 **Right of DFCCIL/Railways to Deal with Tenders:** The DFCCIL/Railways reserves the right of not to invite tenders for any of DFCCIL/Railways work or works or to invite open or limited tenders and when tenders are called to accept a tender in whole or in part or reject any tender or all tenders without assigning reasons for any such action. In case if tender is accepted in part by DFCCIL/Railways administration, Letter of Acceptance shall be issued as counter offer to the Tenderer, which shall be subject to acceptance by the Tenderer.

(As per Clause No. 7 of Part-I of GCC APRIL-2022 , with up to date correction slip)

3.0 Opening of Tender:

- (a) Tender will be opened at the scheduled date and time mentioned in the Notice Inviting E-Tender.
- (b) After the opening of tender documents of all the tenderers, these bids shall be scrutinized and analyzed. If found necessary by the Employer, the tenderers shall be asked to furnish clarifications and the Employer may also hold discussions with the tenderers after giving due notice. The names of the tenderers whose bid are considered complete and meet eligibility criteria shall be short listed.
- (c) The earnest money of non-qualifying tenderers will be returned back within a reasonable period.

3.1 Preliminary examination of bids

- a) The DFCCIL 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.
- b) 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.
- c) The rates should be quoted in figures as well as in words. If there is variation between rates quoted in figures and in words, the rate quoted in shall be taken as correct. If more than one or improper rates are tendered for the same item, the tender is liable to be rejected.
- d) Prior to the detailed evaluation, DFCCIL 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:

3.2 Evaluation and comparison of tenders In case of open tenders, bids, which are determined as substantially responsive, shall be evaluated based on criteria as given in Eligibility Criteria” and as given in Notice inviting E - Tender. 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.

3.3 **Clarification of Bids:** To assist in the examination, evaluation & comparison and pre-qualification of the Tender, the DFCCIL/Railways may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the DFCCIL/Railways shall not be entertained or considered. The DFCCIL/Railways request for clarification and the response of the bidder in this regard shall be in writing.

However, if a Bidder does not provide clarification of its bid by the date and time communicated in the DFCCIL/Railways request for clarification, the bid shall be evaluated as per the documents submitted along with the bid.

(As per Clause No. 7E of Part-I of GCC APRIL-2022 , with up to date correction slip)

3.4 **Validity of Tender:-** Tenderer shall keep his offer open for a minimum period of 60 days from the date of opening of the tender or as mentioned in the Tender Notice.

3.5 **Tenderer’s Address**

The tenderer should state in the tender his postal address legibly and clearly. Any communication sent in time, to the tenderer by post at his said address shall be deemed to have reached the tenderer duly and in time. Important documents should be sent by registered post.

3.6 **Right of DFCCIL to Deal with Tenders**

(a) The DFCCIL reserves the right of not to invite tenders for any of DFCCIL work or works or to invite open or limited tenders and when tenders are called to accept a tender in whole or in part or to reject any tender or all tenders without assigning reasons for any such action.

(b) The authority for the acceptance of the tender will rest with the DFCCIL. It shall not be obligatory on the said authority to accept the lowest tender or any other tender and no tenderer(s) shall demand any explanation for the cause of rejection of his/their tender nor the DFCCIL undertake to assign reasons for declining to consider or reject any particular tender or tenders.

3.7 The entire work is required to be completed in all respects within 03 months from the date of issue of the acceptance letter. Time is the essence of contract. The contractor shall 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.

3.8 If the Tenderer/s deliberately gives any wrong information about credentials/documents in his/ their tenders and thereby create(s) circumstances for acceptance of his/their tender, DFCCIL reserves the right to reject such tender at any stage, besides, shall suspend business with such tenderer. The EMD of such tenderers shall also be forfeited.

- 3.9 Employer not bound to accept any tender: The employer shall not be bound to accept the lowest or any tender or to assign any reason for non-acceptance or rejection of a tender. The employer reserves the right to accept any tender in respect of the whole or any portion of the work specified in the tender papers or to reduce the work or to accept any tender for less than the tendered quantities without assigning any reason whatsoever.
- 3.10 Negotiation: Should DFCCIL decide to negotiate with a view to bring down the rates, the tenderer called for negotiations should furnish the following form of declaration before commencement of negotiations? "I. do declare that in the event of failure of contemplated negotiations relating to Tender No..... dated my original tender shall remain open for acceptance on its original terms and conditions".
- 3.11 **Site Inspection:** Tenderers are requested to inspect the site and carry out careful examination to satisfy them as to the nature of work involved and facilities available at the site. They should note carefully all the existing structures and those under construction through other agencies. They should also study the suitability of utilizing the different equipment and the machinery that they intend to use for the execution of the work. The tenderers should also select suitable sites for the purpose of locating their store yard, laboratory, staff quarters etc., and satisfy themselves with regard to the feasibility of transporting the girders, etc. from the yard to the final site of placement etc.
- 3.12 **Canvassing**
- No tenderer is permitted to canvass to DFCCIL on any matter relating to this tender. Any tenderer found doing so may be disqualified and his bid may be rejected.
- 3.13 **Award of Contract**
1. DFCCIL shall notify the successful tenderer in writing by a Registered Letter/Courier/Speed Post or through bearer that his tender has been accepted.
 2. Letter of Acceptance after it is signed by the Contractor in token of his acceptance shall constitute a legal and binding contract between DFCCIL and the contractor till such time the contract agreement is signed.
- 3.14 **Security Deposit on Acceptance of Tender:**
- The security deposit / rate of recovery / mode of recovery on acceptance of tender shall be as per the Para 16(1) to 16(3) Of General Conditions of Contract (GCC).
- 3.15 **Execution of Contract Document:** The Tenderer whose tender is accepted shall be required to appear in person at the office of Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur-302020 , as the case may be, or if tenderer is a firm or corporation, a duly authorized representative shall appear (there would be no need for appear in person if agreement is signed digitally) and execute the contract agreement within seven days of notice from DFCCIL/Railways that the Contract Agreement is ready. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender. The Contract Agreement shall be entered into by DFCCIL/Railways only after submission of valid Performance Guarantee by the Contractor. In such cases the DFCCIL/Railways may determine that such tenderer has abandoned the contract and there upon his tender and acceptance thereof shall be treated as

cancelled and the DFCCIL/Railways shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The failed Contractor shall be debarred from participating in the re-tender for that work.

(As per Clause No. 8 of Part-I of GCC APRIL-2022 , with up to date correction slip)

3.16 Form of Contract Document: Every contract shall be complete in respect of the document it shall so constitute. Not less than 2 copies of the contract document shall be signed by the competent authority and the Contractor and one copy given to the Contractor (there would be no need of signing two copies if agreement is signed digitally)

(a) For contracts for specific works, the contract document required to be executed by the tenderer whose tender is accepted shall be an agreement as per specimen form Annexure- IV.

(As per Clause No. 9 & 9B of Part-I of GCC APRIL-2022 , with up to date correction slip)

3.17 Understanding and Amendments of Tender Documents:

1. The bidder must own all responsibilities and bear all cost for obtaining all the information including risks, contingencies & other circumstances in execution of the work. It shall also carefully read and understand all its obligations & liabilities given in tender documents.
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 should obtain at his own cost all information that may be necessary for preparing the bid and execution of the contract. The cost 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.
3. At any time prior to the deadline for submission of bids, DFCCIL 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 Amendment, which shall be part of the Tender documents.
4. DFCCIL may at its discretion extend the deadline for submission of the bids at any time before the time of submission of the bids.

4.0 Make in India Policy: Provisions of Make in India Policy 2017 issued by Govt. of India, as amended from time to time, shall be followed for consideration of tenders.

(As per Clause No. 7C of Part-I of GCC APRIL-2022 , with up to date correction slip)

4.1 Provision for medium & small enterprises (MSE): As mandated by Railway Board Letter No. 2010/RS (G)/363/1 dated 05.07.2012 (RBS No. 4/2012), in compliance to public procurement policy, following provisions are included for Medium & Small Enterprises (MSE) in the tender document:

1. Tender sets shall be provided free of cost to MSEs registered with the listed agencies for the item tendered.
2. MSEs registered with the listed agencies for the item tendered will be exempted from payment of Earnest Money.
3. (I) MSEs who are interested in availing themselves of these benefits will enclose with their offer the proof of their being MSE registered with any of the agencies mentioned in the notification of Ministry of MSME indicated below:
 - (i) District industries Centers
 - (ii) Khadi and Village Industries Commission
 - (iii) Khadi and Village Industries Board

- (iv) Coir Board
- (v) National Small Industries Corporation
- (vi) Directorate of Handicraft and Handloom
- (vii) Any other body specified by Ministry of MSME.

(II) The MSEs must also indicate the terminal validity date of their registration. Falling (I) & (II) above, such offers will not be liable for consideration of benefits detailed in MSE notification of Government of India dated 23.03.2012.

4. Definition of MSEs owned by SC/ST is as give below:
 - (i) In case of proprietary MSE, proprietors (s) shall be SC/ST.
 - (ii) In case of partnership MSE, the SC/ST partners shall be holding at least 51% shares in the unit.
 - (iii) In case of Private Limited Companies at least 51% share shall be held by SC/ST promoters.
5. All bidders registered under Micro, Small and Medium Enterprises (MSMEs) shall have to satisfy the eligibility criteria at par with other bidders. There shall not be any relaxation in eligibility criteria/tender process or other tender requirements and L-1 price.
6. The above facilities shall not be applicable for the items for which they are not registered.
7. The tenderer (s) shall submit copy of current and valid MSMEs registration certificate inclusive of all the pages showing the category of entrepreneur whether the registered firm is owned by General or SC/ST entrepreneurs, monetary limit of their registration for the items tendered to avail the benefits under the Policy. The MSMEs shall also submit a copy "Entrepreneur's Memorandum (Part-II)" of the concerned district centre where the unit is established.
8. Registration of Udyog Aadhar Memorandum (UAM): All Micro, Small and Medium Enterprises (MSMEs) bidders are required to declare UAM Number on CPPP / <https://www.ireps.gov.in> failing which such bidders will not be able to enjoy the benefits as per Public Procurement Policy for tenders invited electronically through CPPP / <https://www.ireps.gov.in>.

5. Bid Security:

- (1) (a) The tenderer shall be required to submit the Bid Security with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the conditions of tender. The Bid Security shall be as under:

Value of the Work	Bid Security
For works estimated to cost up to 1 crore	2% of the estimated cost of the work
For works estimated to cost more than 1 crore	2 lakh plus ½% (half percent) of the excess of the estimated cost of work beyond 1 crore subject to a maximum of 1 crore

Note:

- (i) The Bid Security shall be rounded off to the nearest 100. This Bid Security shall be applicable for all modes of tendering.
- (ii) Any firm recognized by Department of Industrial Policy and Promotion (DIPP) as 'Startups' shall be exempted from payment of Bid Security detailed above.

- (iii) Labour Cooperative Societies shall submit only 50% of above Bid Security detailed above.
- (b) It shall be understood that the tender documents have been issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resale from his offer or modify the terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the DFCCIL/Railways.
- (c) If his tender is accepted, this Bid Security mentioned in sub para (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the DFCCIL/Railways shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.
- (2) The Bid Security shall be deposited either in cash through e-payment gateway or submitted as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. The Bank Guarantee bond shall be as per **Annexure-VIA** and shall be valid for a period of 90 days beyond the bid validity period.
- (3) **In case, submission of Bid Security in the form of Bank Guarantee, following shall be ensured:**
- i. A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender.
 - ii. The original Bank Guarantee should be delivered in person to the official nominated as indicated in the tender document within 5 working days of deadline of submission of bids.
 - iii. Non submission of scanned copy of Bank Guarantee with the bid on e-tendering portal (IREPS) and/or non-submission of original Bank Guarantee within the specified period shall lead to summary rejection of bid.
 - iv. The Tender Security shall remain valid for a period of 90 days beyond the validity period for the Tender.
 - v. The details of the BG, physically submitted should match with the details available in the scanned copy and the data entered during bid submission time, failing which the bid will be rejected
 - vi. The Bank Guarantee shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification “**Bid for the ***** Project**” and shall clearly indicate the name and address of the Bidder. In addition, the Bid Due Date should be indicated on the right hand top corner of the envelope.
 - vii. The envelope shall be addressed to the officer and address as mentioned in the tender document.

viii. If the envelope is not sealed and marked as instructed above, the Authority assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted and consequent losses, if any, suffered by the Bidder.

(As per Clause No. 5 of Part-I of GCC APRIL-2022, with up to date correction slip)

6. (a) Subject to exemptions provided under para 5(1) (a) of Part-III (ITT) of this document, the tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.
- (b) The Tenderer(s) shall keep the offer open for a minimum period of 60 days (in case of two packet system of tendering 90days) from the date of closing of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to Railway/DFCCIL. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited or Bank guarantee bond submitted as Bid Security for the due performance of the above stipulation, shall be forfeited to the DFCCIL.
- (c) If his tender is accepted,
- (i) the Bid Security mentioned in sub para(a) above deposited in cash through e-payment gateway will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract;
- (ii) the Bid Security mentioned in sub para(a) above submitted as Bank guarantee bond, will be encashed as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract.
- (iii) The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the DFCCIL shall not be responsible for any loss or depreciation to the Bid Security that may happen thereto while in their possession, nor be liable to pay interest thereon.
- (d) In case Contractor submits the Term Deposit Receipt/Bank Guarantee Bond towards either the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the DFCCIL shall return the Bid Security so retained as per sub para(c) above, to the Contractor.

(As per Clause No. 6 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

7. **Rights of the DFCCIL to deal with Tender:** The authority for the acceptance of the tender will rest with the DFCCIL. It shall not be obligatory on the said authority to accept the lowest tender or any other tender, and tenderer(s) shall neither demand any explanation for the cause of rejection of his/ their tender nor the DFCCIL to assign reasons for declining to consider or reject any particular tender or tenders.

(As per Clause No. 7 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

8. If the tenderer(s) deliberately gives / give wrong information in his / their tender or creates / create circumstances for the acceptance of his / their tender, the DFCCIL reserves the right to reject such tender at any stage.

(As per Clause No. 8 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with

up to date correction slip.)

9. If any partner(s) of a partnership firm expires after the submission of its tender or after the acceptance of its tender, the DFCCIL shall deem such tender as cancelled/contract as terminated under clause 61 of the Standard General Conditions of Contract, unless the firm retains its character as per partnership agreement. If a sole proprietor expires after the submission of tender or after the acceptance of tender, the DFCCIL shall deem such tender as cancelled / contract as terminated under clause 61 of the Standard General Conditions of Contract.

(As per Clause No. 9 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

10. Eligibility Criteria:

10.1 Technical Eligibility Criteria:

- (a) The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) 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 the tender, or
 - (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender.
- (b) **Definition of Similar nature of work: - " Rehabilitation/Maintenance/design supply erection testing commissioning of at least one 132 kV or Higher Grid Substation."**

Or

"Rehabilitation/Maintenance/design supply erection testing commissioning of 25/2X25 kV AC Traction Substation/Switching Stations."

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) ELECTRICAL CONTRACTOR LICENSE—

- a. The Contractor should have valid A-Class Electrical license to be submitted along with tender failing which tender would be consider ineligible (i.e. not eligible).
- b. The work shall be carried out by the contractor, having valid Electrical Contractor's License for carrying out installation work under the direct supervision of the persons holding valid certificates of competency issued by the State Government.
- c. The successful tenderer shall furnish the names and particulars of the certificate of competency of supervisor and workmen to be engaged for carrying out this work.

Note: for subletting of work costing up to Rs 50 lakh, no previous work experience of subcontractor shall be asked for by the DFCCIL.

In case after award of contract or during execution of work it becomes necessary for contractor to change subcontractor, the same shall be done with subcontractor(s) fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract, with prior approval of Chief Engineer in writing.

Note for Item 10.1:

Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organization, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.

In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

(As per Clause No. 10 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

10.2. Financial Eligibility Criteria: The tenderer must have minimum average annual contractual turnover of V/N or 'V' whichever is less; where

V= Advertised value of the tender in crores of Rupees

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

The average annual contractual turnover shall be calculated as an average of "total contractual payments" in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.

The tenderers shall submit requisite information as per **Annexure-VIB**, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

(As per Clause No. 10.2 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

10.3 Bid Capacity: The tender/technical bid will be evaluated based on bid capacity formula detailed as Annexure-VI. **(Not applicable For this Tender)**

(As per Clause No. 10.3 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

10.4 No Technical and Financial credentials are required for tenders having advertised value up to Rs 50 lakh.

(As per Clause No. 10.4 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

10.5 Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under:

The conversion rate of US Dollars into Rupees shall be the daily representative exchange rates published by the Reserve Bank of India or entity authorized by RBI to do so for the relevant date or immediately previous date for which rates have been published. Where, relevant date shall be as on the last day of month previous to the one in which tender is invited. In case of any other currency, the same shall first be converted to US Dollars as on the last day of month previous to the one in which tender is invited, and the amount so derived in US Dollars shall be converted into Rupees at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date or immediately previous date for which rates have been published.

[Explanation for Para 10 of the Tender Form (Second Sheet) including Para 10.1 to 10.5 - Eligibility Criteria:

- 1. Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any) has been made to the contractor in that ongoing contract and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender.*
- 2. In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.*
- 3. If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials*
- 4. In case of completed work, the value of final bill (gross amount) including the PVC amount (if paid) shall be considered as the completion cost of work. In case final bill is pending, only the total gross amount already paid including the PVC amount (if paid) shall be considered as the completion cost of work.*

In case of substantially completed work, the total gross amount already paid including the PVC amount (if paid), as mentioned in the certificate, shall be considered as the cost of substantially completed work.

- 5. If a bidder has successfully completed a work as subcontractor and the work experience certificate has been issued for such work to the subcontractor by a Govt. Organization or public listed company as defined in Note for Item 10.1 Para 10 of the Tender Form (above)), the same shall be considered for the purpose of fulfillment of credentials.*
- 6. In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost including the PVC amount (if paid) of that completed work or substantially completed work, shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.*
- 7. In case of newly formed partnership firm, the credentials of individual partners from previous proprietary firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent*

of 0.3*0.2*value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.

8. In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
9. In case of existing partnership firm if any new partner(s) joins the firm without any modification in the name and PAN/TAN no. of the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.
10. Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A&B partners in any other partnership firm or propriety firm without leaving partnership firm of A&B partners.
11. In case a partner in a partnership firm is replaced due to succession as per succession law, the proportion of credentials of the previous partner will be passed on to the successor.
12. If the percentage share among partners of a partnership firm is changed, but the partners remain the same, the credentials of the firm before such modification in the share will continue to be considered for the firm as it is without any change in their value. Further, in case a partner of partnership firm retires without taking away any credentials from the firm, the credentials of partnership firm shall remain the same as it is without any change in their value.
13. In a partnership firm "AB" of A&B partners, in case A also works as propriety firm "P" or partner in some other partnership firm "AX", credentials of A in propriety firm "P" or in other partnership firm "AX" earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.
14. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
15. In case company A is merged with company B, then company B would get the credentials of company A also.]

(As per Clause No. 10.5 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

11. Tenderer Credentials:

Documents testifying tenderer previous experience and financial status should be produced along with the tender.

Tenderer(s) who is/are not borne on the approved list of the Contractors of DFCCIL/Railway shall submit along with his / their tender:

- (i) Certificates and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.
 - (ii) Audited Balance Sheet duly certified by the Chartered Accountant regarding contractual payments received in the past.
 - (iii) The list of personnel / organization on hand and proposed to be engaged for the tendered work. Similarly list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.
 - (iv) A copy of certificate 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 certificate to be submitted by the bidder is enclosed as Annexure-V. Non submission of a copy of certificate by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self-attested / digitally signed by which they/he are/is qualifying the Qualifying Criteria mentioned in the Tender Document.
 - (v) The 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 DFCCIL, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the DFCCIL shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the DFCCIL there under.
 - (vi) (a) In case of any information submitted by tenderer is found to be false, forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Bid Security besides banning of business for a period of upto five years.
(b) In case of any information submitted by tenderer is found to be false, forged or incorrect after the award of contract, the contract shall be terminated. Bid Security, Performance Guarantee and Security Deposit available with the DFCCIL shall be forfeited. In addition, other dues of the contractor, if any, under this contract shall be forfeited and agency shall be banned for doing business for a period of up to five years.
(As per Clause No. 11 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)
- 12.** Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.
(As per Clause No. 12 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)
- 13. Execution of Contract Documents:** The successful Tenderer(s) shall be required to execute an agreement with the President of India acting through the Chief General Manager/DFCCIL/Jaipur for carrying out the work according to the Standard General Conditions of Contract, Special Conditions / Specifications annexed to the tender and Standard Specifications (Works and Materials) of DFCCIL as amended/corrected upto latest correction slips, mentioned in tender form (First Sheet).
(As per Clause No. 13 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022,

with up to date correction slip.)

14. Documents to be Submitted Along with Tender

- (i) The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. The tenderer(s) shall enclose the attested copies of the constitution of their concern, and copy of PAN Card along with their tender. Tender Documents in such cases are to be signed by such persons as may be legally competent to sign them on behalf of the firm, company, association, trust or society, as the case may be.
- (ii) Following documents shall be submitted by the tenderer:
 - (a) **Sole Proprietorship Firm:**
 - (i) All documents in terms of Para 10 of part III above.
 - (b) **HUF:**
 - (i) A copy of notarized affidavit on Stamp Paper declaring that he who is submitting the tender on behalf of HUF is in the position of 'Karta' of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.
 - (ii) All other documents in terms of Para 10 of the part III above.
 - (c) **Partnership Firm:**
 - (i) All documents as mentioned in para 18 of the part III.
 - (d) **Joint Venture (JV):** All documents as mentioned in para 17 of the part III.
 - (e) **Company registered under Companies Act 2013:**
 - (i) The copies of **MOA (Memorandum of Association) / AOA (Articles of Association)** of the company
 - (ii) A copy of Certificate of Incorporation
 - (iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company.
 - (iv) All other documents in terms Para 10 of the part III above.
 - (f) **LLP (Limited Liability Partnership):**
 - (i) A copy of LLP Agreement
 - (ii) A copy of Certificate of Incorporation
 - (iii) A copy of Power of Attorney/Authorization issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP.
 - (iv) An undertaking by all partners of the LLP that they are not blacklisted or debarred by DFCCIL/Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.
 - (v) All other documents in terms of Para 10 of the part III.
 - (g) **Registered Society & Registered Trust:**

- (i) A copy of Certificate of Registration
 - (ii) A copy of Memorandum of Association of Society/Trust Deed
 - (iii) A copy of Power of Attorney in favour of the individual to sign the tender documents and create liability against the Society/Trust.
 - (iv) A copy of Rules & Regulations of the Society
 - (v) All other documents in terms of Para 10 of the part III above.
- (iii) If it is NOT mentioned in the submitted tender that tender is being submitted on behalf of a Sole Proprietorship firm / Partnership firm / Joint Venture / Registered Company etc., then the tender shall be treated as having been submitted by the individual who has signed the tender.
- (iv) After opening of the tender, any document pertaining to the constitution of Sole Proprietorship Firm / Partnership Firm / Registered Company/ Registered Trust / Registered Society / HUF/LLP etc. shall be neither asked nor considered, if submitted. Further, no suo moto cognizance of any document available in public domain (i.e., on internet etc.) or in DFCCIL's record/office files etc. will be taken for consideration of the tender, if no such mention is available in tender offer submitted.
- (v) A tender from JV shall be considered only where permissible as per the tender conditions.
- (vi) The DFCCIL will not be bound by any change of power of attorney or in the composition of the firm made subsequent to the submission of tender. DFCCIL may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.

(As per Clause No. 14 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

15. The tenderer whether sole proprietor / a company or a partnership firm / joint venture (JV) / registered society / registered trust / HUF / LLP etc. if they want to act through agent or individual partner(s), should submit along with the tender, a copy of power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person, specifically authorizing him/them to sign the tender, submit the tender and further to deal with the Tender/ Contract up to the stage of signing the agreement except in case where such specific person is authorized for above purposes through a provision made in the partnership deed / Memorandum of Understanding / Article of Association /Board resolution, failing which tender shall be summarily rejected. A separate power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person, shall be submitted after award of work, specifically authorizing him/them to deal with all other contractual activities subsequent to signing of agreement, if required.

Note: A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Appostille certificate.

(As per Clause No. 15 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

16. Employment/Partnership etc. of Retired DFCCIL Employees:

- (a) Should a tenderer
 - i) be a retired Engineer of the gazetted rank or any other gazetted officer working before

his retirement, whether in the executive or administrative capacity or whether holding a pensionable post or not, in the Engineering or any other department of any of the DFCCIL/Railways owned and administered by the President of India for the time being, OR

- ii) being partnership firm / joint venture (JV) / registered society / registered trust etc have as one of its partners/members a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, OR
- iii) being an incorporated company have any such retired Engineer of the gazetted rank or any other gazetted officer working before his retirement as one of its directors

AND

in case where such Engineer or officer had not retired from government service at least 1 year prior to the date of submission of the tender

THEN

the tenderer will give full information as to the date of retirement of such Engineer or gazetted officer from the said service and as to whether permission for taking such contract, or if the Contractor be a partnership firm or an incorporated company, to become a partner or director as the case may be, has been obtained by the tenderer or the Engineer or officer, as the case may be from the President of India or any officer, duly authorized by him in this behalf, shall be clearly stated in writing at the time of submitting the tender.

- b) In case, upon successful award of contract, should a tenderer depute for execution of the works under or to deal matters related with this contract, any retired Engineer of gazette rank or retired gazetted officer working before his retirement in the Engineering or any other department of any of the DFCCIL/Railways owned and administered by the President of India for the time being, and now in his employment, then the tenderer will ensure that retired Engineer or retired gazetted officer had retired from government service at least 1 year prior to the date of his employment with tenderer and in case he had retired from service within a year then he possesses the requisite permission from the President of India or any officer, duly authorized by him in this behalf, to get associated with the tenderer.
- c) Should a tenderer or Contractor being an individual, have member(s) of his family or in the case of partnership firm/ company / joint venture (JV) / registered society / registered trust etc. one or more of his partner(s)/shareholder(s) or member(s) of the family of partner(s)/shareholder(s) having share of more than 1% in the tendering entity employed in gazetted capacity in the Engineering or any other department of the DFCCIL, then the tenderer at the time of submission of tender, will inform the authority inviting tenders the details of such persons.

Note: -If information as required as per 16.a), b), c) above has not been furnished, contract is liable to be dealt in accordance with provision of clause 62 of the Standard General Condition of contract.

(As per Clause No. 16 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

JOINT VENTURE (JV) IN WORKS TENDERS

(Not applicable for this tender)

- 17.0 Participation of Joint Venture (JV) in Works Tender:** This para shall be applicable for works tenders wherein tender documents provide for the same.
- 17.1** Separate identity/name shall be given to the Joint Venture.
- 17.2** Number of members in a JV shall not be more than three, if the work involves only one department (say Civil or S&T or Electrical or Mechanical) and shall not be more than five, if the work involves more than one Department. One of the members of the JV shall be its Lead Member who shall have a majority (at least 51%) share of interest in the JV. The other members shall have a share of not less than 20% each in case of JV with upto three members and not less than 10% each in case of JV with more than three members. In case of JV with foreign member(s), the Lead Member has to be an Indian firm/company with a minimum share of 51%.
- 17.3** A member of JV shall not be permitted to participate either in individual capacity or as a member of another JV in the same tender.
- 17.4** The tender form shall be purchased and submitted only in the name of the JV and not in the name of any constituent member. The tender form can however be submitted by JV or any of its constituent member or any person authorized by JV through Power of Attorney to submit tender.
- 17.5** Bid Security shall be submitted by JV or authorized person of JV either as :
- (i) Cash through e-payment gateway or as mentioned in tender document, or
 - (ii) Bank Guarantee bond either in the name of JV, or in the name of all members of JV as per MOU irrespective of their share in the JV if the JV has not been constituted legally till the date of submission of tender.
- 17.6** A copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV alongwith the tender. The complete details of the members of the JV, their share and responsibility in the JV etc. particularly with reference to financial, technical and other obligations shall be furnished in the MoU.
- 17.7** Once the tender is submitted, the MoU shall not normally be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Bid Security shall be liable to be forfeited.
- 17.8** Approval for change of constitution of JV shall be at the sole discretion of the DFCCIL. The constitution of the JV shall not normally be allowed to be modified after submission of the bid by the JV, except when modification becomes inevitable due to succession laws etc., provided further that there is no change in qualification of minimum eligibility criteria by JV after change of composition. However, the Lead Member shall continue to be the Lead Member of the JV. Failure to observe this requirement would render the offer invalid.
- 17.9** Similarly, after the contract is awarded, the constitution of JV shall not be normally allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and minimum eligibility criteria should not get vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract conditions.

- 17.10** On award of contract to a JV, a single Performance Guarantee shall be submitted by the JV as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization Advance, Machinery Advance etc. shall be accepted only in the name of the JV and no splitting of guarantees amongst the members of the JV shall be permitted.
- 17.11** On issue of LOA (Letter of Acceptance), the JV entity to whom the work has been awarded, with the same shareholding pattern as was declared in the MOU/JV Agreement submitted alongwith the tender, shall be got registered before the Registrar of the Companies under 'The Companies Act -2013' (in case JV entity is to be registered as Company) or before the Registrar/Sub-Registrar under the 'The Indian Partnership Act, 1932' (in case JV entity is to be registered as Partnership Firm) or under 'The LLP Act 2008' (in case JV entity is to be registered as LLP). A separate PAN shall be obtained for this entity. The documents pertaining to this entity including its PAN shall be furnished to the DFCCIL/Railways before signing the contract agreement for the work. In case the tenderer fails to observe/comply with this stipulation within 60 days of issue of LOA, contract is liable to be terminated. In case contract is terminated DFCCIL shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The entity so registered, in the registered documents, shall have, inter-alia, following Clauses:
- 17.11.1** Joint and Several Liability - Members of the entity to which the contract is awarded, shall be jointly and severally liable to the DFCCIL for execution of the project in accordance with General and Special Conditions of Contract. The members of the entity shall also be liable jointly and severally for the loss, damages caused to the DFCCIL/Railways during the course of execution of the contract or due to non-execution of the contract or part thereof.
- 17.11.2** Duration of the Registered Entity - It shall be valid during the entire currency of the contract including the period of extension, if any and the maintenance period after the work is completed.
- 17.11.3** Governing Laws - The Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.
- 17.12** Authorized Member - Joint Venture members in the JV MoU shall authorize Lead member on behalf of the Joint Venture to deal with the tender, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the JV.
- 17.13** No member of the Joint Venture shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the DFCCIL in respect of the said tender/contract.
- 17.14** Documents to be enclosed by the JV alongwith the tender:
- 17.14.1** In case one or more of the members of the JV is/are partnership firm(s), following documents shall be submitted:
- (i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
 - (ii) A copy of consent of all the partners or individual authorized by partnership firm, to enter into the Joint Venture Agreement on a stamp paper,
 - (iii) A notarized or registered copy of Power of Attorney in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm.

- (iv) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by DFCCIL/Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.

17.14.2 In case one or more members is/are Proprietary Firm or HUF, the following documents shall be enclosed:

- (i) A copy of notarized affidavit on Stamp Paper declaring that his Concern is a proprietary Concern and he is sole proprietor of the Concern OR he who is signing the affidavit on behalf of HUF is in the position of 'Karta' of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.

17.14.3 In case one or more members of the JV is/are companies, the following documents shall be submitted:

- (i) A copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement,
(ii) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company
(iii) A copy of Certificate of Incorporation
(iv) A copy of Authorization/copy of Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual, to sign the tender, sign MOU/JV Agreement on behalf of the company and create liability against the company

17.14.4 In case one or more members of the JV is/are LLP firm/s, the following documents shall be submitted:

- (i) A copy of LLP Agreement
(ii) A copy of Certificate of Incorporation of LLP
(iii) A copy of resolution passed by partners of LLP firm, permitting the Firm to enter into a JV agreement
(iv) A copy of Authorization /copy of Power of Attorney issued by the LLP firm (backed by resolution passed by the Partners) in favour of the individual, to sign the tender and/or sign the MOU/ JV agreement on behalf of the LLP and create liability against the LLP.
(v) An undertaking by all partners of the LLP that they are not blacklisted or debarred by DFCCIL/Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.

17.14.5 In case one or more members of the JV is/are Society/s or Trust/s, the following documents shall be submitted:

- (i) A copy of Certificate of Registration
(ii) A copy of Memorandum of Association of Society/Trust Deed

- (iii) A copy of Rules & Regulations of the Society
- (iv) A copy of Power of Attorney, in favour of the individual to sign the tender documents and create liability against the Society/Trust.

17.14.6 All other documents in terms of Para 10 Part III above.

17.15 Credentials & Qualifying Criteria: Technical, financial eligibility and Bid capacity of the JV shall be adjudged based on satisfactory fulfillment of the following criteria:

17.15.1 Technical Eligibility Criteria ('a' or 'b' mentioned hereunder):

(a) For Works without composite components

The technical eligibility for the work as per para 10.1 above, shall be satisfied by either the 'JV in its own name & style' or 'Lead member of the JV'.

Each other (non-lead) member(s) of JV, who is/ are not satisfying the technical eligibility for the work as per para 10.1 above, shall have technical capacity of minimum 10% of the cost of work i.e., each non-lead member of JV member must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of 10% of advertised value of the tender.

(b) For works with composite components

The technical eligibility for major component of work as per para 10.1 above, shall be satisfied by either the 'JV in its own name & style' or 'Lead member of the JV' and technical eligibility for other component(s) of work as per para 10.1 above, shall be satisfied by either the 'JV in its own name & style' or 'any member of the JV'.

Each other (non-lead)member(s) of JV, who is/ are not satisfying the technical eligibility for any component of the work as per para 10.1 above, shall have technical capacity of minimum 10% of the cost of any component of work mentioned in technical eligibility criteria. i.e., each other (non-lead) member of must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of 10% of cost of any component of work mentioned in technical eligibility criteria.

Note for Para 17.15.1:

- a) The *Major component of the work for this purpose shall be the component of work having highest value. In cases where value of two or more component of work is same, any one work can be classified as Major component of work.*
- b) *Value of a completed work done by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned technical eligibility criteria in the tender under consideration.*

17.15.2 Financial Eligibility Criteria

The JV shall satisfy the requirement of "Financial Eligibility" mentioned at para 10.2 above. The "financial capacity" of the lead member of JV shall not be less than 51% of the financial eligibility criteria mentioned at para 10.2 above.

The arithmetic sum of individual "financial capacity" of all the members shall be taken as JV's "financial capacity" to satisfy this requirement.

Note: Contractual payment received by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying compliance

of the above-mentioned financial eligibility criteria in the tender under consideration.

17.15.3 Bid Capacity

The JV shall satisfy the requirement of “Bid Capacity” requirement mentioned at para 10.3 above. The arithmetic sum of individual “Bid capacity” of all the members shall be taken as JV’s “Bid capacity” to satisfy this requirement.

(As per Clause No. 17.0 to 17.15.3 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

18.0 Participation of Partnership Firms in works tenders:

- 18.1 The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.
- 18.2 The partnership firm should have been in existence or should have been formed prior to submission of tender. Partnership firm should have either been registered with the Registrar or the partnership deed should have been notarized as per the Indian Partnership Act, prior to submission of tender.
- 18.3 Separate identity / name should be given to the partnership firm. The partnership firm should have PAN / TAN number in its own name and PAN / TAN number in the name of any of the constituent partners shall not be considered. The valid constituents of the firm shall be called partners.
- 18.4 Once the tender has been submitted, the constitution of the firm shall not normally be allowed to be modified / altered / terminated during the validity of the tender as well as the currency of the contract except when modification becomes inevitable due to succession laws etc., in which case prior permission should be taken from DFCCIL and in any case the minimum eligibility criteria should not get vitiated. The re-constitution of firm in such cases should be followed by a notary certified Supplementary Deed. The approval for change of constitution of the firm, in any case, shall be at the sole discretion of the DFCCIL/Railways and the tenderer shall have no claims what-so-ever. Any change in the constitution of Partnership firm after submission of tender shall be with the consent of all partners and with the signatures of all partners as that in the Partnership Deed. Failure to observe this requirement shall render the offer invalid and full Bid Security shall be forfeited.
If any Partner/s withdraws from the firm after submission of the tender and before the award of the contract, the offer shall be rejected and Bid Security of the tenderer will be forfeited. If any new partner joins the firm after submission of tender but prior to award of contract, his / her credentials shall not qualify for consideration towards eligibility criteria either individually or in proportion to his share in the previous firm. In case the tenderer fails to inform DFCCIL beforehand about any such changes / modification in the constitution which is inevitable due to succession laws etc. and the contract is awarded to such firm, then it will be considered a breach of the contract conditions liable for determination of the contract under Clause 62 of the Standard General Conditions of Contract.
- 18.5 A partner of the firm shall not be permitted to participate either in his individual capacity or as a partner of any other firm in the same tender.
- 18.6 The tender form shall be submitted only in the name of partnership firm. The Bid Security shall be submitted by partnership firm. The Bid Security submitted in the name of any individual partner or in the name of authorized partner (s) shall not be considered.
- 18.7 On issue of Letter of Acceptance (LOA) to the partnership firm, all the guarantees like Performance Guarantee, Guarantee for various Advances to the Contractor shall be submitted only in the name of the partnership firm and no splitting of guarantees among the partners shall be acceptable.
- 18.8 On issue of Letter of Acceptance (LOA), contract agreement with partnership firm shall be

executed in the name of the firm only and not in the name of any individual partner.

18.9 In case the Letter of Acceptance (LOA) is issued to a partnership firm, the following shall be furnished by all the partners through a notarized affidavit, before signing of contract agreement.

(a) Joint and several liabilities:

The partners of the firm to which the Letter of Acceptance (LOA) is issued, shall be jointly and severally liable to the DFCCIL for execution of the contract in accordance with General and Special Conditions of the Contract. The partners shall also be liable jointly and severally for the loss, damages caused to the DFCCIL during the course of execution of the contract or due to non-execution of the contract or part thereof.

(b) Duration of the partnership deed and partnership firm agreement:

The partnership deed/partnership firm agreement shall normally not be modified/alterd/terminated during the currency of contract and the maintenance period after the work is completed as contemplated in the conditions of the contract. Any change carried out by partners in the constitution of the firm without permission of DFCCIL, shall constitute a breach of the contract, liable for determination of the contract under Clause 62 of the Standard General Conditions of Contract.

(c) Governing laws: The partnership firm agreement shall in all respect be governed by and interpreted in accordance with the Indian laws.

(d) No partner of the firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other partner/s and that of the DFCCIL.

18.10 The tenderer shall clearly specify that the tender is submitted on behalf of a partnership firm. The following documents shall be submitted by the partnership firm, with the tender:

- (i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
- (ii) A notarized or registered copy of Power of Attorney in favour of the individual to tender for the work, sign the agreement etc. and create liability against the firm.
- (iii) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by DFCCIL/Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.
- (iv) All other documents in terms of Para 10 above.

18.11 **Evaluation of eligibility of a partnership firm:**

Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfillment of the eligibility criteria laid down in Para 10 above.

(As per Clause No. 17.0 to 18.11 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

19.0 Advances to Contractor – (Not applicable for this Tender)

If specifically provided in Tender Documents of tender having advertised value more than Rs 50 Crores, DFCCIL shall make payment, as an Interest bearing advances, as per Contractor's request. These advances shall carry a simple interest _____ as indicated in the Tender documents. The payment and recovery of such advances shall be made as per manners

prescribed in Clause 46.4 of the Standard General Conditions of Contract.

Signature of Tenderer(s) _____
Date _____

(Signature)
(Designation)
DFCCIL
Date _____

**(As per Clause No. 19 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022,
with up to date correction slip.)**

Part IV

**STANDARD GENERAL CONDITIONS OF
CONTRACT**

STANDARD GENERAL CONDITIONS OF CONTRACT

- 1. (1) Definitions:** In these Standard General Conditions of Contract, the following terms shall have the meaning assigned hereunder except where the context otherwise requires:
- (a) "Railway" shall mean the President of the Republic of India or the Administrative Officers of the DFCCIL/Railways or of the Successor DFCCIL/Railways authorized to deal with any matters which these presents are concerned on his behalf.
 - (b) "General Manager" shall mean the Officer in-charge of the General Superintendence and Control of the DFCCIL/Railways and shall also include Addl. General Manager, the General Manager (Construction) and shall mean and include their successors, of the successor DFCCIL/Railways.
 - (c) "Chief Engineer" shall mean the Officer in-charge of the Engineering Department of DFCCIL/Railways and shall also include Chief Engineer (Construction), Chief Signal & Telecommunication Engineer, Chief Signal & Telecommunication Engineer (Construction), Chief Electrical Engineer, Chief Electrical Engineer (Construction), Chief Mechanical Engineer and shall also include GGM/GM of DFCCIL.
 - (d) "Divisional Railway Manager" shall mean the Officer in-charge of a Division of the Railway and shall also mean any officer nominated by Managing Director / DFCCIL and shall mean and include their successors of the successor DFCCIL/Railways.
 - (e) "Engineer" and Employer's Engineer shall mean the Chief General Manager of DFCCIL / Representative appointed by DFCCIL.
 - (f) "Engineer's Representative" shall mean the Assistant Engineer, Assistant Signal and Telecommunication Engineer and Assistant Electrical Engineer, APM / PM / Dy .CPM / Add. CPM of DFCCIL in direct charge of the work and shall include any Sr. Sec. / Sec / Jr. Engineer / Executive / Sr. Executive, APM/PM / Dy.CPM of DFCCIL of Civil Engineering / Signal & Telecommunication Engineering / Electrical Engineering Department appointed by the DFCCIL/Railways and shall mean and include the Engineer's Representative of the successor DFCCIL/Railways.
 - (g) "Contractor" shall mean the Person/Firm/LLP/Trust/Co-operative Society or Company whether incorporated or not who enters into the contract with the DFCCIL/Railways and shall include their executors, administrators, successors and permitted assigns.
 - (h) "Contract" shall mean and include the Agreement, the Work Order, the accepted Bill(s) of Quantities or Chapter(s) of Standard Schedule of Rates (SSOR) of the DFCCIL/Railways modified by the tender percentage for items of works quantified, or not quantified, the Standard General Conditions of Contract, the Special Conditions of Contracts, if any; the Drawing, the Specifications, the Special Specifications, if any and Tender Forms, if any.
 - (i) "Works" shall mean the works to be executed in accordance with the contract.
 - (j) "Specifications" shall mean the Standard Specifications for Materials & Works of DFCCIL/Railways as specified by DFCCIL under the authority of the Chief Engineer or as amplified, added to or superseded by Special Specifications, if any.

- (k) Standard Schedule of Rates (SSOR) shall mean the schedule of Rates adopted by the Railway/DFCCIL, which includes-
1. "Unified Standard Schedule of Rates of the Railway (USSOR)" i.e. the Standard Schedule of Rates of the Railway issued under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents;
 2. "Delhi Schedule Of Rates (DSR)" i.e. the Standard Schedule of Rates published by Director General/ Central Public Works Department, Government of India, New Delhi, as adopted and modified by the DFCCIL under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
- (l) "Drawing" shall mean the maps, drawings, plans and tracings or prints there of annexed to the contract and shall include any modifications of such drawings and further drawings as may be issued by the Engineer from time to time.
- (m) "Constructional Plant" shall mean all appliances or things of whatsoever nature required for the execution, completion or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent work.
- (n) "Temporary Works" shall mean all temporary works of every kind required for the execution completion and/or maintenance of the works.
- (o) "Site" shall mean the lands and other places on, under, in or through which the works are to be carried out and any other lands or places provided by the Railway/DFCCIL for the purpose of the contract.
- (p) "Period of Maintenance" shall mean the specified period of maintenance from the date of completion of the works, as certified by the Engineer.
- (q) 'Contractor's authorized Engineer' shall mean a graduate Engineer or equivalent, having more than 3 years experience in the relevant field of construction work involved in the contract, duly approved by Engineer.
- (r) Date of inviting tender shall be the date of publishing tender notice on IREPS website if tender is published on website or the date of publication in newspaper in case tender is not published on website.
- (s) "Bill of Quantities" shall mean Schedule of Item(s) included in the tender document along with respective quantities and rates, accepted by the DFCCIL.
- 1. (2) Singular and Plural:** Words importing the singular number shall also include the plural and vice versa where the context requires.
- 1.(3) Headings and Marginal Headings:** The headings and marginal headings in these Standard General Conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof of the contract.

GENERAL OBLIGATIONS

- 2. (1) Execution Co-Relation and Intent of Contract Documents:** The contract documents shall be signed in triplicate by the DFCCIL/Railways and the Contractor. The contract documents are complementary and what is called for by anyone shall be as binding as if called for by all, the intention of the documents is to include all labour and materials, equipments and transportation necessary for proper execution of work. Materials or works not covered by or properly inferable from any heading or class of the specifications shall not be supplied by the

DFCCIL to the Contractors unless distinctly specified in the contract documents. Materials or works described in words which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.

- 2.(2) If a work is transferred from the jurisdiction of one DFCCIL/Railways to another DFCCIL/Railways or to a Project authority or vice versa while contract is in subsistence, the contract shall be binding on the Contractor and the Successor DFCCIL/Railways/Project in the same manner & take effect in all respects as if the Contractor and the Successor DFCCIL/Project were parties thereto from the inception and the corresponding officer or the Competent Authority in the Successor Railway/DFCCIL/Project will exercise the same powers and enjoy the same authority as conferred to the Predecessor Railway/DFCCIL/Project under the original contract/agreement entered into.
2. (3) If for administrative or other reasons the contract is transferred to the Successor DFCCIL/Railways , the contract shall, notwithstanding any things contained herein contrary there to, be binding on the Contractor and the Successor DFCCIL/Railways in the same manner and take effect in all respects as if the Contractor and the Successor DFCCIL/Railways had been parties thereto from the date of this contract.
3. (1) **Law Governing the Contract:** The contract shall be governed by the law for the time being in force in the Republic of India.
- 3.(2) **Compliance to Regulations and Bye-Laws:** The Contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertakings, with whose system the work is proposed to be connected and shall before making any variation from the drawings or the specifications that may be necessitated by so confirming give to the Engineer notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute, regulations or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

3.(3) Environmental and Forest clearances:

The DFCCIL/Railways represents and warrants that the environmental and forest clearances pertaining to the work commensurate with the progress of work/agreed programme, will be obtained by Engineer. In the event of any delay in securing respective clearances leading to delay in execution of work, the Contractor shall be entitled to Extension of Time for the period of such delay in accordance with the provisions of Clause-17A(ii).

4. **Communications to be in Writing:** All notices, communications, reference and complaints made by the DFCCIL or the Engineer or the Engineer's Representative or the Contractor inter-se concerning the works shall be in writing or e-mail on registered e-mail IDs i.e. the e mail id provided for correspondence in the contract agreement, otherwise email id registered with IREPS and no notice, communication, reference or complaint not in writing or through e-mail, shall be recognized.
5. **Service of Notices on Contractors:** The Contractor shall furnish to the Engineer the name, designation and address of his authorized agent and all complaints, notices, communications and references shall be deemed to have been duly given to the Contractor, if delivered to the

Contractor or his authorized agent or left at or posted to the address so given and shall be deemed to have been so given in the case of posting on day on which they would have reached such address in the ordinary course of post/ e-mail or on the day on which they were so delivered or left. In the case of contract by partners, any change in the constitution of the firm shall be forthwith notified by the Contractor to the Engineer.

6. Occupation and Use of Land: No land belonging to or in the possession of the DFCCIL/Railways shall be occupied by the Contractor without the permission of the DFCCIL/Railways. The Contractor shall not use, or allow to be used the site for any purposes other than that of executing the works. Whenever non-Railway bodies/DFCCIL/persons are permitted to use DFCCIL/Railway premises with competent authority's approval, conservancy charges as applicable from time to time may be levied.

7. Assignment or Subletting of Contract: The Contractor shall not assign or sublet the contract or any part thereof or allow any person to become interested therein in any manner whatsoever without the special permission in writing of the Chief Engineer, save as provided below. Any breach of this condition shall entitle the DFCCIL/Railways to rescind the contract under Clause 62 of these Conditions and also render the Contractor liable for payment to the DFCCIL/Railways in respect of any loss or damage arising or ensuing from such cancellation; provided always that execution of the details of the work by petty Contractor under the direct and personal supervision of the Contractor or his agent shall not be deemed to be sub-letting under this clause.

In case Contractor intends to subcontract part of work, he shall submit a proposal in writing seeking permission of Chief Engineer for the same. While submitting the proposal to Railway/DFCCIL, Contractor shall ensure the following:

(a) (i) Total value of work to be assigned to sub-contractor(s) shall not be more than 50% of total contract value.

(ii) The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract in last 5 years, ending date of submission of proposal by Contractor to Railway/DFCCIL, costing not less than 35% value of work to be subletted, through a works contract. For fulfilment of above, Work Experience Certificate issued by a Govt. Department/Organisation shall be considered. Further, Work Experience Certificate issued by a Public listed company shall be considered provided the company is having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, registered at least 5 years back from the date of submission of proposal by Contractor to Railway/DFCCIL and work experience certificate issued by a person authorised by the Public Listed Company to issue such certificates. *Note: for subletting of work costing up to Rs 50 lakh no previous work experience shall be asked for by the Railway/DFCCIL.*

In case contractor submits subcontractor's work experience certificate issued by public listed company, the contractor shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

(ii) There is no banning of business with the sub-contractor in force over IR.

(b) The Contractor shall provide to the Engineer a copy of the agreement to be entered into by Contractor with subcontractor. No subcontractor shall be permitted without a formal agreement

between Contractor and subcontractor. This agreement shall clearly define the scope of work to be carried out by subcontractor and the terms of payment in clear & unambiguous manner.

- (c) On receipt of approval from Chief Engineer, Contractor shall enter into a formal agreement legally enforceable in Court of Law with subcontractor and submit a copy of the same to the Engineer.
- (d) The Contractor shall intimate to the Engineer not less than 7 days in advance, the intended date of commencement of subcontractor's work.
- (e) Once having entered into above arrangement, Contractor shall discontinue such arrangement, if he intends to do so at his own or on the instructions of Railway/DFCCIL, with prior intimation to Chief Engineer.
- (f) The Contractor shall indemnify Railway/DFCCIL against any claim of subcontractor.
- (g) The Contractor shall release payment to the Sub-contractor(s) promptly and shall endeavour to resolve all issues amicably and speedily with the Sub-contractor(s), so that the execution of work is not affected in any manner whatsoever.
- (h) In addition to issuance of work experience certificate to Contractor, the Engineer, when, based on documents, is satisfied that subcontracted work has been carried out by subcontractor, shall issue work experience certificate to the subcontractor also for the portion of work subcontracted and successfully completed by the sub-contractor.
*Note: Work Experience Certificate to the subcontractor shall be issued only when the contractor's work is complete and contractor is entitled for the issuance of Work Experience Certificate. However, in the same contract, when the Chief Engineer, based on documents, is satisfied that the subcontractor has successfully carried out subletted work; without issuance of work experience certificate to subcontractor at this stage, the Chief Engineer can, **only once**, consider the successfully completed subletted work for the fulfilment of eligibility for further subletting of work to the subcontractor in the same contract. When the contractor's work is complete and contractor is entitled for the issuance of work experience certificate, the subcontractor shall be issued one Work Experience Certificate for the total scope of work executed by the subcontractor in the contract.*
- (i) The responsibility of successful completion of work by subcontractor shall lie with Contractor. Subcontracting will in no way relieve the Contractor to execute the work as per terms of the Contract.
- (j) Further, in case Engineer is of the view that subcontractor's performance is not satisfactory, he may instruct the Contractor to remove the subcontractor from the work and Contractor has to comply with the above instructions with due promptness. Contractor shall intimate the actual date of discontinuation of subcontract to Engineer. No claim of Contractor whatsoever on this account shall be entertained by the DFCCIL/Railways and this shall be deemed as 'excepted matter' (matter not arbitrable).
- (k) The permitted subcontracting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the DFCCIL/Railways and shall not relieve the Contractor of any responsibility under the Contract.

8. Assistance by DFCCIL for the Stores to be obtained by the Contractor: Owing to difficulty

in obtaining certain materials (including Tools & Plant) in the market, the DFCCIL may have agreed without any liability therefore to endeavour to obtain or assist the Contractor in obtaining the required quantities of such materials as may be specified in the Tender. In the event of delay or failure in obtaining the required quantities of the aforesaid material, the Contractor shall not be deemed absolved of his own responsibility and shall keep in touch with the day to day position regarding their availability and accordingly adjust progress of works including employment of labour and the DFCCIL shall not in any way be liable for the supply of materials or for the non-supply thereof for any reasons whatsoever nor for any loss or damage arising in consequence of such delay or non-supply.

9. **Railway Passes:** No free Railway passes shall be issued by the Railway to the Contractor or any of his employee/worker.
10. **Carriage of Materials:** No forwarding orders shall be issued by the DFCCIL/Railways for the conveyance of Contractor's materials, tools and plant by train which may be required for use in the works and the Contractor shall pay full freight charges at public tariff rates therefor.
11. **Use of Ballast Trains:** The Railway/DFCCIL may agree to allow the Contractor use of the ballast or material trains under such conditions as shall be specially prescribed, provided that the Contractor shall pay for the use thereof charges calculated at public tariff rates on the marked carrying capacity of each vehicle subject to specified minimum charge per day or part of day and provided further that the Contractor shall indemnify the Railway/DFCCIL against any claims or damages arising out of the use or misuse thereof and against any liabilities under the Workmen's Compensation Act, 1923 or any statutory amendments thereto.
12. **Representation on Works:** The Contractor shall, when he is not personally present on the site of the works place, keep a responsible agent at the works during working hours who shall on receiving reasonable notice, present himself to the Engineer and orders given by the Engineer or the Engineer's representative to the agent shall be deemed to have the same force as if they had been given to the Contractor. Before absenting himself, the Contractor shall furnish the name and address of his agent for the purpose of this clause and failure on the part of the Contractor to comply with this provision at any time will entitle the DFCCIL/Railways to rescind the contract under Clause 62 of these Conditions.
13. **Relics and Treasures:** All gold, silver, oil, other minerals of any description, all precious stones, coins, treasures relics antiquities and other similar things which shall be found in or upon the site shall be the property of the DFCCIL/Railways and the Contractor shall duly preserve the same to the satisfaction of the DFCCIL/Railways and shall from time to time deliver the same to such person or persons as the DFCCIL/Railways may appoint to receive the same.
14. **Excavated Material:** The Contractor shall not sell or otherwise dispose of or remove except for the purpose of this contract, the sand, stone, clay ballast, earth, trees, rock or other substances or materials which may be obtained from any excavation made for the purpose of the works or any building or produced upon the site at the time of delivery of the possession thereof but all the substances, materials, buildings and produce shall be the property of the DFCCIL/Railways provided that the Contractor may, with the permission of the Engineer, use the same for the purpose of the works either free of cost or pay the cost of the same at such rates as may be determined by the Engineer.
15. **Indemnity by Contractors:** The Contractor shall indemnify and save harmless the

DFCCIL/Railways from and against all actions, suit, proceedings, losses, costs, damages, charges, claims and demands of every nature and description brought or recovered against the DFCCIL/Railways by reason of any act or omission of the Contractor, his agents or employees, in the execution of the works or in his guarding of the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

16.(1) Security Deposit: The Security Deposit shall be 5% of the contract value. The Bid Security submitted by the Contractor with his tender will be retained /encashed by the DFCCIL/Railways as part of security for the due and faithful fulfillment of the contract by the Contractor. Provided further that, if Contractor submits the Cash or Term Deposit Receipt issued from a Scheduled commercial bank of India or irrevocable Bank Guarantee Bond from a Scheduled commercial bank of India, either towards the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the DFCCIL shall return the Bid Security, to the Contractor.

Balance of Security Deposit may be deposited by the Contractor in cash or Term Deposit Receipt issued from Scheduled commercial bank of India or irrevocable Bank Guarantee bond issued from Scheduled commercial bank of India, or may be recovered at the rate of **6%** of the bill amount till the full Security Deposit is recovered. Provided also that in case of defaulting Contractor, the DFCCIL 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.

The Irrevocable Bank Guarantee submitted towards Security deposit shall be initially valid up to the stipulated date of Maintenance period plus 60 days and shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17A and 17B of the Standard General Conditions of Contract.

Note: Security Deposit deposited in cash by the Contractor or recovered from the running bills of a Contractor or submitted by contractor as Term Deposit Receipt(s) can be refunded/returned to the contractor, in lieu of irrevocable Bank Guarantee bond issued from scheduled commercial bank of India, to be submitted by him, for an amount equal to or more than the already available Security Deposit, provided however that, in a contract of value less than Rs. 50 Crore, such refund/ return of the already available Security Deposit is permitted up to two times and in a contract of value equal to or more than Rs. 50 Crore, such refund / return of the already available Security Deposit is permitted up to three times.

16.(2) (i) Refund of Security Deposit: Security Deposit mentioned in sub clause (1) above shall be returned to the Contractor along with or after, the following:

- (a) Final Payment of the Contract as per clause 51.(1) **and**
- (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 as per clause 50.(1), in case applicable.

16. (2) (ii) Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 62 (1) of these conditions, the Security Deposit already with DFCCIL/Railways under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of

these conditions, the Security Deposit shall not be forfeited.

- 16.(3)** No interest shall be payable upon the Bid Security and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause 16.(4)(b) of this clause will be payable with interest accrued thereon.

16.(4) Performance Guarantee

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 22nd 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 DFCCIL, 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 DFCCIL shall be entitled to forfeit Bid Security and other dues payable to the contractor against that particular contract, subject to maximum of PG amount. In case a tenderer has not submitted Bid Security 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 5% of the original 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) Pay Orders and Demand Drafts tendered by any Scheduled Commercial Bank of India;
 - (v) Guarantee Bonds executed or Deposits Receipts tendered by any Scheduled Commercial Bank of India;
 - (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 is based on original contract value and shall not change due to subsequent variation(s) in the original contract value.
- (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.
- (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 these conditions.

17. Force Majeure Clause: 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/pandemics, 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.

17A Extension of Time in Contracts: Subject to any requirement in the contract as to completion of any portion or portions of the works before completion of the whole, the Contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:

- (i) **Extension due to Modification:** If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise.
- (ii) **Extension for Delay not due to DFCCIL/Railways or Contractor:** If in the opinion of the Engineer, the progress of work has any time been delayed by any act or neglect of Railway/DFCCIL's employees or by other Contractor employed by the DFCCIL under Sub-

Clause (4) of Clause 20 of these Conditions or in executing the work not forming part of the contract but on which Contractor's performance necessarily depends or by reason of proceeding taken or threatened by or dispute with adjoining or to neighbouring owners or public authority arising otherwise through the Contractor's own default etc. or by the delay authorized by the Engineer pending arbitration or in consequences of the Contractor not having received in due time necessary instructions from the DFCCIL for which he shall have specially applied in writing to the Engineer or his authorized representative then upon happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer within 15 days of such happening, but shall nevertheless make constantly his best endeavours to bring down or make good the delay and shall do all that may be reasonably required of him to the satisfaction of the Engineer to proceed with the works. The Contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time.

- (iii) **Extension for Delay due to DFCCIL/Railways:** In the event of any failure or delay by the DFCCIL to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the DFCCIL due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the Contractor to damages or compensation therefor, but in any such case, the DFCCIL may grant such extension or extensions of the completion date as may be considered reasonable.

The Contractor shall indicate the period for which the work is likely to be delayed and shall seek extension of time as may be considered necessary under clause 17A(i) or/and 17A(ii) or/ and 17A(iii) above, as soon as the cause thereof shall arise and, in any case, not less than 15 days before the expiry of the date fixed for completion of the works. The Engineer shall consider the same and shall grant and communicate such extension of time as in his opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby. No other compensation shall be payable for works so carried forward to the extended period of time; the same rates, terms and conditions of contract being applicable, as if such extended period of time was originally provided in the original contract itself.

The non-submission of request for extension or submission of request within less than 15 days before the expiry of the date fixed for completion of the works, shall make him ineligible for extension under these sub clauses, subject to final decision of Engineer.

(As per Advance Correction Slip No. 1, Letter No. 2022/CE-1/CT/GCC-2022/Policy Dated-14.07.2022)

17B Extension of Time with Liquidated Damages (LD) for delay due to Contractor: The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the Contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in Clause 17 and 17A, the DFCCIL may, if satisfied that the works can be completed by the Contractor within reasonable short time thereafter, allow the Contractor for further extension of time (Proforma at Annexure-VII) as the Engineer may decide. On such extension the DFCCIL will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the Contractor as agreed damages and not by way of penalty for each week or part of the week, a sum calculated at the rate of Liquidated Damages as decided by Engineer, between 0.05% to 0.30% of contract value of the works for each week or part of the week.

For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued.

Provided also, that the total amount of liquidated damages under this condition shall not exceed 5% of the contract value or of the total value of the item or groups of items of work for which a separate distinct completion period is specified in the contract.

Provided further, that if the DFCCIL is not satisfied that the works can be completed by the Contractor and in the event of failure on the part of the contractor to complete the work within further extension of time allowed as aforesaid, the DFCCIL shall be entitled without prejudice to any other right or remedy available in that behalf, to appropriate the contractor's Security Deposit and rescind the contract under Clause 62 of these Conditions, whether or not actual damage is caused by such default.

NOTE:

In a contract, where extension(s) of time have been allowed once under clause 17B, further request(s) for extension of time under clause 17A can also be considered under exceptional circumstances. Such extension(s) of time under clause 17A shall be without any Liquidated damages, but the Liquidated damages already recovered during extension(s) of time granted previously under clause 17B shall not be waived. However, Price variation during such extension(s) shall be dealt as applicable for extension(s) of time under clause 17B.

(As per Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

- 17C Bonus for Early Completion of Work:** In open tenders having advertised value more than Rs.50 crore and original period of completion 12 months or more, when there is no reduction in original scope of work by more than 10%, and no extension granted on either DFCCIL or Contractor's account, Contractor shall be entitled for a bonus of 1% for each 30 days early completion of work. The period of less than 30 days shall be ignored while working out bonus. The maximum bonus shall be limited to 5% of original contract value. The completion date shall be reckoned as the date of issuance of completion certificate by Engineer.
- 18.(1) Illegal Gratification:** Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner or agent or servant or anyone on his behalf, to any officer or employee of the DFCCIL or to any person on his behalf in relation to obtaining or execution of this or any other contract with the DFCCIL shall, in addition to any criminal liability which he may incur, subject Contractor to the rescission of the contract and all other contracts with the DFCCIL and to the payment of any loss or damage resulting from such decision and the DFCCIL shall be entitled to deduct the amounts so payable from the Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.
- 18.(2)** The Contractor shall not lend or borrow from or have or enter into any monetary dealings or transactions either directly or indirectly with any employee of the DFCCIL and if he shall do so, the DFCCIL shall be entitled forthwith to rescind the contract and all other contracts with the DFCCIL. Any question or dispute as to the commission of any such offence or compensation payable to the DFCCIL under this Clause shall be settled by the General Manager of the DFCCIL, in such a manner as he shall consider fit & sufficient and his decision shall be final & conclusive. In the event of rescission of the contract under this Clause, the Contractor will not be paid any compensation whatsoever except payments for the work done upto the date of rescission.

EXECUTION OF WORKS

- 19.(1) Contractor's understanding:** It is understood and agreed that the Contractor has, by careful examination, satisfied himself as to the nature and location of the work, the conformation of

the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the progress of the works, the general and local conditions, the labour conditions prevailing therein and all other matters which can in any way affect the works under the contract.

- 19.(2) Commencement of Works:** The Contractor shall commence the works within 15 days after the receipt by him of an order in writing to this effect from the Engineer and shall proceed with the same with due expedition and without delay
- 19.(3) Accepted Programme of Work:** The Contractor who has been awarded the work shall as soon as possible but not later than 30 days after the date of receipt of the acceptance letter in respect of contracts with initial completion period of two years or less or not later than 90 days for other contracts have to submit the detailed programme of work indicating the time schedule of various items of works in the form of Bar Chart/PERT/CPM. He shall also submit the details of organisation (in terms of labour and supervisors), plant and machinery that he intends to utilize (from time to time) for execution of the work within stipulated date of completion. The programme of work amended as necessary by discussions with the Engineer, shall be treated as the agreed programme of the work for the purpose of this contract and the Contractor shall endeavor to fulfill this programme of work. The progress of work will be watched accordingly and the liquidated damages will be with reference to the overall completion date. Nothing stated herein shall preclude the Contractor in achieving earlier completion of item or whole of the works than indicated in the programme.

In Contracts for works of New Line/Gauge Conversion/Doubling/DFCCIL Electrification, finalized through Tenders having advertised value more than Rs.100 crores, the Contractor shall submit a detailed time programme to the Engineer within 30 days after issue of LOA. The program shall include the physical and Financial Progress vis-à-vis program and forecast cash flow adopting Project Management Software such as **Primavera/Sure Track/MS Project etc.** The program must identify the milestones, interface requirements and program reporting elements. The Contractor shall supply, free of cost one set of authorized software to the Engineer and the soft copy of structured program for the project. This shall be updated every month. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress. Each programme shall include:

The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage, Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing, each of these stages for work by each Subcontractor, if any, the sequence and timing of inspections and tests specified in the Contract, and a supporting report which includes:

- a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works,
- and details showing the Contractor's reasonable estimate for the number of each class of Contractor's Personnel & Equipment, required on the Site for each major stage.

Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Engineer shall be entitled to rely upon the programme when planning their activities.

If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer within 15 days in accordance with this Sub-Clause.

(As per Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

- 19.(4) Setting out of Works:** The Contractor shall be responsible for the correct setting out of all works in relation to original points, lines and levels of reference at his cost. The Contractor shall execute the work true to alignment, grade, levels and dimensions as shown in the drawing and as directed by the Engineer's representative and check these at frequent intervals. The Contractor shall provide all facilities like labour and instruments and shall co-operate with the Engineer's representative for checking of all alignment, grades, levels and dimensions. If, at any time, during the progress of the works any error appear or arise in any part of the work, the Contractor, on being required so to do by the Engineer's representative shall, at his own cost rectify such errors, to the satisfaction of the Engineer's representative.

Such checking shall not absolve the Contractor of his own responsibility of maintaining accuracy in the work. The Contractor shall carefully protect and preserve all bench marks, sight rails, pegs and other things used in setting out the work.

- 20.(1) Compliance to Engineer's Instructions:** The Engineer shall direct the sequence in which the several parts of the works shall be executed and the Contractor shall execute without delay all orders given by the Engineer from time to time; but the Contractor shall not be relieved thereby from responsibility for the due performance of the works in all respects.
- 20.(2) Alterations to be Authorized:** No alterations in or additions to or omissions or abandonment of any part of the works shall be deemed authorised, except under written instructions from the Engineer.
- 20.(3) Extra Works:** Should works over and above those included in the contract require to be executed at the site, the Contractor shall have no right to be entrusted with the execution of such works which may be carried out by another Contractor or Contractors or by other means at the option of the DFCCIL.
- 20.(4) Separate Contracts in Connection with Works:** The DFCCIL shall have the right to let other contracts in connection with the works. The Contractor shall afford other Contractors reasonable opportunity for the storage of their materials and the execution of their works and shall properly connect and coordinate his work with theirs. If any part of the Contractor's work depends upon proper execution or result upon the work of another Contractor(s), the Contractor shall inspect and promptly report to the Engineer any defects in such works that render it unsuitable for such proper execution and results. The Contractor's failure so-to inspect and report shall constitute an acceptance of the other Contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other Contractor's work after the execution of his work.
- 21. Instruction of Engineer's Representative:** Any instructions or approval given by the Engineer's representative to Contractor in connection with the works shall bind the Contractor as though it had been given by the Engineer provided always as follows:
- (a) Failure of the Engineer's representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or material and to order the removal or breaking up thereof.

- (b) If the Contractor shall be dissatisfied by reason of any decision of the Engineer's representative, he shall be entitled to refer the matter to the Engineer who shall there upon confirm or vary such decision.
- 22.(1) Adherence to Specifications and Drawings:** The site and the detailed drawings shall be made available to the contractor commensurate with the accepted programme of work submitted under clause 19(3). The whole of the works shall be executed in perfect conformity with the specifications and drawings of the contract. If Contractor performs any works in a manner contrary to the specifications or drawings or any of them and without such reference to the Engineer, he shall bear all the costs arising or ensuing therefrom and shall be responsible for all loss to the DFCCIL.
- 22.(2) Drawings and Specifications of the Works:** The Contractor shall keep one copy of Drawings and Specifications at the site, in good order, and such contract documents as may be necessary, available to the Engineer or the Engineer's Representative.
- 22.(3) Ownership of Drawings and Specifications:** All Drawings and Specifications and copies thereof furnished by the DFCCIL to the Contractor are deemed to be the property of the DFCCIL. They shall not be used on other works and with the exception of the signed contract set, shall be returned by the Contractor to the DFCCIL on completion of the work or termination of the Contract.
- 22.(4) Compliance with Contractor's Request for Details:** The Engineer shall furnish with reasonable promptness, after receipt by him of the Contractor's request, additional instructions by means of drawings or otherwise, necessary for the proper execution of the works or any part thereof. All such drawings and instructions shall be consistent with the Contract Documents and reasonably inferable there from.
- 22.(5) Meaning and Intent of Specification and Drawings:** If any ambiguity arises as to the meaning and intent of any portion of the Specifications and Drawings or as to execution or quality of any work or material, or as to the measurements of the works the decision of the Engineer thereon shall be final subject to the appeal (within 7 days of such decision being intimated to the Contractor) to the Chief Engineer who shall have the power to correct any errors, omissions, or discrepancies in aforementioned items and whose decision in the matter in dispute or doubt shall be final and conclusive.
- 23. Working during Night:** The Contractor shall not carry out any work between sun-set and sun-rise without the previous permission of the Engineer. However, if the Engineer is satisfied that the work is not likely to be completed in time except by resorting to night work, he may order the same without confirming any right on the Contractor for claiming any extra payment for the same.
- 24. Damage to DFCCIL Property or Private Life and Property:** The Contractor shall be responsible for all risk to the work and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the DFCCIL or the lives, persons or property of others from whatsoever cause in connection with the works until

they are taken over by the DFCCIL, although all reasonable and proper precautions may have been taken by the Contractor. In case the DFCCIL shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the Contractor; the amount of any costs or charges including costs and charges in connection with legal proceedings, which the DFCCIL may incur in reference thereto, shall be charged to the Contractor. The DFCCIL shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid; any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.

- 25. Sheds, Storehouses and Yards:** The Contractor shall at his own expense provide himself with sheds, storehouses and yards in such situations and in such numbers as in the opinion of the Engineer is requisite for carrying on the works and the Contractor shall keep at each such sheds, storehouses and yards a sufficient quantity of materials and plant in stock as not to delay the carrying out of the works with due expedition and the Engineer and the Engineer's representative shall have free access to the said sheds, store houses and yards at any time for the purpose of inspecting the stock of materials or plant so kept in hand, and any materials or plant which the Engineer may object to shall not be brought upon or used in the works, but shall be forthwith removed from the sheds, storehouses or yards by the Contractor. The Contractor shall at his own expenses provide and maintain suitable mortar mills, soaking vats or any other equipments necessary for the execution of the works.
- 26. Provision of Efficient and Competent Staff at Work Sites by the Contractor:**
- 26.1** 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 & proper manner and shall employ only such supervisors, workmen & labourers in or about the execution of any of these works as are careful and skilled in the various trades.
- 26.2** 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.
- 26.3** 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 DFCCIL to rescind the contract under Clause 62 of these conditions.

26A. Deployment of Qualified Engineers at Work Sites by the Contractor:

26A.1 The Contractor shall also employ qualified Graduate Engineer(s) or equivalent, or qualified Diploma Engineer(s), as prescribed in the tender documents.

26A.2 In case the Contractor fails to employ the Engineer, as aforesaid in Para 26A.1, he shall be liable to pay liquidated damages at the rates, as prescribed in the tender documents.

26A.3 No. of qualified Engineers required to be deployed by the Contractor for various activities contained in the works contract shall be specified in the tender documents as ‘Special Condition of Contract’.

27.(1) Workmanship and Testing: The whole of the works and/or supply of materials specified and provided in the contract or that may be necessary to be done in order to form and complete any part thereof shall be executed in the best and most substantial workman like manner with materials of the best and most approved quality of their respective kinds, agreeable to the particulars contained in or implied by the specifications and as referred to in and represented by the drawings or in such other additional particulars, instructions and drawings given during the carrying on of the works and to the entire satisfaction of the Engineer according to the instructions and directions which the Contractors may from time to time receive from the Engineer. The materials may be subjected to tests by means of such machines, instruments and appliances as the Engineer may direct and wholly at the expense of the Contractor.

27.(2) Removal of Improper Work and Materials: The Engineer or the Engineer's Representative shall be entitled to order from time to time:

- (a) The removal from the site, within the time specified in the order, of any materials which in his opinion are not in accordance with the specifications or drawings.
- (b) The substitution of proper and suitable materials, and
- (c) the removal and proper re-execution, notwithstanding any previous tests thereof or on account payments therefor, of any work which in respect of materials or workmanship is not in his opinion in accordance with the specifications and in case of default on the part of the Contractor in carrying out such order, the DFCCIL shall be entitled to rescind the contract under Clause 62 of these conditions.
- (d) The provision of Construction and Demolition Waste Management Rule 2016 issued by Ministry of Environment Forest and Climate Change dated 29.03.2016 and published in the Gazette of India, Part – II, Section -3, Sub-section (ii) are binding upon the Contractor. Contractor shall implement these provisions at worksites, for which no extra payment will be payable.

28. Facilities for Inspection: The Contractor shall afford the Engineer and the Engineer's Representative every facility for entering in and upon every portion of the work at all hours for the purpose of inspection or otherwise and shall provide all labour, materials, planks, ladders, pumps, appliances and things of every kind required for the purpose and the Engineer and the Engineer's Representative shall at all times have free access to every part of the works and to all places at which materials for the works are stored or being prepared.

29. Examination of Work before Covering Up: The Contractor shall give 7 days' notice to the Engineer or the Engineer's Representative whenever any work or materials are intended to be covered up in the earth, in bodies or walls or otherwise to be placed beyond the reach of measurements in order that the work may be inspected or that correct dimensions may be taken

before being so covered, placed beyond the reach of measurement in default whereof, the same shall at the option of the Engineer or the Engineer's Representative be uncovered and measured at the Contractor's expense or no allowance shall be made for such work or materials.

- 30. Temporary Works:** All temporary works necessary for the proper execution of the works shall be provided and maintained by the Contractor and subject to the consent of the Engineer shall be removed by him at his expenses when they are no longer required and in such manner as the Engineer shall direct. In the event of failure on the part of the Contractor to remove the temporary works, the Engineer will cause them to be removed and cost as increased by supervision and other incidental charges shall be recovered from the Contractor. If temporary huts are provided by the Contractor on the DFCCIL land for labour engaged by him for the execution of works, the Contractor shall arrange for handing over vacant possession of the said land after the work is completed; if the Contractor's labour refuse to vacate, and have to be evicted by the DFCCIL, necessary expenses incurred by the DFCCIL in connection therewith shall be borne by the Contractor.
- 31.(1) Contractor to Supply Water for Works:** Unless otherwise provided in the Contract, the Contractor shall be responsible for the arrangements to obtain supply of water necessary for the works.
- 31.(2) Water Supply from DFCCIL/Railways System:** The DFCCIL/Railways may supply to the Contractor part or whole of the quantity of the water required for the execution of works from the Railway/DFCCIL's existing water supply system at or near the site of works on specified terms and conditions and at such charges as shall be determined by the DFCCIL/Railways and payable by the Contractor, provided that the Contractor shall arrange, at his own expense, to effect the connections and lay additional pipelines and accessories on the site and that the Contractor shall not be entitled to any compensation for interruption or failure of the water supply.
- 31.(3) Water Supply by DFCCIL/Railways Transport:** In the event of the DFCCIL/Railways arranging supply of water to the Contractor at or near the site of works by travelling water tanks or other means, the freight and other charges incurred thereby, including demurrage charges that may be levied, shall be paid by the Contractor in addition to the charges referred to in Sub-Clause (2) of the Clause provided that the Contractor shall not be entitled to any compensation for interruption or failure of the water supply.
- 31.(4) (a) Contractor to Arrange Supply of Electric Power for Works:** Unless otherwise provided in the contract, the Contractor shall be responsible for arrangements to obtain supply of Electric Power for the works.
- (b) Electric Supply from the DFCCIL/Railways System:** The DFCCIL/Railways may supply to the Contractor part or whole of the electric power wherever available and possible, required for execution of works from the DFCCIL's existing electric supply systems at or near the site of works on specified terms and conditions and such charges as shall be determined by the DFCCIL/Railways and payable by the Contractor provided the cost of arranging necessary connections to the Railway/DFCCIL's Electric Supply systems and laying of underground/overhead conductor, circuit protection, electric power meters, transmission structure, shall be borne by the Contractor and that the Contractor shall not be entitled to any compensation for interruption or failure of the Electric supply system.
- 32. Property in Materials and Plant:** The materials and plant brought by the Contractor upon the site or on the land occupied by the Contractor in connection with the works and intended to be used for the execution thereof shall immediately be deemed to be the property of the DFCCIL/Railways. Such of them as during the progress of the works are rejected by the Engineer under Clause 25 of these conditions or are declared by him not to be needed for the execution of the works or such as on the grant of the certificate of completion remain unused shall immediately on such rejection, declaration or grant cease to be deemed the property of

the DFCCIL/Railways and the Contractor may then (but not before) remove them from the site or the said land. This clause shall not in any way diminish the liability of the Contractor nor shall the DFCCIL/Railways be in any way answerable for any loss or damage which may happen to or in respect of any such materials or plant either by the same being lost, stolen, injured or destroyed by fire, tempest or otherwise.

- 33.(1) Tools, Plant and Materials Supplied by DFCCIL/Railways:** The Contractor shall take all reasonable care of all tools, plant and materials or other property whether of a like description or not belonging to the DFCCIL/Railways and committed to his charge for the purpose of the works and shall be responsible for all damage or loss caused by him, his agents, permitted sub-contractor, or his workmen or others while they are in his charge. The Contractors shall sign accountable receipts for tools, plants and materials made over to him by the Engineer and on completion of the works shall hand over the unused balance of the same to the Engineer in good order and repair, fair wear and tear excepted, and shall be responsible for any failure to account for the same or any damage done thereto.
- 33.(2) Hire of DFCCIL's Plant:** The DFCCIL may hire to the Contractor such plant as concrete mixers, compressors and portable engines for use during execution of the works on such terms as may be specified in the special conditions or in a separate agreement for Hire of Plant.
- 34.(1) Precaution During Progress of Works:** During the execution of works, unless otherwise specified, the Contractor shall at his own cost provide the materials for and execute all shoring, timbering and strutting works as is necessary for the stability and safety of all structures, excavations and works and shall ensure that no damage, injury or loss is caused or likely to be caused to any person or property.
- 34.(2) Roads and Water Courses:** Existing roads or water courses shall not be blocked cut through, altered, diverted or obstructed in any way by the Contractor, except with the permission of the Engineer. All compensations claimed for any unauthorized closure, cutting through, alteration, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.
- 34.(3) Provision of Access to Premises:** During progress of work in any street or thoroughfare, the Contractor shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or thoroughfare and for any drainage, water supply or means of lighting which may be interrupted by reasons of the execution of the works and shall react and maintain at his own cost barriers, lights and other safeguards as prescribed by the Engineer, for the regulation of the traffic, and provide watchmen necessary to prevent accidents. The works shall in such cases be executed night and day, if so ordered by the Engineer and with such vigour so that the traffic way be impeded for as short a time as possible.
- 34.(4) Safety of Public:** The Contractor shall be responsible to take all precautions to ensure the safety of the public whether on public or DFCCIL/Railways property and shall post such look out men as may, in the opinion of the Engineer, be required to comply with regulations appertaining to the work. Contractor shall ensure placement of barricading / partitions at the place of work to ensure safety of habitants of adjacent area, failing which Engineer may advise stoppage of work as per his discretion.
- 34.(5) Display Board:** The Contractor shall be responsible for displaying the details of works i.e. name of work, approximate cost, expected date of completion, name and address of the Contractor and address of Engineer on a proper steel Board of size not less than 1m x 1m.
- 35. Use of Explosives:** Explosives shall not be used on the works or on the site by the Contractor without the permission of the Engineer and then also only in the manner and to the extent to which such permission is given. Where explosives are required for the works, they shall be stored in a special magazine to be provided by and at the cost of the Contractor in accordance

with the Explosive Rules. The Contractor shall obtain the necessary license for the storage and the use of explosives. All operations in which or for which explosives are employed shall be at the sole risk and responsibility of the Contractor and the Contractor shall indemnify the DFCCIL/Railways in respect thereof.

- 36.(1) Suspension of Works:** The Contractor shall on the order of the Engineer, suspend the progress of the works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension properly protect and secure the work so far as is necessary in the opinion of the Engineer. If such suspension is:
- Provided for in the contract, or
 - Necessary for the proper execution of the works or by the reason of weather conditions or by some default on the part of the Contractor, and or
 - Necessary for the safety of the works or any part thereof, or
 - Necessary for the safety of adjoining public or other property or safety of the public or workmen or those who have to be at the site, or
 - Necessary to avoid disruption of traffic and utilities, as also to permit fast repair and restoration of any damaged utilities, or
 - Due to instruction of The National Green Tribunal or any other statutory authority due to high level of pollution in the city of worksite.
- 36.(2)** The Contractor shall not be entitled to the extra costs, if any, incurred by him during the period of suspension of the works, but in the event of any suspension ordered by the Engineer for reasons other than aforementioned and when each such period of suspension exceeds 14 days, the Contractor shall be entitled to such extension of time for completion of the works as the Engineer may consider proper having regard to the period or periods of such suspensions and to such compensations as the Engineer may consider reasonable in respect of salaries or wages paid by the Contractor to his employees during the periods of such suspension.
- 36.(3) Suspension Lasting More than 3 Months:** If the progress of the works or any part thereof is suspended on the order of the Engineer for more than three months at a time, the Contractor may serve a written notice on the Engineer requiring permission within 15 days from the receipt thereof to proceed with the works or that part thereof in regard to which progress is suspended and if such permission is not granted within that time the Contractor by further written notice so served may, but is not bound to, elect to treat the suspension where it affects part only of the works as an omission of such part or where it affects the whole of the works, as an abandonment of the contract by the DFCCIL.
- 37. Rates for Items of Works:**
- The rates, entered in the accepted Bill(s) of Quantities 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 or additions as may be ordered in terms of Clause 42 of these conditions 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 DFCCIL, 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 center 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 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 clause 17 & 17A 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.

- 38. Demurrage and Wharfage Dues:** Demurrage charges calculated in accordance with the scale in force for the time being on the DFCCIL and incurred by the Contractor failing to load or unload any goods or materials within the time allowed by the DFCCIL for loading as also wharfage charges, of materials not removed in time, as also charges due on consignments booked by or to him shall be paid by the Contractor, failing which such charges shall be debited to the Contractor's account in the hands of the DFCCIL and shall be deducted from any sums which may become due to him in terms of the contracts.

39.(1) Rates for Extra Item(s) of Works:

- (a) Standard Schedule of Rates (SSOR) Items: Any item of work carried out by the Contractor on the instructions of the Engineer which is not included in the accepted Bill(s) of Quantities but figures in the Standard Schedule of Rates (SSOR), shall be executed at the rates set forth in the "Standard Schedule of Rates (SSOR)" modified by the tender percentage as accepted in the contract for that chapter of Standard Schedule of Rates (SSOR).

For item(s) not covered in this sub clause, the rate shall be decided as agreed upon between the Engineer and the Contractor before the execution of such items of work as per sub clause

- (b) Other Items: For any item of work to be carried out by the Contractor but not included in the accepted Bill(s) of Quantities and also not covered under sub clause (a) above, the Contractor shall be bound to notify the Engineer at least seven days before the necessity arises for the execution of such items of works that the accepted Bill(s) of Quantities does not include rate or rates for such extra work involved. The rates payable for such items shall be decided at the meeting to be held between the Engineer and Contractor, in as short a period as possible after the need for the special item has come to the notice. In case the Contractor fails to attend the meeting after being notified to do so or in the event of no settlement being arrived at, the Railway shall be entitled to execute the extra works by other means and the Contractor shall have no claim for loss or damage that may result from such procedure.

The assessment of rates for extra item(s) shall be arrived at based on the prevailing market rates of labour, machinery & materials and by taking guidance from the following documents in

order of priority:

- i. Analysis of Rates for “Unified Standard Schedule of Rates of Indian Railways (USSOR)”
- ii. Analysis of Rates for “Delhi Schedule of Rates issued by CPWD (DSR)”
- iii. Market Analysis

(As per Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

- .39.(2)** Provided that if the Contractor commences work or incurs any expenditure in regard thereto before the rates as determined and agreed upon as lastly hereuntoforesaid-mentioned, then and in such a case the Contractor shall only be 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 fixed by the Engineer. However, if the Contractor is not satisfied with the decision of the Engineer in this respect, he may appeal to the Chief Engineer within 30 days of getting the decision of the Engineer, supported by analysis of the rates claimed. The Chief Engineer's decision after hearing both the parties in the matter would be final and binding on the Contractor and the DFCCIL.
- 40.(1) Handing over of Works:** The Contractor shall be bound to hand over the works executed under the contract to the DFCCIL complete in all respects to the satisfaction of the Engineer. The Engineer shall determine the date on which the work is considered to have been completed, in support of which his certificate shall be regarded as sufficient evidence for all purposes. The Engineer shall determine from time to time, the date on which any particular section of the work shall have been completed, and the Contractor shall be bound to observe any such determination of the Engineer.
- 40.(2) Clearance of Site on Completion:** On completion of the works, the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and works clean and in a workman like condition to the satisfaction of the Engineer. No final payment in settlement of the accounts for the works shall be paid, held to be due or shall be made to the, Contractor till, in addition to any other condition necessary for final payment, site clearance shall have been affected by him, and such clearance may be made by the Engineer at the expense of the Contractor in the event of his failure to comply with this provision within 7 days after receiving notice to that effect. Should it become necessary for the Engineer to have the site cleared at the expenses of the Contractor, the DFCCIL shall not be held liable for any loss or damage to such of the Contractor's property as may be on the site and due to such removal there from which removal may be affected by means of public sales of such materials and property or in such a way as deemed fit and convenient to the Engineer.
- 40A Offloading of Part(s) of Work:** At the final stage of completion/ commissioning of work, in case the contractor fails to complete the final part(s) of the work and the value of such part(s) of the work is limited to 5% of the original contract value, the Engineer may allow/decide for offloading of such part(s) of works, either after the Contractor's request in writing to do so or after serving a 14 (Fourteen) days suo-moto notice (as per annexure- VIIA), if the Engineer is of the opinion that :-
- (i) Such Offloading of works (up to 5% of original contract value) would enable successful completion of contract/work,
 - (ii) Termination/ Part termination of the contract at this stage is not be in the interest of the DFCCIL/work,; and

- (iii) The anticipated additional cost for execution of such works through other mode would not be substantial and can be recovered from the pending dues of the contractor;

The Contractor shall be informed, in due course, by the Engineer of the mode and cost of execution of such offloaded work through other agency(ies) (as per annexure- VIIB). The extra expenditure so incurred in execution of the offloaded work, shall be recovered from subsequent Bill(s) or any other dues of the Contractor, but not exceeding the value of Performance Guarantee available in the contract. There shall be no other repercussion of such offloading on execution of the balance contract. The Contractor shall have no claim on account of above mentioned offloading of works.

VARIATIONS IN EXTENT OF CONTRACT

- 41. Modification to Contract to be in Writing:** In the event of any of the provisions of the contract required to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the DFCCIL and the Contractor and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the contract or any of the terms thereof shall be deemed conditional and shall not be binding on the DFCCIL unless and until the same is incorporated in a formal instrument and signed by the DFCCIL and the Contractor, and till then the DFCCIL shall have the right to repudiate such arrangements.
- 42.(1) Powers of Modification to Contract:** The Engineer on behalf of the DFCCIL/Railways shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character position, site, quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be done or any works not to be done and the Contractor will not be entitled, to any compensation for any increase/reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.
- 42.(2)(i) Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be upto 25% of the quantity originally contracted, except in case of foundation work (in which no variation limit shall apply). However, the rates for the increased quantities shall be as per sub-para (iii) below.
- (ii) The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever upto the limit of 25% variation in quantity of individual item of works.
- (iii) In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates
- Quantities operated in excess of 125% but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender;
 - Quantities operated in excess of 140% but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender;
 - Variation in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
 - Variation to quantities of Minor Value Item:

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

- d.(i) Quantities operated upto and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the rate awarded for that item in that particular tender;
 - d.(ii) Quantities operated in excess of 100% but upto 200% of the agreement quantity of the concerned minor value item, shall be paid at 98% of the rate awarded for that item in that particular tender;
 - d.(iii) Variation in quantities of individual minor value item beyond 200% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
- (iv) In case of earthwork items, the variation limit of 25% shall apply to the gross quantity of earthwork items and variation in the quantities of individual classifications of soil shall not be subject to this limit.
- (v) As far as Standard Schedule of Rates (SSOR) items are concerned, the variation limit of 25% would apply to the value of SSOR schedule(s) as a whole and not on individual SSOR items. However, in case of Non-Standard Schedule of Rates (SSOR) items, the limit of 25% would apply on the individual items irrespective of the manner of quoting the rate (single percentage rate or individual item rate).

42.(3) Valuation of Variations: The enlargements, extensions, diminution, reduction, alterations or additions referred to in Sub-Clause (2) of this Clause shall in no degree affect the validity of the contract; but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations and obligations as if they had been originally and expressively included and provided for in the Specifications and Drawings and the amounts to be paid therefor shall be calculated in accordance with the accepted Bill(s) of Quantities. Any extra item(s)/quantities of work falling outside the purview of the provisions of Sub-Clause (2) above shall be paid for at the rates determined under Clause-39 of these Conditions.

CLAIMS

43.(1) Quarterly Statement of Claims: The Contractor shall prepare and furnish to the Engineer once in every quarter commencing from the month following the month of issue of Letter of Acceptance, an account giving full and detailed particulars of all claims for any additional expenses to which the Contractor may consider himself entitled to and of all extra or additional works ordered by the Engineer which he has executed during the preceding quarter and no claim for payment for such work will be considered which has not been included in such particulars.

43.(2) Signing of "No Claim" Certificate : The Contractor shall not be entitled to make any claim whatsoever against the DFCCIL under or by virtue of or arising out of this contract, nor shall the DFCCIL entertain or consider any such claim, if made by the Contractor, after he shall have signed a "No Claim" Certificate in favour of the DFCCIL in such form as shall be required by the DFCCIL after the works are finally measured up. The Contractor shall be debarred from disputing the correctness of the items covered by "No Claim" Certificate or demanding a clearance to arbitration in respect thereof.

MEASUREMENTS, CERTIFICATES AND PAYMENTS

44. Quantities in Bill(s) of Quantities Annexed to Contract: The quantities set out in the accepted Bill(s) of Quantities with items of works quantified are the estimated quantities of the works and they shall not be taken as the actual and correct quantities of the work to be executed by the Contractor in fulfillment of his obligations under the contract.

45(i). Measurement of Works by DFCCIL: The Contractor shall be paid for the works at the rates in the accepted Bill(s) of Quantities and for extra works at rates determined under Clause 39 of these Conditions on the measurements taken by the Engineer or the Engineer's representative in accordance with the rules prescribed for the purpose by the DFCCIL. The quantities for items the unit of which in the accepted Bill(s) of Quantities is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for items the unit of which in the accepted Bill(s) of Quantities is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time and at such intervals as in the opinion of the Engineer shall be proper having regard to the progress of works. The date and time on which 'on account' or 'final' measurements are to be made shall be communicated to the Contractor who shall be present at the site and shall sign the results of the measurements (which shall also be signed by the Engineer or the Engineer's representative) recorded in the official measurements book as an acknowledgement of his acceptance of the accuracy of the measurements. Failing the Contractor's attendance, the work may be measured up in his absence and such measurements shall, notwithstanding such absence, be binding upon the Contractor whether or not he shall have signed the measurement books provided always that any objection made by him to measurement shall be duly investigated and considered in the manner set out below:

- (a) It shall be open to the Contractor to take specific objection to any recorded measurements or Classification on any ground within seven days of the date of such measurements. Any re-measurement taken by the Engineer or the Engineer's representative in the presence of the Contractor or in his absence after due notice has been given to him in consequence of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and Classification of the measurements.
- (b) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.

45(ii). Measurement of Works by Contractor's Authorized Representative (in case the contract provides for the same):

- (a) The Contractor shall be paid for the works at the rates in the accepted Bill(s) of Quantities and for extra works at rates determined under Clause 39 of these Conditions on the measurements taken by the Contractor's authorized Engineer in accordance with the rules prescribed for the purpose by the DFCCIL. The quantities for items the unit of which in the accepted Bill(s) of Quantities is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for items the unit of which in the accepted Bill(s) of Quantities is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time. The date and time on which 'on account' or 'final' measurements are to be made shall be communicated to the Engineer.

The date and time of test checks shall be communicated to the Contractor who shall be present at the site and shall witness the test checks, failing the Contractor's attendance the test checks may be conducted in his absence and such test checks shall notwithstanding such absence be

binding upon Contractor provided always that any objection made by Contractor to test check shall be duly investigated and considered in the manner set out below:

- (i) It shall be open to the Contractor to take specific objection to test checks of any recorded measurement within 7 days of date of such test checks. Any re-test check done by the concerned DFCCIL's authority in the presence of the Contractor or in his absence after due notice given to him in consequent of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and classification of the measurements.
- (ii) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.

(b) Incorrect measurement, actions to be taken: If in case during test check or otherwise, it is detected by the Engineer that agency has claimed any exaggerated measurement or has claimed any false measurement for the works which have not been executed; amounting to variation of 5% or more of claimed gross bill amount, action shall be taken as following:

- (i) On first occasion of noticing exaggerated/ false measurement, Engineer shall recover liquidated damages equal to 10% of claimed gross bill value.
- (ii) On any next occasion of noticing any exaggerated/false measurement, DFCCIL shall recover liquidated damages equal to 15% of claimed gross bill value. In addition, the facility of recording of measurements by Contractor as well as release of provisional payment shall be withdrawn. Once withdrawn, measurements shall be done by DFCCIL as per clause 45(i) above.

46.(1) "On-Account " Payments: The Contractor shall be entitled to be paid from time to time by way of "On-Account" payment only for such works as in the opinion of the Engineer he has executed in terms of the contract. All payments due on the Engineer's/Engineer's Representative's certificates of measurements or Engineer's certified "Contractor's authorized Engineer's measurements" shall be subject to any deductions which may be made under these presents and shall further be subject to, unless otherwise required by Clause 16 of these Conditions, a retention of six percent by way of Security Deposits, until the amount of Security Deposit by way of such retentions shall amount to 5% of the total value of the contract provided always that the Engineer may by any certificate make any correction or modification in any previous certificate which shall have been issued by him and that the Engineer may withhold any certificate, if the works or any part thereof are not being carried out to his satisfaction.

46.(2) Rounding off Amounts: The total amount due on each certificate shall be rounded off to the nearest rupee, i.e. sum less than 50 paise shall be omitted and sums of 50 paise and more upto ₹1 will be reckoned as ₹ 1.

46.(3) On Account Payments not Prejudicial to Final Settlement: "On-Account" payments made to the Contractor shall be without prejudice to the final making up of the accounts (except where measurements are specifically noted in the Measurement Book as "Final Measurements" and as such have been signed by the Contractor and Engineer/Engineer's Representative) and shall in no respect be considered or used as evidence of any facts stated in or to be inferred from such accounts nor of any particular quantity of work having been executed nor of the manner of its execution being satisfactory.

46.(4) If payment(s) of Advances are applicable in the contract, as mentioned in the Tender Documents, DFCCIL shall make payment(s) of Interest bearing advances, on the request of contractor. The payment and recovery of such Advances shall be made as under:

(a): Mobilisation Advance – (Not applicable for this tender)

This shall be limited to 10% of the Contract value and shall be paid in 2 stages :

Stage 1– 5% of Contract Value on signing of the contract agreement.

Stage 2 – 5% on mobilization of site-establishment, setting up offices, bringing in equipment and actual commencement of work.

The stage 1 of advance shall be payable immediately after signing of contract agreement.

The stage 2 of advance shall be payable at the time of mobilisation, only after submission of an utilization certificate by the contractor that the Stage 1 advance has been properly utilized in the contract.

These Advances shall be payable against irrevocable guarantee (Bank Guarantee, FDRs) from a scheduled commercial bank of India of at least 110% of the value of the sanctioned advance amount (covering principal plus interest).

(b): Advance Against Machinery and Equipment –

This advance shall be limited to a maximum of 10% of the contract value against new Machinery & Equipment, involving substantial outlay, brought to site and essentially required for the work. This advance shall not exceed 75% of the purchase price of such Equipment and shall be payable when Equipment is hypothecated to the President of India by a suitable bond or alternatively covered by an irrevocable Bank Guarantee from a scheduled commercial bank of India for full cost of the Plant & Equipment in a form acceptable to Railways/DFCCIL. The Plant & Equipment shall be insured for the full value and for the entire period, they are required for the work. This Plant & Equipment shall not be removed from the site of work without prior written permission of the Engineer. No advance should be given against old Plant & Machinery.

The advances under sub clause (a) and (b) above, are subject to the following conditions

-

- (i) The full amount of Advances shall be recovered from contractor dues. The recovery shall commence when the value of contract executed reaches 15% of original contract value and shall be completed when the value of work executed reaches 85% of the original contract value. The installments on each "on account bill" will be on pro-rata basis.

Interest shall be recovered on the advance outstanding for the period commencing from the date of payment of advance till date of particular on-account bill (through which recovery of principal is effected) and adjusted fully against on-account bill along with pro-rata principal recovery. In the event of any short-fall, the same shall be carried forward to the next on-account bill and shall attract interest.
- (ii) The advances shall be used by the Contractor for the purpose of the Contract, and for the purpose for which they are paid. Under no circumstances, shall the advances be diverted for other purposes. Any such diversion shall be construed as a breach of the Contract and the Contractor shall be asked to return the advance at once and pay interest at 15% per annum till the advance is recovered back from him. The Contractor shall return the advance and pay the interest in one go without demur. The Contractor, if required by the Engineer shall provide the details of utilisation of Mobilisation advance.
- (iii) If the Contractor is found to have contravened the provision, it will constitute a breach of contract and DFCCIL shall be entitled to terminate the contract and forfeit his Performance Guarantee as well as Security Deposit.

- (iv) In cases, where the Contract is rescinded as per clause 62 of the contract or short closed under any other condition(s) of the contract, without making full recovery of advances and accrued interest thereon, by the DFCCIL, such balance of advances and accrued interest thereon shall immediately become due and payable by the Contractor to the DFCCIL. The same shall be recovered from any due of Contractor with the Government of India.

46.(5) Manner of Payment: Unless otherwise specified payments to the Contractor will be transferred electronically to his bank account.

46A. Price Variation Clause (PVC): (Not Applicable for this Tender)

46A.1 Applicability: Price Variation Clause (PVC) shall be applicable only in tender having advertised value above **Rs. 2 Crores**. Provided further that, in a contract where PVC is applicable, following shall be outside the purview of price adjustments (i.e. shall be excluded from the gross value of the work for the purpose of price variation) :

- a) Materials supplied by DFCCIL to the Contractors, either free or at fixed rate;
- b) Any extra item(s) included in subsequent variation falling outside the purview of the Bill(s) of Quantities of tender, under clause 39. (1)(b) of these Standard General Conditions, unless applicability of PVC and 'Base Month' has been specially agreed, while fixing the rates of such extra item(s).

(As per Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

46A.2 Base Month: The Base Month for 'Price Variation Clause' shall be taken as the one month prior to closing of tender, unless otherwise stated elsewhere. The quarter for applicability of PVC shall commence from the month following the Base month. The Price Variation shall be based on the average Price Index of the quarter under consideration.

46A.3 Validity:

Rates accepted by DFCCIL Administration shall hold good till completion of work and no additional individual claim shall be admissible except:

- (a) Payment/recovery for increase/decrease in GST on works contract or imposition/removal of any tax/cess on Works Contract as per Clause 37,
- (b) Payment/recovery for overall market situation as per Price Variation Clause given hereunder.

46A.4 Components of various items in a contract on which variation in prices be admissible, shall be steel, cement, ferrous material, non-ferrous material, insulators, zinc and other materials, labour, plant & machinery, fuel, explosives, detonators etc. Adjustment for variation in prices of these items shall be determined in the manner prescribed.

46A.5 No price variation shall be admissible for fixed components.

46A.6 The percentages of various components in various type of works shall be as specified for all item (s)/ Bill(s) of Quantities in tender document and the same shall be fixed as per table & classifications given below:

(I). For Civil Engineering Works: Deleted

(II) For DFCCIL Electrification Works:

$$(viii) T = [0.4136x(CQ - CB) / CB] \times 85$$

$$(ix) R = [0.94x(RT - RO) / RO + 0.06x(ZT - ZO) / ZO] \times 85$$

$$(x) N = [(PT - PO) / PO] \times 85$$

$$(xi) I = [(IT - IO) / IO] \times 85$$

$$(xii) G = [(MQ - MB) / MB] \times 85$$

$$(xiii) Er = [(LQ - LB) / LB] \times 85$$

Where,

L : Amount of price variation in Labour

M: Amount of price variation in Materials

F: Amount of price variation in Fuel

E :Amount of price variation in Explosives

PM: Amount of price variation in Plant, Machinery and Spares

S: Amount of price variation in Steel Supply Item

C :Amount of price variation in Cement Supply Item

T :Percentage variation payable on the gross value of bill of Concreting (Bill(s) of Quantities for concrete items)

R :Percentage variation payable on the gross value of bill of Ferrous Items (Bill(s) of Quantities for ferrous items)

N :Percentage variation payable on the gross value of bill of Non-Ferrous Items (Bill(s) of Quantities for non-ferrous items)

I :Percentage variation payable on the gross value of bill of Insulator (Bill(s) of Quantities for Insulator items)

G :Percentage variation payable on the gross value of bill of General Works (Bill(s) of Quantities for General items)

Er :Percentage variation payable on the gross value of erection (Bill(s) of Quantities for Erection Item)

LC % of Labour Component in the item(s)

MC % of Material Component in the item(s)

FC % of Fuel Component in the item(s)

EC % of Explosive Component in the item(s)

PMC % of Plant, Machinery and Spares Component in the item(s)

SC % of Steel Supply item Component in the item(s)

CC % of Cement Supply item Component in the item(s)

W Gross value of work done by Contractor as per on-account bill(s) excluding the

Gross value of work under WS or/and WC or/and WSF or/and WF or/and WSFL

or/and WFL and cost of materials supplied by Railway either free or at fixed rate, WS Gross value of work done by Contractor for item(s) of supply of steel.

WC Gross value of work done by Contractor for item(s) of supply of cement and /or supply of grout material.

WSF Gross value of work done by Contractor for item(s) of Fabrication & Erection of Structures including supply of Steel.

WF Gross value of work done by Contractor for Fabrication & Erection of Structures excluding supply of Steel.

WSFL Gross value of work done by Contractor for item(s) of Fabrication, Assembly, Erection / Launching of Girders including supply of Steel.

WFL Gross value of work done by Contractor for item(s) of Fabrication, Assembly, Erection / Launching of Girders excluding supply of Steel.

LB Consumer Price Index for Industrial Workers - All India: Published in R.B.I. Bulletin for the base period

LQ Consumer Price Index for Industrial Workers - All India: Published in R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration

MB Wholesale Price Index: All commodities – as published in the R.B.I. Bulletin for the base period

MQ Wholesale Price Index: All commodities – as published in the R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration

FB The average of official prices of Diesel available on the official website of ‘Petroleum Planning and Analysis cell’ under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, for the base period

FQ The average of official prices of Diesel available on the official website of ‘Petroleum Planning and Analysis cell’ under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, for the 3 months of the quarter under consideration

EB Index number of Monthly Whole Sale Price Index for the category ‘Explosive’ of (g). Manufacture of other chemical products under (J) MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the base period.

EQ Index number of Monthly Whole Sale Price Index for the category ‘Explosive’ of (g). Manufacture of other chemical products under (J) MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS, published by Office of Economic Adviser, Govt. of India, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the average price index of 3 months of the quarter under consideration.

PMB Index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for ‘Manufacture of machinery for mining, quarrying and construction’– published in RBI (Reserve Bank of India) Bulletin, for the base period.

PMQ Index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for ‘Manufacture of machinery for mining, quarrying and construction’– published in RBI (Reserve Bank of India) Bulletin, for the average price index of 3 months of the quarter under consideration.

SB The average rate provided by the Joint Plant Committee for the relevant category of steel item as mentioned in Clause 46A.9; for the base period.

SQ The average rate provided by the Joint Plant Committee for the relevant category of steel item as mentioned in Clause 46A.9; for the 3 months of the quarter under consideration.

CB Index No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the base period

CQ No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the average price index of the 3 months of the quarter under consideration

RT IEEMA price index for Steel Blooms (size 150mmx150mm) for the month which is two months prior to date of inspection of material.

RO IEEMA price index for Steel Blooms (size 150mmx150mm) for the month which is one month prior to date of opening of tender.

PT IEEMA price index for Copper wire rods for the month which is two months prior to date of inspection of material.

PO IEEMA price index for Copper wire rods for the month which is one month prior to date of opening of tender.

ZT IEEMA price index for Zinc for the month which is two months prior to date of inspection of material

ZO IEEMA price index for Zinc for the month which is one month prior to date of opening of tender

IT RBI wholesale price index for the sub-group “Insulators” for the month which is two months prior

to date of inspection of material

IO RBI wholesale price index for the sub-group “Insulators” for the month which is one month prior to date of opening of tender

(III) SIGNALING & TELECOMMUNICATION WORKS: Deleted

46A.10 Price Variation during Extended Period of Contract

The price adjustment as worked out above, i.e. either increase or decrease shall be applicable upto the stipulated date of completion of work including the extended period of completion where such extension has been granted under Clause 17A of the Standard General Conditions of Contract. However, where extension of time has been granted due to Contractor’s failure under Clause 17B of the Standard General Conditions of Contract, price adjustment shall be done as follows:

- a. In case the indices increase above the indices applicable to the last month of original completion period or the extended period under Clause 17A, the price adjustment for the period of extension granted under Clause 17B shall be limited to the amount payable as per the Indices applicable to the last month of the original completion period or the extended period under Clause 17A of the Standard General Conditions of Contract; as the case may be.
- b. In case the indices fall below the indices applicable to the last month of original/ extended period of completion under Clause 17A, as the case may be; then the lower indices shall be adopted for the price adjustment for the period of extension under Clause 17B of the Standard General Conditions of Contract.

47. 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 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.

48.(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 DFCCIL/Railways 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 Railways /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.

- 48.(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.
- 48(3) Final Supplementary Agreement:** After the work is completed or otherwise concluded by the parties with mutual consent, and taken over by the DFCCIL as per terms and conditions of the contract agreement, and there is unequivocal no claim on either side under the Contract other than as mentioned in item 4 of Annexure XIV, the parties shall execute the Final Supplementary Agreement as per Annexure XIV.
- 49. Approval only by Maintenance Certificate:** No certificate other than Maintenance Certificate, if applicable, referred to in Clause 50 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.
- 50.(1) Maintenance Certificate:** The Contract shall not be considered as completed until a Maintenance Certificate, if applicable, 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 pursuant to Sub Clause (2) to Clause 48 of these Conditions shall have been completed to the satisfaction of the Engineer, and full effect shall be given to this Clause notwithstanding the taking possession of or using the works or any part thereof by the DFCCIL.
- 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 DFCCIL/Railways against the contract concerned
- 50.(2) Cessation of DFCCIL's Liability:** The 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.
- 50.(3) Unfulfilled Obligations:** Notwithstanding the issue of the Maintenance Certificate the Contractor and (subject to Sub-Clause (2) of this Clause) the 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.
- 51.(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 rates accepted in Bill(s) of Quantities and for extra works on rates determined under Clause 39 of these Conditions 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 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 such claims are not covered under excepted matter i.e. Clauses 7(j), 8, 18, 22(5), 39.1, 39.2, 40A, 43(2), 45(i)(a), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1), 63(iv) and 63.2.11 of the Standard General Conditions of Contract or in any Clause (stated as excepted matter) of the Special Conditions of the Contract, 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 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.

51.(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.

51-A. 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 (as per Clause 7 of the Standard General Conditions of Contract), 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.

52. Withholding and Lien in Respect of Sums Claimed: Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the Contractor, the DFCCIL shall be entitled to withhold and also have a lien to retain such sum or sums in whole

or in part from the security, if any, deposited by the Contractor and for the purpose aforesaid, the DFCCIL shall be entitled to withhold the said cash Security Deposit or the Security if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, the DFCCIL shall be entitled to withhold and have a lien to the extent of the such claimed amount or amounts referred to supra, from any sum or sums found payable or which at any time thereafter may become payable to the Contractor under the same contract or any other contract with this or any other DFCCIL or any Department of the Central Government pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above, by the DFCCIL will be kept withheld or retained as such by the DFCCIL/Railways till the claim arising out of or under the contract is determined by the arbitrator (if the contract governed by the Arbitration Clause) or by the competent court as the case may be and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to supra and duly notified as such to the Contractor. For the purpose of this clause, where the Contractor is a partnership firm or a company, the DFCCIL shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner / company, as the case may be whether in his individual capacity or otherwise.

52-A Lien in Respect of Claims in other Contracts:

- (i) Any sum of money due and payable to the Contractor (including the Security Deposit returnable to him) under the contract may be withheld or retained by way of lien by the DFCCIL, against any claim of this or any other DFCCIL or any other Department of the Central Government in respect of payment of a sum of money arising out of or under any other contract made by the Contractor with this or any other Department of the Central Government.
- (ii) However, recovery of claims of DFCCIL in regard to terminated contracts may be made from the Final Bill, Security Deposits and Performance Guarantees of other contract or contracts, executed by the Contractor. The Performance Guarantees submitted by the Contractor against other contracts, if required, may be withheld and encashed. In addition, 10% of each subsequent 'on-account bill' may be withheld, if required, for recovery of DFCCIL's dues against the terminated contract.
- (iii) It is an agreed term of the contract that the sum of money so withheld or retained under this Clause by the DFCCIL will be kept withheld or retained as such by the DFCCIL till the claim arising out of or under any other contract is either mutually settled or determined by arbitration, if the other contract is governed by Arbitration Clause or by the competent court as the case may be and Contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this Clause and duly notified as such to the Contractor.

53. Signature on Receipts for Amounts: Every receipt for money which may become payable or for any security which may become transferable to the Contractors under these presents, shall, if signed in the partnership name by anyone of the partners of a Contractor's firm be a good and sufficient discharge to the DFCCIL in respect of the moneys or security purported to be acknowledged thereby and in the event of death of any of the Contractor, partners during the pendency of the contract, it is hereby expressly agreed that every receipt by anyone of the

surviving Contractor partners shall if so signed as aforesaid be good and sufficient discharge as aforesaid provided that nothing in this Clause contained shall be deemed to prejudice or effect any claim which the DFCCIL may hereafter have against the legal representative of any Contractor partner so dying for or in respect to any breach of any of the conditions of the contract, provided also that nothing in this clause contained shall be deemed to prejudice or effect the respective rights or obligations of the Contractor partners and of the legal representatives of any deceased Contractor partners interse.

LABOUR

54. 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 thereunder 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 DFCCIL/Railways whether in connection with any work being executed by the Contractor or otherwise for the purpose of the DFCCIL 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 DFCCIL, such money shall be deemed to be moneys payable to the DFCCIL by the Contractor and on failure by the Contractor to repay the DFCCIL any moneys paid by it as aforesaid within seven days after the same shall have been demanded, the DFCCIL/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.

54-A. 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 DFCCIL 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.

55. Provisions of Payments of Wages Act: The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 and the rules made thereunder 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 DFCCIL/Railways deduct the same from any moneys due to the Contractor in terms of the contract. The DFCCIL 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 DFCCIL 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.

55-A. Provisions of Contract Labour (Regulation and Abolition) Act, 1970:

- 55-A.(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 DFCCIL from and against any claims under the aforesaid Act and the Rules.
- 55-A.(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.
- 55-A.(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.
- 55-A.(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.
- 55-A.(5)** In every case in which, by virtue of the provisions of the aforesaid Act or the rules, the DFCCIL 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 DFCCIL due to the Contractor's failure to fulfill his statutory obligations under the aforesaid Act or the rules, the DFCCIL 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 DFCCIL under the Section 20, Sub-Section (2) and Section 2, Sub-Section (4) of the aforesaid Act, the DFCCIL 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 DFCCIL 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 DFCCIL full security for all costs for which the DFCCIL might become liable in contesting such claim. The decision of the Chief Engineer regarding the amount actually recoverable from the Contractor as stated above shall be final and binding on the Contractor.

55-B. 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 DFCCIL from and against any claims under the aforesaid Act and the Rules.

55-C (i) Contractor is to abide by the provisions of various labour laws in terms of above clause 54, 55, 55-A and 55-B of the Standard General Conditions of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailwayss.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 in Portal shall be done as under:

- (a) Contractor shall apply for onetime 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 Letter of Acceptances (LoAs) issued in his favour.
 - (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LoAs) / 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.
- (iii) 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 DFCCIL's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till ____Month, ____Year."

55-D. 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 by Registering Officer of the concerned State Govt. (Labour Dept.). The Cess shall be deducted from contractor's bills as per provisions of the Act.

56. 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 arrangement to render all possible assistance.

57. 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, Railways /DFCCIL is obliged to pay compensation to a workman directly or through petty Contractor or sub-contractor employed by the Contractor in executing the work, Railways /DFCCIL will recover from the Contractor the amount of the compensation so paid, and, without prejudice to the rights of DFCCIL under Section 12 Sub-section (2) of the said Act, Railways 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. Railways 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 Railways full security for all costs for which DFCCIL/Railways might become liable in consequence of contesting such claim.

57-A. 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 DFCCIL 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.

- 58. DFCCIL not to Provide Quarters for Contractors:** No quarters shall normally be provided by the DFCCIL for the accommodation of the Contractor or any of his staff employed on the work. In exceptional cases where accommodation is provided to the Contractor at the DFCCIL's discretion, recoveries shall be made at such rates as may be fixed by the DFCCIL for the full rent of the buildings and equipments therein as well as charges for electric current, water supply and conservancy.
- 59.(1) Labour Camps:** The Contractor shall at his own expense make adequate arrangements for the housing, supply of drinking water and provision of latrines and urinals for his staff and workmen, directly or through the petty Contractors or sub-contractors and for temporary creche (Bal-Mandir) where 50 or more women are employed at a time. Suitable sites on DFCCIL land, if available, may be allotted to the Contractor for the erection of labour camps, either free of charge or on such terms and conditions that may be prescribed by the DFCCIL. All camp sites shall be maintained in clean and sanitary conditions by the Contractor at his own cost.
- 59.(2) Compliance to Rules for Employment of Labour:** The Contractor(s) shall conform to all laws, bye-laws rules and regulations for the time being in force pertaining to the employment of local or imported labour and shall take all necessary precautions to ensure and preserve the health and safety of all staff employed directly or through petty contractors or sub-contractors on the works.
- 59.(3) Preservation of Peace:** The Contractor shall take requisite precautions and use his best endeavours to
- (i) Prevent any riotous or unlawful behaviour by or amongst his workmen and other employed directly or through the petty Contractors or sub-contractors on the works and for the preservation of peace and protection of the inhabitants and
 - (ii) Security of property in the neighbourhood of the works. In the event of the DFCCIL requiring the maintenance of a Special Police Force at or in the vicinity of the site during the tenure of works, the expenses thereof shall be borne by the Contractor and if paid by the DFCCIL shall be recoverable from the Contractor.
- 59.(4) Sanitary Arrangements:** The Contractor shall obey all sanitary rules and carry out all sanitary measures that may from time to time be prescribed by the DFCCIL Medical Authority and permit inspection of all sanitary arrangements at all times by the Engineer, the Engineer's Representative or the Medical Staff of the DFCCIL. Should the Contractor fail to make the adequate sanitary arrangements, these will be provided by the DFCCIL and the cost thereof recovered from the Contractor.
- 59.(5) Outbreak of Infectious Disease:** The Contractor shall remove from his camp such labour and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer or the Engineer's Representative on the advice of the DFCCIL/Railways Medical Authority. Should cholera, plague, or other infectious disease break out, the Contractor shall burn the huts, beddings, clothes and other belongings of or used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer, failing which within the time specified in the Engineer's requisition, the work may be done by the DFCCIL/Railways and the cost thereof recovered from the Contractor.
- 59.(6) Treatment of Contractor's Staff in Railways Hospitals:** The Contractor and his staff, other than labourers and their families requiring medical aid from the Railways hospital and dispensaries will be treated as private patients and charged accordingly. The Contractors'

labourers and their Families will be granted free treatment in Railways hospitals and dispensaries where no other hospitals or dispensaries are available provided the Contractor pays the cost of medicines, dressing and diet money according to the normal scale and additional charges for special examinations such as pathological and bacteriological examination, X-Ray, etc. and for surgical operation.

- 59. (7) Medical Facilities at Site:** The Contractor shall provide medical facilities at the site as may be prescribed by the Engineer on the advice of the Railways Medical Authority in relation to the strength of the Contractor's resident staff and workmen.
- 59. (8) Use of Intoxicants:** The sale of ardent spirits or other intoxicating beverages upon the work or in any of the buildings, encampments or tenements owned, occupied by or within the control of the Contractor or any of his employees shall be forbidden and the Contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.
- 59.(9) Restrictions on the Employment of Retired Engineers of DFCCIL/Railways Services Within One Year of their Retirement:** The Contractor shall not, if he is a retired Government Engineer of Gazetted rank, himself engage in or employ or associate a retired Government Engineer of Gazetted rank, who has not completed one year from the date of retirement, in connection with this contract in any manner whatsoever without obtaining prior permission of the President and if the Contractor is found to have contravened this provision it will constitute a breach of contract and administration will be entitled to terminate the contract and forfeit his Performance Guarantee as well as Security Deposit.
- 60.(1) Non-Employment of Labourers below the age of 15:** The Contractor shall not employ children below the age of 15 as labourers directly or through petty Contractors or sub-contractors for the execution of work.
- 60.(2) Medical Certificate of Fitness for Labour:** It is agreed that the Contractor shall not employ a person above 15 and below 19 years of age for the purpose of execution of work under the contract unless a medical certificate of fitness in the prescribed form (Proforma at Annexure-VIII) granted to him by a certifying surgeon certifying that he is fit to work as an adult, is obtained and kept in the custody of the Contractor or a person nominated by him in this behalf and the person carries with him, while at work; a token giving a reference to such certificate. It is further agreed that the responsibility for having the adolescent examined medically at the time of appointment or periodically till he attains the age of 19 years shall devolve entirely on the Contractor and all the expenses to be incurred on this account shall be borne by him and no fee shall be charged from the adolescent or his parent for such medical examination.
- 60.(3) Period of Validity of Medical Fitness Certificate:** A certificate of fitness granted or renewed for the above said purposes shall be valid only for a period of one year at a time. The certifying surgeon shall revoke a certificate granted or renewed if in his opinion the holder of it, is no longer fit for work in the capacity stated therein. Where a certifying surgeon refuses to grant or renew a certificate or revoke a certificate, he shall, if so required by the person concerned, state his reasons in writing for doing so.
- 60.(4) Medical Re-Examination of Labourer:** Where any official appointed in this behalf by the Ministry of Labour is of the opinion that any person employed in connection with the execution of any work under this contract in the age group 15 to 19 years is without a certificate of fitness or is having a certificate of fitness but no longer fit to work in the capacity stated in the certificate, he may serve on the Contractor, or on the person nominated by him in this regard, a notice requiring that such persons shall be examined by a certifying surgeon and such person shall not if the concerned official so directs, be employed or permitted to do any work under this contract unless he has been medically examined and certified that he is fit to work in the capacity stated in the certificate.

EXPLANATIONS:

- (1) Only Qualified Medical Practitioners can be appointed as "Certifying Surgeons" and the term

"Qualified Medical Practitioners" means a person holding a qualification granted by an authority specified in the Schedule to the Indian Medical Degrees Act, 1916 (VII to 1916) or in the Schedule to the Indian Medical Council Act, 1933 (XXVII) of 1933.

- (2) The Certifying surgeon may be a medical officer in the service of State or Municipal Corporation.

DETERMINATION OF CONTRACT

- 61.(1) Right of DFCCIL to Determine the Contract:** The DFCCIL shall be entitled to determine and terminate the contract at any time should, in the DFCCIL'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 DFCCIL of such determination and the reasons therefor shall be conclusive evidence thereof.
- 61.(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 DFCCIL/Railways shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The DFCCIL's decision on the necessity and propriety of such expenditure shall be final and conclusive.
- 61.(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.

62.(1) 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 programme of work by a margin of 10% of the stipulated period, or
- (ix) Fail to Execute the contract documents in terms of Para 8 of the Instructions to Tenderers.
- (x) Fail to submit the documents pertaining to identity of JV and PAN in terms of Para 17.11 of Part III available in the Tender document.
- (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 under Clause 25 and 27 of these Conditions, or
- (xii) Fail to take steps to employ competent or additional staff and labour as required under Clause 26 of these Conditions, or
- (xiii) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required under Clause 28 of these Conditions, or

- (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 DFCCIL or to any person on his or on their behalf in relation to the execution of this or any other contract with this DFCCIL.
- (xv) Fail to adhere to the provisions of Para 16 of Part III of Tender Document of the Instructions to Tenderers, or provision Clause 59(9) of these Conditions.
- (xvi) Submits copy of fake documents / certificates in support of credentials, submitted by the tenderer

Then and in any of the **said Clause**, the Engineer on behalf of the DFCCIL may serve the Contractor with a notice (Proforma at Annexure-IX) 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 DFCCIL shall be entitled after giving 48 hours' notice (Proforma at Annexure-X or XII, as the case may be) 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 (Proforma at Annexure-XI or XIII, as the case may be) should be issued.

Note: Engineer at his discretion may resort to the part termination of contract with notices (Proforma at Annexure- IX, XII and XIII), only in cases where progress of work is more than or equal to 80% of the original scope of work.

62.(2) Right of DFCCIL after Rescission of Contract owing to Default of Contractor: In the event of any or several of the courses, 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 DFCCIL/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 available 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 clause 16(2) of these Conditions.
- (iv) 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.

SETTLEMENT OF DISPUTES –DFCCIL ARBITRATION AND CONCILIATION RULES

63. Conciliation of Disputes:

- (i) This clause is applicable in the tender having advertised value less than or equal to Rs 50 Crore.
- (ii) 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 "Chief Engineer" or "Divisional DFCCIL Manager" through “Notice of Dispute” provided that no such notice shall be served later than 30 days after the date of issue of Completion Certificate by the Engineer. Chief Engineer or Divisional DFCCIL Manager shall, within 30 days after receipt of the Contractor’s “Notice of Dispute”, notify the name of conciliator(s) to the Contractor.
- (iii) The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of contract.
- (iv) If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a written settlement agreement duly signed by Engineer In-charge, Contractor and conciliator(s). When the parties sign the settlement agreement, it shall be final and binding on the parties.
- (v) The parties shall not initiate, during the conciliation proceedings, any arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.
- (vi) The conciliation proceedings shall be terminated as per Section 76 of ‘The Arbitration and Conciliation Act, 1996.

63.1 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 GM and the GM 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 matters for which provision has been made in Clauses 7(j), 8, 18, 22(5), 39.1, 39.2, 40A,43(2), 45(i)(a), 55, 55-A(5), 57, 57A,61(1), 61(2),62(1), 63(iv) and 63.2.11 of the Standard General Conditions of Contract or in any Clause (stated as excepted matter) of the Special 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 Dispute Adjudication Board (DAB) and Arbitration.

63.2 Dispute Adjudication Board (DAB): This clause is applicable in the tender having advertised value more than Rs 50 Crore.

63.2.1 Any dispute/s if not settled with the Engineer, shall be referred to DAB.

The DAB shall consist of a panel of three Retired DFCCIL Officers, retired not below senior administrative grade (SAG). The DAB shall be formed within 90 days of signing of Contract Agreement. For this purpose, a panel of DAB members shall be maintained in the General Manager’s office. The complete panel, which shall not be less than five members, shall be sent by Chief Engineer to the Contractor to nominate one member of the DAB from the panel as Contractor’s nominee within two weeks of receipt of the panel. On receipt of Contractor’s nominee, the Chief Engineer shall nominate one member from the same panel as DFCCIL nominee for the DAB. Both above nominees shall jointly select presiding member of the DAB from the same panel.

63.2.2 The appointment of DAB shall be effectuated by way of a tri-partite agreement among the DFCCIL, Contractor and the respective DAB members. The terms of the remuneration of each member shall be as fixed by Ministry of DFCCIL/Railways from time to time. Each party shall be responsible for paying one-half of this remuneration.

63.2.3 If one or more of the members appointed refuses to act as DAB member, or is unable or unwilling to perform his functions as DAB member for any reason whatsoever or dies or in the opinion of the Chief Engineer fails to act without undue delay, the parties shall terminate the mandate of such DAB member and thereupon new DAB member shall be appointed in the same manner, as the outgoing DAB member had been appointed.

63.2.4 The appointment of any member may be terminated by mutual agreement of both Parties, but not by the DFCCIL or the Contractor acting alone. Unless otherwise agreed by both the Parties, the appointment of the DAB (including each member) shall expire upon expiry of this Contract Agreement.

63.2.5 Before start of DAB proceedings, each DAB member shall give the following certificate to the DFCCIL and the Contractor:

“I have no any past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind. Further, I have no any past or present relationship with or interest in any of the parties whether financial, business, professional or

other kind, which is likely to give rise to justifiable doubts as to my independence or impartiality.”

- 63.2.6** DAB proceedings shall be conducted as decided by the DAB. The DAB shall give its decision within 90 days of a Dispute referred to it by any of the Parties, duly recording the reasons before arriving at the decision. The DAB shall decide the issue within terms and conditions of the contract. This time limit shall be extendable subject to the Parties mutual agreement.
- 63.2.7** The DAB decision shall not be binding on both the Parties. In case any party is not satisfied by the decision of DAB, then the aggrieved party may approach Arbitral Tribunal for arbitration proceedings.
- 63.2.8** No dispute shall be referred to Arbitral Tribunal unless the same has been referred to DAB for adjudication. However, in case DAB is not formed due to any reason, the disputes can be directly referred to Arbitral Tribunal to adjudicate the dispute.
- 63.2.9** In the specific cases of any misconduct by any of the members of the DAB, the parties shall have the right to specifically bring it to the notice of the DAB such conduct, through a statement filed with necessary documents in proof of such misconduct and the DAB, after taking NOTICE of such conduct initiate the replacement of the member concerned, in the same manner the member to be replaced was appointed.
- 63.2.10** Once the decision is given by DAB, DAB cannot review the decision at its own or on the request of one party, unless both parties agree for review of decision by DAB.
- 63.2.11** In case DAB decision is not challenged by either party within 180 days of receipt of decision of DAB, the decision shall be considered as final and parties would be barred for referring the same to Arbitral Tribunal for adjudication.
- 63.2.12** The obligation of the DFCCIL and the Contactor shall not be altered by reasons of issue being or under reference to DAB.
- 63.2.13** The DAB shall conduct the proceedings at any convenient venue which shall be decided by DAB in consultations with parties.
- 63.2.14** It is a term of this contract that the Parties shall not approach any Court of Law for settlement of such disputes or differences unless an attempt has first been made by the parties to settle such disputes or differences through DAB and Arbitral Tribunal.
- 64.(1) : Demand for Arbitration:**
- 64.(1)(i):** 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 63.1 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.

- 64.(1)(ii)(a):** 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.
- 64.(1)(ii)(b):** The parties may waive off the applicability of Sub-Section 12(5) of Arbitration and Conciliation (Amendment) Act 2015, if they agree for such waiver in writing, after dispute having arisen between them, in the format given under Annexure XV of these conditions.
- 64.(1)(iii)(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.
- 64.(1)(iii)(b):** The claimant shall submit his claims stating the facts supporting the claims alongwith 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.
- 64.(1)(iii)(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, unless otherwise extension has been granted by Tribunal.
- 64.(1)(iii)(d):** Place of Arbitration: The place of arbitration would be within the geographical limits of the Division of the DFCCIL where the cause of action arose or the Headquarters of the concerned DFCCIL or any other place with the written consent of both the parties.
- 64.(1)(iv):** No new claim shall be added during proceedings by either party. However, a party may amend or supplement the original claim or defense thereof during the course of arbitration proceedings subject to acceptance by Tribunal having due regard to the delay in making it.
- 64.(1)(v):** 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 DFCCIL/Railways 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.
- 64.(2): 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.
- 64.(3) :Appointment of Arbitrator:**
- 64.(3)(a) : Appointment of Arbitrator where applicability of section 12 (5) of Arbitration and Conciliation Act has been waived off:**
- 64.(3)(a)(i):** In cases where the total value of all claims in question added together does not exceed ₹ 1,00,00,000/- (Rupees One Crore), the Arbitral Tribunal shall consist of a Sole Arbitrator who shall be a Gazetted Officer of DFCCIL not below Junior Administrative Grade, nominated by the General Manager. The sole arbitrator shall be appointed within 60 days from the day when a written and valid demand for arbitration is received by General Manager.
- 64.(3)(a)(ii):** In cases not covered by the Clause 64(3)(a)(i), the Arbitral Tribunal shall consist of a panel of three Gazetted DFCCIL Officers not below Junior Administrative Grade or 2 DFCCIL Gazetted Officers not below Junior Administrative Grade and a retired DFCCIL Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrators. For this purpose, the DFCCIL will send a panel of at least four (4) names of Gazetted DFCCIL Officers of one or more departments of the DFCCIL which may also include the name(s) of retired DFCCIL Officer(s) empanelled to work as DFCCIL Arbitrator to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General

Manager.

Contractor will be asked to suggest to General Manager 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 General Manager 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. General Manager 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 the Accounts Department shall be considered of equal status to the officers in Senior Administrative Grade of other departments of the DFCCIL for the purpose of appointment of arbitrator.

64.3.(a).iii: The serving DFCCIL officer working in arbitral tribunal in the ongoing arbitration cases as per clause 64.(3)(a)(i) and clause 64.(3)(a)(ii) above, can continue as arbitrator in the tribunal even after his retirement.

64.(3)(b): Appointment of Arbitrator where applicability of Section 12 (5) of Arbitration and Conciliation Act has not been waived off:

(i) In cases where the total value of all claims in question added together does not exceed ₹ 50,00,000/- (Rupees Fifty Lakh), the Arbitral Tribunal shall consist of a Retired DFCCIL Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrator. For this purpose, the DFCCIL will send a panel of at least four (4) names of retired DFCCIL Officer(s) empanelled to work as DFCCIL Arbitrator duly indicating their retirement dates to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General Manager.

Contractor will be asked to suggest to General Manager at least 2 names out of the panel for appointment as arbitrator within 30 days from the date of dispatch of the request by DFCCIL. The General Manager shall appoint at least one out of them as the arbitrator within 30 days from the receipt of the names of Contractor's nominees.

(ii) In cases where the total value of all claims in question added together exceed ₹ 50,00,000/- (Rupees Fifty Lakh), the Arbitral Tribunal shall consist of a Panel of three (3) retired DFCCIL Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrators. For this purpose, the DFCCIL will send a panel of at least four (4) names of retired DFCCIL Officer(s) empanelled to work as DFCCIL Arbitrator duly indicating their retirement date to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General Manager.

Contractor will be asked to suggest to General Manager 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 General Manager 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. General Manager 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 has served in the Accounts Department.

64.(3)(c)(i): 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 General Manager fails to act without undue delay, the General Manager 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).

- 64.3(c)(ii):** (a) 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 proceedings shall normally be conducted on the basis of documents and written statements.
- (b) Before proceeding into the merits of any dispute, the Arbitral Tribunal shall first decide and pass its orders over any plea submitted/objections raised by any party, if any, regarding appointment of Arbitral Tribunal, validity of arbitration agreement, jurisdiction and scope of the Tribunal to deal with the dispute (s) submitted to arbitration, applicability of time 'limitation' to any dispute, any violation of agreed procedure regarding conduct of the arbitral proceedings or plea for interim measures of protection and record its orders in day to day proceedings. A copy of the proceedings duly signed by all the members of tribunal should be provided to both the parties.
- 64.3(c)(iii):** (i) Qualification of Arbitrator (s):
- (a) Serving Gazetted DFCCIL Officers of not below JA Grade level.
- (b) Retired DFCCIL Officers not below SA Grade level, one year after his date of retirement.
- (c) Age of arbitrator at the time of appointment shall be below 70 years.
- (ii) An arbitrator may be appointed notwithstanding the total number of arbitration cases in which he has been appointed in the past.
- (iii) While appointing arbitrator(s) under Sub-Clause 64.(3)(a)(i), 64.(3)(a)(ii), 64.(3)(b)(i) & 64.(3)(b)(ii) 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. A certification to this effect as per annexure- XVI shall be taken from Arbitrators also. 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.
- 64.(3)(d)(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 therefrom.
- 64.(3)(d)(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.
- 64.(3)(d)(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.
- 64.(4):** 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.
- 64.(5):** 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.
- 64. (6):** 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 DFCCIL Board from time to time and the fee shall be borne equally by both the parties, provided parties sign an agreement in the format given at Annexure XV to these conditions after/ while referring these disputes to Arbitration. Further, the fee payable to the arbitrator(s) would be governed by the instructions issued on the subject by DFCCIL Board from time to time irrespective of the fact whether the arbitrator(s) is/are appointed by the DFCCIL Administration or by the court of law unless specifically directed by Hon'ble court

otherwise on the matter.

64.(7) Subject to the provisions of the aforesaid Arbitration and Conciliation Act 1996 and the rules thereunder and relevant para of the Standard General Conditions of Contract and any statutory modifications thereof shall apply to the appointment of arbitrators and arbitration proceedings under this Clause.

64.(8) In case arbitration award is challenged by a party in the Court of Law, 75% of award amount, pending adjudication by Court of Law, shall be made by party to other party. In case payment is to be made by DFCCIL to Contractor, the terms & conditions as incorporated in the Ministry of railways letter No. 2016/CE(I)/CT/ARB/3(NITI Aayog)/Pt. dated 08th Mar,2017 as amended from time to time, shall be followed. In case Contractor has to pay to the DFCCIL, then 75% of the award amount shall be deducted by the DFCCIL from the Contractor's bills, Performance Guarantee/ Security Deposit or any other dues of Contractor with the Government of India.

Chapter V

SPECIAL CONDITIONS OF CONTRACT

A. GENERAL

1.0 This Tender shall be governed by Preamble and General instructions to tenderers, General condition of Contract, Special conditions of contract, Technical Specifications, Additional Technical specifications (if any), Drawings, Forms, Annexures, etc.

1.1 If there are varying or conflicting provisions in the documents forming part of the contract, Engineer shall be deciding authority with regard to the intentions of the provision and decision of Engineer will be final and binding on the contractor.

1.2 Scheme of work: - Within a period of 10 days beginning from the date of issue of Letter of Acceptance of Tender, the Contractor shall submit the detailed time schedule for execution of work and various documents enumerated in tender papers to the employer.

1.3 Quality Assurance Plan for Substructure and foundation

All materials used in the work shall be of the best quality as per codes. Quality Assurance Plan shall include for materials used and for workmanship of work. The contractor shall submit Quality Assurance Plan for the substructure and foundation. The contractor shall also ensure that the Employer's prescribed Quality Assurance Standards are rigidly followed in for the construction of substructure and foundation. These are to be approved from the client / DFCCIL

1.4 Quality Assurance Plan for Superstructure

- (a) All materials used in the work shall be of the best quality as per codes / Specifications
- (b) The contractor shall ensure quality at all necessary points, whether at manufacturer's works, or in his depot or at work site as well as during erection through Quality Assurance Plan.
- (c) The Contractor shall adopt a suitable Quality Assurance Programme according to approved instructions, drawings, specifications, etc.

1.5 Expenses of Employer' Representative – All the expenses of Engineer's representative shall be borne by the Employer whether the inspected material is finally utilised in work or not.

1.5.1 The decision of the Engineer shall be final in respect of acceptability or otherwise of any material, fittings, component or equipment required for the work.

1.6 This programme of the Contractor shall generally cover the followings: -

1.6.1 The organization to manage and implement the Quality Assurance programme.

1.6.2 The documentation control system:

- (i) Basic control system.
- (ii) Adopted at manufacturer's work
- (iii) Adopted at the Contractor Depot and work site.

1.6.3 Procedure adopted for:

- (i) Source Inspection.
- (ii) Incoming raw material inspection.
- (iii) Verification of material purchased.
- (iv) Fabrication Controls.
- (v) Site erection controls.

1.6.4 Inspection and Test Procedure for:

- (i) Manufacture and quality control procedure.
- (ii) Field activity.

1.6.5 System of handling and storage.

1.6.6 System of quality audit.

1.6.7 System of maintenance of records.

1.7 For the purpose of obtaining 'On Account Payment', the Contractor shall submit along with the invoice, the documents indicated in the prescribed quality Assurance standards which should inter alia cover the following as may be applicable in each case.

(i) Material test reports on raw materials used.

(ii) Material type and routine test report on components specification.

(iii) Inspection Plan with reports of the inspection Plan check points.

(iv) Routine test report.

(v) Factory test results as required under the specification.

(vi) Quality audit report including test check report of Employer's representative if any.

1.8 Work By Other Agencies

(a) Any other works undertaken at the same time by the Engineer direct or through some other agency at the same time or section where the contractor is carrying out his work will not entitle the contractor to prefer any claim regarding any delays or hindrances he may have to face on this account but the Employer shall grant a reasonable extension of time to the contractor. The contractor shall comply with any instruction which may be given to him by the Employer in order to permit simultaneous execution of his own works and those undertaken by other contractors or the DFCCIL without being entitled on this account on any extra charge.

(b) The contractor shall not be entitled to any extra payment due to hindrance resulting from normal Railway operations, such as delay on account of adequate number of and duration of blocks not being granted, operational delay in movement of work trains extension of time to the contractor.

1.9 Infringement of patents:

(a) The Contractor is forbidden to use any patents or registered drawings, process or pattern in fulfilling his contract without the previous consent in writing of the owner of such patent, drawing, pattern or trade mark, except where these are specified by the Employer himself. Royalties where payable for the use of such patented processes, registered drawings of patterns shall be borne exclusively by the Contractor. The contractor shall advise the Employer of any proprietary right that may exist on such processed drawings or patterns which he may use of his own accord.

(b) In the case of patent taken out by the Contractor of the drawings or patterns registered by him, or of those patents, drawings, or patents for which he holds a licence, the signing of the Contract automatically gives the Employer the right to repair by himself the purchased articles covered by the patent or by any person or body chosen by him and to obtain from any sources he desires the component parts required by him in carrying out the repair work. In the event of infringement of any patent rights due to above action of the Employer, he shall be entitled to claim damages from the contractor on the grounds of any loss of any nature which he may suffer e.g. in the case of attachment because of counterfeiting.

(c) **Indemnification by contractor:-** In the event of any claim or demand being made or action being brought against the Employer for infringement of later patent in respect of any equipment, machine, plant, work or thing used or supplied by the Contractor under this contract or in respect of any methods of using or working by the Employer of such

equipment machine, plant work or thing, the contractor shall indemnify the employer and keep him indemnified and harmless against all claims, costs, charges and expenses arising from or incurred by reason of such claim provided that the Employer shall notify the contractor immediately any claim is made and that the contractor shall be at liberty, if he so desires with the assistance of the Employer if required but at the Contractor's expense, to conduct all negotiations for the settlement of the same or any litigation that may arise there from and provided that no such equipment, machine, plant work or thing, shall be used by the Employer for any purpose or in any manner other than that for which they have been supplied by the Contractor and specified under this contract.

1.10 Insurance (CAR Policy) -

Before commencing of works, it shall be obligatory for the contractor to obtain, at his own cost, insurance cover (CAR policy) in the joint name of the contractor and employer from reputed companies under the following requirements:

- (a) Liability for death of or injury to any person/ employer's staff / animals or things or loss of or damage to any property / things / the work of other contractor (other than the work) arising out of the performance of the Contract.
- (b) Construction Plant, Machinery and equipment brought to site by the Contractor.
- (c) Any other insurance cover as may be required by the law of the land.

The contractor shall provide evidence to the employer / Engineer before commencement of work at site that the insurances required under the contract have been effected and shall within 60 days of the commencement date, provide the insurance policies to the Employer/Engineer, the contractor shall, whenever, called upon, produce to the engineer or his representative the evidence of payment of premiums paid by him to ensure that the policies indeed continue to be in force.

The Contractor shall also obtain any additional insurance cover as per the requirements of the Contract.

The Employer/Engineer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or his sub-contractor or petty contractor / other contractor working there. The Contractor shall indemnify and keep indemnified the employer / Engineer against all such damages and compensation for which the contractor is liable.

The Policies of the contractor shall remain in force throughout the period of execution of the works and till the expiry of the defect liability period except for any specific insurance covers necessary for shorter period.

If the Contractor fails to effect or keep in force or provide adequate cover as acceptable to the engineer in the insurance policies mentioned above, then in such cases, the engineer may effect and keep in force any such insurance or further insurance on behalf of the Contractor. The recovery shall be made at the rate of 1.5 times the premium/premiums paid by the engineer in this regard from the payment due to the Contractor or from the contractor's Performance security. However, the Contractor shall not be absolved from his responsibility and /or liability in this regard.

1.11 Accident:-

- (a) The contractor shall, in respect of all staff engaged by him or by his sub-contractor, indemnify and keep the employer at all times indemnified and protected against all claims made and liabilities incurred under Workman's Compensation Act, the Factories Act and the Payment of Wages Act, and rules made there under from time to time or under any other labour and Industrial Legislation made from time to time.

- (b) The contractor shall indemnify and keep the employer indemnified and harmless against all actions, suits, claim demands, costs, charges or expenses arising in connection with any death or injury sustained by any person or persons sustained due to the acts or omission of the contractor, his sub-contractors, his agents or his staff during the executions of this contract irrespective of whether such liability arises under the Workman's Compensation Act, or Fatal Accident Act or any other statute in force for the time being.
- (c) The contractor' liability to meet third party claims of the type outlined above will be applicable only in cases where accidents have been caused by workmanship, material, execution or negligence on the part of the contractor and further the liability of the contractor will be limited to Rs.5 lakh for any one accident.
- (d) The contractor shall be responsible for all repairs and rectification of damages to completed works or works under execution due to DFCCIL accidents, thefts, pilferage or any other cause, without delay to minimize or to avoid traffic detentions, in a section until the installation are provisionally handed over to the employer.

1.12 Safety Measures:-

- (a) The contractor shall take all precautionary measures in order to ensure the protection of his own personnel moving about or working on the railway premises, but shall then conform to the rules and regulations of the Railway if and when, in the course of the work there is likely to be any danger to persons in the employment of the contractor due to running traffic while working in the Railway siding and premises, the contractor shall provide flagman or look out men for protection of such persons. The employer shall remain indemnified by the contractor in the event of any accident occurring in the normal course of work, arising out of the failure of contractor or his men to exercise reasonable precaution at all places of work.
- (b) Blasting of rocks for foundation work shall be done only after due notice is given to the employer and time/s and date /s for blasting operations agreed to by the employer. Blasting, if required to be done in the vicinity of the track, shall not be undertaken until the Employer's flagmen on duty take necessary step to protect trains and the track is adequately protected by the contractor against damage by blasted rock. The contractor shall follow detailed instructions which will be issued to him regarding blasting operations in the vicinity of tracks.
- (c) The contractor shall abide by all Railway regulations in force for the time being and ensure that the same are followed by his representatives, Agents or sub -contractors or workmen. He shall give due notice to his employees and workers about provision of this para.
- (d) The works must be carried out most carefully without any infringement of the Indian Railway Act or the General and Subsidiary Rules in force on the Railway, in such a way that they do not hinder Railway operation or affect the proper functioning of or damage any DFCCIL equipment, structure or rolling stock except as agreed to by the employer, provided that all damage and disfiguration caused by the contractor at his own cost failing which cost of such repairs shall be recovered from the contractor.
- (e) If safety of track or track drainage etc. is affected as a consequence of works undertaken by the contractor, the contractor shall take immediate steps to restore normal conditions. In case of delay, the employer shall, after giving due notice to the contractor in writing, take necessary steps and recover the costs from the contractor.

1.13 Guarantee / Defect Liability Period:-

- (a) The Contractor shall guarantee that all the works executed under this contract shall be free from all defects and faults in material, workmanship and manufacture and shall be of

acceptable standards for the contracted work and in full conformity with the technical specifications, drawings and other contract stipulations, **for a period of 6 months from the date of taking over by the Employer**

- (b) During the period of guarantee the Contractor shall keep available an experienced engineer / man power to attend to any defective works / installations resulting from defective erection and/or defect in the installation supplied by the Contractor. This engineer shall not attend to rectification of defects which arise out of normal wear and tear and come within the purview of routine maintenance work. The contractor shall bear the cost of modifications, additions or substitutions that may be considered necessary due to faulty materials or workmanship for the satisfactory working of the equipment. The final decision shall rest with the Engineer his successor(s)/Nominee.
- (c) During the period of Guarantee the Contractor shall be liable for the replacement at site of any parts which may be found defective in the executed work whether such parts / structural elements of his own manufacture or those of his sub-contractor / supplier whether arising from faulty materials, workmanship or negligence in any manner on the part of the Contractor provided always that such defective parts as are not repairable at site are promptly returned to the Contractor if so required by him at his (Contractor's) own expenses. In case of parts of executed work detected during guarantee period, contractor should replace all such items irrespective of the fact whether all such items have failed or not. The Contractor shall bear the cost of repairs carried out on his behalf by the Employer at site. In such a case, the contractor shall be informed in advance of the works proposed to be carried out by the Employer.
- (d) If it becomes necessary for the Contractor to replace or renew any defective portion of the structural elements until the expiration of six month from the date of such replacement or renewal or until the end of the above mentioned period whichever is later.
Such extension shall not apply in case of defects of a minor nature, the decision of the Chief General Manager or his successor/nominee being final in the matter. If any defect be not remedied within a reasonable time during the aforesaid period the Employer may proceed to do work at the Contractor's risk and expense, but without prejudice to any other rights and remedies which the Employer may have against the Contractor in respect of such defects or faults.
- (e) The repaired or renewal parts structure shall be delivered / supplied and erected / executed on site free of charge to the employer.
- (f) Any materials, fittings, components or equipment/structure supplied under items for supplying / providing and fixing in schedule shall also be covered by the provisions of this paragraph. The liability of the Contractor under the guarantee will be limited to re-supply of components / structure installation and fittings.

1.14 Final Acceptance:-

- (a) The final acceptance of the entire work executed shall take effect from the date of expiry of the period of guarantee / Defect Liability period as defined in paragraph 1.13 above of the expiry of the last of the respective periods of guarantee, provided in any case that the Contractor has complied fully with his obligations under clause 1.13, provided also that the attention has been paid by way of maintenance by the Employer.
- (b) If on the other hand the contractor has not so complied with his obligation under Para 1.13 above in respect of any work, the Employer may either extend the period of guarantee in respect of that work until the necessary works are carried out by the Contractor or carry out those works or got them carried out suo moto on behalf of the Contractor at the Contractor's expenses. After expiry of the period of guarantee for each

work, a certificate of final acceptance for the section shall be issued by the Employer and the last of such certificate will be called the last and final acceptance certificate. The contract shall not be considered as completed until the issue of final acceptance certificate by the Employer.

- (c) The Employer shall not be liable to the Contractor for any matter arising out of or in connection with the contract or execution of the work unless the Contractor shall have made a claim in writing in respect thereof before the issue of final acceptance certificate under this clause.

Notwithstanding the issue of final acceptance certificate the Contractor and the Employer (subject to sub-clause as above) shall remain liable for fulfilment of any obligation incurred under the provision of the contract prior to the issue of final acceptance certificate which remains unperformed at the time such certificate is issued and for determining the nature and extent of such obligation the contract shall be deemed to remain in force between the parties hereto.

1.15 Payment:-

Payment will be governed by the terms specified in accordance with accepted schedule of prices, read with relevant para of the other parts and Chapters of the Tender Papers. The employer retains the right to withhold money due to the contractor arising out of this contract for any default of the contractor.

- (i) The Contractor shall, whenever required, produce or cause to be produced for examination by the Employer any quotation / invoice, cost of other account, book of account, voucher, receipt letter, memorandum paper or 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 anyway relating to the execution of this contract or relevant for verifying or ascertaining the cost of the execution of this Contract (the decision of the employer on the question of relevancy of any documents, information or return being final and binding on the parties). The Contractor shall similarly produce vouchers etc., if required, to prove to the Employer that materials supplied by him are in accordance with the specifications laid down in the contract.
- (ii) If any portion of the work be carried out by a sub-contractor or any subsidiary or allied firm or company the Employer shall have power to secure the books of such sub-contractor or any subsidiary or allied firm or company, through the Contractor, and such books shall be open to his inspection. The Contractor should seek prior permission from the employer for subletting whole and/or part of the work to any sub-contractor.
- (iii) The obligations imposed by sub-clause (i) and (ii) above are without prejudice to the obligation of the Contractor under any statute, rules or order binding to the Contractor or other conditions of the contract.
- (iv) It is an agreed term of the contract that the employer reserves the right to carry out 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 if as a result of such examination any over payment to him is discovered to have been made in respect of any work done or alleged to have been done by him under the contract.

- 1.16 All payments in respect of the contract during the currency of the contract shall be made through Electronic Clearing System (ECS) / National Electronic Funds Transfer (NEFT/RTGS). The successful tenderer on award of contract must submit ECS/NEFT/RTGS Mandate Form complete in all respects as detailed at Form No. 8 of the

tender document. However, if the facility of ECS/NEFT/RTGS is not available at a particular location, the payments shall be made by cheque.

1.17 Performance Guarantee:-

- (i) The Bank Guarantee for performance Guarantee shall remain valid until a date 60 days (or as specified in the Contract) after expiry of Defects Liability Period.
- (ii) The Bank Guarantee for performance Guarantee shall be submitted invariably in the format given in the bidding document.
- (iii) The performance Guarantee shall be released 21 days after issue of performance certificate.

1.18 GST

Contractor should bear the fact in mind while quoting the rates that GST is inclusive in schedule of rates i.e. GST will not be paid extra.

1.19 PERMITS, FEES, TAXES & ROYALTIES

Unless otherwise provided in the contract documents, the contractor shall secure and pay for all permits, Government fees and licenses necessary for the execution and completion of the works. The contractor shall pay all taxes and duties except GST tax. **GST will be paid by DFCCIL as per prevailing rate.**

The DFCCIL authorities will not take any responsibility of refund of such taxes/fees. Any violation, in the legal provision of taxes, duties, permits and fees, carried out by the Contractor and detected subsequently shall be sole responsibility of the Contractor and his legal heirs.

1.20 STATUTORY INCREASE IN DUTIES, TAXES ETC

Tenderers will examine the various provisions of the central Goods and services Tax Act, 2017 (CGST)/ Integrated goods and service 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. Tenders will ensure that full benefit of input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.

All the taxes and duties levied by the State and Central Govt. and by Local Bodies at the prevailing rates applicable on the date of receipt of tender shall be fully borne by the Contractor and shall not be reimbursed to him on any account.

Further DFCCIL shall not honour any claim arising out of any increase in any of the prevailing statutory duties, taxes, levies, octroi, etc **except GST**. At the time of quoting/bidding contractor should bear the above fact in mind. 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 DFCCIL 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.

1.21 EXCISE DUTY OR ANY OTHER TAXES/DUTIES:

The contractor shall bear full taxes /duties other than GST duties levied by state government and / or Central Government/ Local bodies from time to time. This would be entirely a matter between the contractor and the State / Central Government/ Local bodies. No claim, what so ever, on this account shall be entertained by DFCCIL.

1.22 ROAD TAX CHARGES:

Road Tax/Charges levied by Government for movement of vehicles of contractor, used in transportation, shall be borne by the contractor and no re-imburement on this account will be made by the DFCCIL.

1.23 FOREIGN EXCHANGE REQUIREMENTS:

Any demand of foreign exchange for importing of equipment's and materials shall not be accepted.

1.24 ANTI PROFITEERING CLAUSE.

The contractor should adhere to anti profiteering provisions as per section 171 of the CGST Act. Where due to change in the rates GST/Change in law, the contractor gets any credits/benefits, the same shall be passed on to DFCCIL by way of reduction in prices.

1.25 INTEGRITY PACT:-

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 proforma 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.

A copy of pre contract integrity pact is enclosed as form no. 20 for signature of bidder as acceptance, as and when Independent External monitor is appointed.

1.25.1 The Performa for Integrity Pact is placed as Form No.-05. The details of present DFCCIL's IEMs are as under:

- i) Shri. V. Kannan, Ex-CMD, Vijaya Bank,
Address: TA-1, Krishna Regency, Third Floor, Tata Silk Farm, K R Road, Basavanagudi, Bangalore – 4, Mobile No.08105305555, (email: Kannan.venkata@gmail.com)
- ii) Ms.Rashmi Verma, IAS (Retd.)
Address: D-87, Ground Floor, Panchsheel Enclave, New Delhi – 110017
Mobile No.9810735544, (email: verma.rashmi@rediffmail.com)

B. SAFETY PRECAUTIONS

1.0 MEASURES TO BE ENSURED PRIOR TO START OF WORK

- 1.1 The contractor shall not start any work without the presence of DFCCIL supervisors at site.
- 1.2 The methodology in detail for execution of the work at site shall be approved by engineering in charge of the organization executing the work and copies of the same shall be available with contractor's supervisor, DFCCIL supervisor of the section in whose jurisdiction the work falls.
- 1.3 Before permitting the execution of any OHE/PSI works, DFCCIL engineer-in-charge (APM/DPM/PM/Dy. CPM) of the section shall ensure that he received the prior intimation/confirmation of the following aspects from representative of contractor.

- 1.4 Name and address of the contract assigned to execute the work.
- (i) Name of the Contractor's supervisor
 - (ii) Name of the supervisor/assistant engineer/assistant officer of the construction organization/other organizations who are going to be site in charge/in charge of work site.
 - (iii) List of the number(s) of individual vehicle(s)/ machineries, names and license particulars of the driver(s) proposed to be used by contractor.
 - (iv) Information regarding location, duration and timings during which the vehicles/machinery are planned to be plied/worked.
 - (v) The supervisors and operators of the contractor proposed to be deployed at work site which is close to the running track, shall be imparted training by the DFCCIL trainer at contractor own cost about the safety measures to be adopted while working in the vicinity of running track. Further competency certificate to the individual supervisors/operator shall be issued as in Annexure-A by a DFCCIL officer not below the rank of Assistant level officer who is in charge of site. No supervisor/operator of the contractor shall work or allowed to work in the vicinity of running track who is not possession of valid competent certificate.
 - (vi) Survey of site by supervisor of contractor and DFCCIL to assess the precautions to be taken at site for working of trains and materials required for protection.
 - (vii) Written advice to sectional APM/DPM about the detailed planning of work including protection of track and safety measures proposed to be adopted.
 - (viii) A copy of the approved methodology (to be approved by engineer in charge) proposed to be adapted by the contractor with a view to ensure safety of trains passengers and workers.
 - (ix) Assurance that the methods and arrangements are actually available at site before start of the work and the contractors supervisors and the workers have clearly understood the safety aspects and requirement to be adapted/followed while executing the work.
 - (x) An assurance register has been kept at site duly signed by both DFCCIL supervisor as well as by the contractor supervisor as a token of their having understood the safety precautions to be observed at site.
 - (xi) No work shall which is to be done near running track shall commence unless permitted by sectional APM/DPM/PM/Dy.CPM
 - (xii) Supplementary site specific instructions, wherever considered necessary shall be issued by the Engineer in Charge
 - (xiii) Standard Check list on Safety at Work Sites shall be used to ensure that all the requisite measures have been taken before start of work.

2.0 **PLYING OF ROAD VEHICLES AND WORKING OF MACHINERIES CLOSE TO RUNNING TRACKS**

- (i) Normally, the road vehicles shall be run or machinery shall be worked so as not to come closer than 6.0m from center line of nearest running track.
- (ii) The land strip adjacent to running tracks, where road vehicle is to ply or machinery is to work, shall be demarcated by lime in advance in consultation with the DFCCIL's Supervisor. Wooden pegs at interval not exceeding 75mts shall be provided along the line marking as permanent marks. The road vehicles shall ply or machinery shall work so as not to infringe the line of demarcation.
- (iii) If a road vehicle or machinery is to work closer to 6.0m due to site conditions or requirement of work, following precautions shall be observed.
 - a. In no case the road vehicle shall run or machinery shall work at distance less than 3.5m from center line of track.
 - b. Demarcation of land shall be done by bright colored ribbon/nylon cord suspended on 120 cm high wooden/bamboo posts at distance of 3.5 m from center line of nearest running track.
 - c. Presence of an authorized DFCCIL's representative shall be ensured before plying of vehicle

- or working of machinery.
- d. DFCCIL's Supervisor shall issue suitable caution order to Drivers of approaching train about road vehicles plying or machineries working close to running tracks. The train drivers shall be advised to whistle freely to warn about the approaching train. Whistle boards shall be provided wherever considered necessary.
- e. Lookout men shall be posted along the track at a distance of 800m from such locations who will carry red flag and whistles to warn the road vehicle/machinery users about the approaching trains. Lookout man shall be deputed for Safety at Work Sites.
- f. On curves where visibility is poor, additional lookout men shall be posted.
- (iv) **If vehicle/machinery is to be worked closer to 3.5m from running track.**
Under unavoidable conditions, if road vehicles is to ply or machinery is to work closer to 3.5m due to site conditions or requirement of work, following precautions shall be observed:
- a. Plying of vehicles or working of machinery closer to 3.5m of running track shall be done only under protection of track. Traffic block shall be imposed wherever considered necessary. The site shall be protected as per provisions of Para No. 806 & 807 of P-Way Manual as case may be.
- b. Presence of a DFCCIL's Supervisor shall be ensured at worksite.
- c. DFCCIL's Supervisor shall issue suitable caution order to Drivers of approaching train about road vehicles plying or machineries working close to running tracks. The train drivers shall be advised to whistle freely to warn about the approaching train.
- (v) **Precaution to be taken while reversing road vehicle alongside the track.**
The location where vehicle will take a turn shall be demarcated duly approved by DFCCIL's representative. The road vehicle driver shall always face the DFCCIL track during the course of turning/reversing his vehicle. Presence of an authorized DFCCIL representative shall be ensured at such location.
- (vi) Road vehicle shall not be allowed to run along the track during night hours generally. In unavoidable situations, however, vehicles shall be allowed to work during night hours only in the presence of an authorized DFCCIL's representative and where adequate lighting arrangements are made and where adequate precautions as mentioned earlier have been ensured.
- (vii) Road vehicles/machinery/plant etc. when stabled near running tracks shall be properly secured against any possible roll off and always be manned even during off hours.

3.0 **EXECUTION OF WORKS CLOSE TO OR ON RUNNING LINES**

Any work close to or on running tracks shall be executed under the presence of a DFCCIL's Supervisor only.

- (i) **Precaution to be taken to ensure safety of trains while execution of work close to the running line or on running lines.**
- (a) Contractor has deputed trained supervisors in required number at worksites duly certified by APM/DPM/PM/Dy. CPM in charge of the works.
- (b) Drivers of vehicle/operators of the machines have been briefed about the safety and precautions to be taken while moving / working close to traffic.
- (c) **Contractor shall ply road vehicles/working of machinery only between sunrise and sunset. In case of emergency where it is necessary to work during night hours sufficient lighting shall be ensured in the complete work area for the safety of public and passengers. Also additional staff shall be posted as necessary for night working and taking safety precautions.**

- (d) The contractor shall not change the approved vehicle/machinery and driver/operator for working at site. Contractor shall not induct any new vehicle/machinery and driver/operator without prior written approval of APM/DPM and the list of such changes with numbers of individual vehicle, name and license particulars of the driver shall be given to APM/DPM/PM/Dy. CPM of the section.
- (e) Contractor shall ensure that road vehicle/machinery ply/work in a way so that these do not infringe the line of demonstration.
- (f) Lookout men with required safety equipment shall be posted where necessary.
- (g) In unusual circumstances, where operator apprehends danger to track while working truck/machinery near running track, following action shall be taken.
 - a) The contractor/supervisor/vehicle operator immediately advise the situation to DFCCIL official/officials of the organization executing the work and assist him/them in protecting the track.
 - b) Protection shall be done as done for other emergencies
 - (h) Individual vehicle/machinery shall not be left unattended at site of work. If it is unavoidable and becomes necessary to stable the road vehicle/machinery at site near the running track, these shall be properly secured against any possible roll off and always be manned even during non-working hours. In addition the road vehicle / machinery should be stabled parallel to track only so that incase of failure of any securing arrangement, it may not roll towards the track.
 - (i) All temporary arrangements required to be made during execution of work shall be made in such a manner that moving dimensions do not infringe. Necessary checks shall be exercised by site in charge from time to time.
 - (j) During the hours of night, lamps of temporary indicators which are not of reflective type should be lit at sun-set and kept burning till sun rise, where trains run at night.
 - (ii) **Precaution to be taken to ensure safety of electrical/signal/ telephone cables while excavating near tracks.**
 - (a) Particular care shall be taken to mark the locations of buried electrical/signal/telephone cables on the plans jointly with S & T/Electric supervisor and also at site so that these are not damaged during excavation
 - (b) Copy of the cable plan should be given to the contractor's authorized representative before handing over the site to start the work.
 - (c) Due care shall be taken to ensure that any part of the equipment or machinery or temporary arrangement does not come close to cables while working.
 - (iii) **Precaution to be taken during execution of works requiring traffic blocks.**
 - a) Any work, which infringes the moving dimensions or causes discontinuity in the track any activity making the existing track unsafe for passage of trains etc. Shall be started only after the traffic block has been imposed, DFCCIL servant in charge of the work is present at the worksite, engineering signals are exhibited at specified distance and flagmen are posted with necessary equipment to man them etc
 - b) Before closing the work, the track shall be left with the proper track geometry so that the trains run safely and flagmen are kept in the night with safety and track protection equipment to patrol the stretch and take action to protect the track, if so warranted and inform the DFCCIL supervisors.
 - c) After completion of work the released sleeper and fittings should be properly stacked away from the track to be kept clear of moving dimensions.
 - d) Block shall be removed only when all the temporary arrangement, machineries, tools, plants etc. have been kept clear of moving dimensions.

- (iv) **Precaution to be taken during execution of works during night.** The work close to running line, generally, shall be carried out only during day hours. At locations, however, where night working is unavoidable, proper lighting arrangement should be made. The engineering indicator boards shall be lighted during night hours as per the provisions of IRPWM. The staff deputed for night working should have taken adequate rest before deploying them in night shift. We can specify duration of night shift from 20.00 hrs to 04.00 hrs. All other safety precautions applicable for day time work should be strictly observed during night working.
- (v) **Precautions to be taken to ensure safety of workers while working close to running lines.**
- a) Any work close to or on running tracks shall be executed under the presence of a DFCCIL's supervisor only.
- b) Precaution to be taken to ensure safety of trains while execution of work close to the running line or on running lines.
- (i) Such works shall be planned and necessary drawings particularly with regard to infringement to moving dimensions shall be finalized duly approved by competent authority before execution of work. The work shall be executed only as per approved procedure and drawings.
- (ii) All temporary arrangements required to be made during execution of work shall be made in such a manner that moving dimension do not infringe.
- (iii) Suitable speed restriction shall be imposed or Traffic block shall be ensured as required.
- (iv) The site shall be protected as per provisions of Para No. 806 & 807 of P.Way Manual as case may be.
- (v) Necessary equipment for safety of trains during emergency shall be kept ready at site.
- c) A 'first aid kit' shall always be kept ready at site.
- (vi) **Precaution shall be taken for safety of public or passengers, while executing works at locations, used by passengers and public.,** The worksite shall be suitably demarcated to keep public and passengers away from work area. Necessary signage boards such as "Work in progress. Inconvenience is regretted" etc. shall be provided at appropriate locations to warn the public/ passengers. Adequate lighting arrangement of worksite wherever required shall be done to ensure safety of public/passengers during night.
- (vii) **Precaution to be taken before stacking materials alongside the track to ensure that safety of trains is not affected.** The following precautions shall be taken before stacking the materials along the track for stacking of ballast, rails, sleepers etc.
- a) The sites for material stacking should be selected in advance in such a manner as to ensure that no part of the material to be stacked is infringing the Standard Moving Dimensions. A plan of proposed stacking locations be made and signed jointly by an authorized DFCCIL's representative and contractor's representative.
- b) The selected locations shall be marked by lime in advance.
- c) Presence of an authorized DFCCIL's representative while unloading and stacking shall be ensured.
- d) The material shall be stacked in such a height so as to not to infringe SOD in case of accidental roll off.
- (viii) **SAFETY ASPECTS TO BE OBSERVED WHILE WORKING IN OHE AREA**
- (a) No electrical work close to running track shall be carried out without permission of DFCCIL representative.
- (b) A minimum distance of 2m has to be maintained between live OHE wire and body part of worker or tools or metallic supports etc.

- (c) No electric connection etc. can be tapped from OHE.
- (d) Authorized OHE staff should invariably be present when the relaying work or any major work is carried out.
- (e) Power block is correctly taken and 'permit to work' is issued.
- (f) The structure bonds, track bonds, cross bonds, longitudinal rail bonds are not disturbed and
- (g) If disconnected for the work, they are reconnected properly when the work is completed.
- (h) The track level is not raised beyond the permissible limit during the work.

4.0 **PROTECTION OF TRACK DURING EMERGENCY**

(i) **Action to be taken when a contractor's supervisor or vehicle operator apprehends any unusual circumstances likely to infringe the track and endanger safe running of trains.**

At any time if a contractor's supervisor or vehicle operator observes any unusual circumstances likely to infringe the track and apprehend danger to safe running of track, he shall take immediate steps to advise a DFCCIL official of such danger and assist him in protection of track.

The track shall be protected as under. One person shall immediately plant a red flag (red lamp during night) at the spot and proceed with all haste in the direction of approaching train with a red flag in hand (red lamp during night) and plant a detonator on rail at a distance of 600m from the place of obstruction of BG track after which he shall further proceed for not less than 1200m from the place of obstruction from BG track and plant three detonators at 10m apart on rails. After this he shall display the red flag (red lamp during night) at a distance of 45m from the detonators.

Attempts shall also be made to send an advice to nearest DFCCIL station about the incident immediately.

(ii) **Action to be taken if train is seen approaching to site of danger and there is no time to protect the track as per guidelines mentioned above.**

In such a case the detonators shall be planted on rails immediately at distance away from place of danger as far as possible and attention of driver of approaching train shall be invited by whistling, waving the red flag vigorously, gesticulating and shouting.

(iii) **Action to be taken if more than one track is obstructed.**

a) In case of single line protection as above shall be done in both the directions from place of danger.

b) In case of double line or multiple lines, if other tracks are also obstructed, the protection as above shall be done for other track also.

The protection shall be done in that direction and on that track first on which train is likely to arrive first.

c) The Contractor's Supervisors, Operators and lookout men shall be properly explained about the direction of trains on running tracks.

(iv) **Equipment required for protection of track.**

Minimum compliment of protection equipment i.e. 10 detonators, 4 red hand flags, 4 red hand lamps, 4 banner flags and whistles etc. shall always be kept ready at worksites for use in case of emergency. DFCCIL will arrange to provide detonators, whereas Contractor shall arrange other equipment at his own cost.

(v) **Arrangement of lookout men and competency required for lookout man to warn labour about approaching train.**

a) Contractor will provide lookout men

b) The lookout men shall be properly trained in warning to staff at worksite about approaching train.

c) Only those lookout men shall be provided at site who have been issued with a competency certificate by the DFCCIL's Supervisor.

- d) In case, it is felt necessary to provide lookout men by DFCCIL, the charges for the same as fixed by DFCCIL Administration shall be recovered from Contractor.

5.0 TRAINING TO SUPERVISORS AND OPERATORS OF CONTRACTOR

The Supervisors and Operators of the contractor proposed to be deployed at work site, which is close to the running track, shall be imparted mandatory training by the DFCCIL at site free of cost about the safety measures to be adopted while working in the vicinity of running track. Engineer-in charge of the work shall decide the scale, extent & adequacy of training. In case training is imparted at a recognized DFCCIL training institute, the charges for the same, as decided by DFCCIL, shall be recovered from contractor. A competency certificate to this effect to the individual Supervisor/ Operator shall be issued as given below by a DFCCIL Officer not below the rank of Project Manager. No Supervisor/Operator of the Contractor shall work or allowed to work in the vicinity of running track that is not in possession of valid competency certificate.

All the labour, materials, tools, plants etc. except detonators, required for ensuring safe running of trains shall be provided by Contractor at his own cost. Wherever lookout men are provided by DFCCIL, charges at the rate of Rs. 500/- per man day shall be recovered from Contractor.

6.0 SPECIAL CONDITIONS FOR WORKING OF ROAD CRANES

To ensure safe working of road cranes used in works in connection with provision of ROB/RUB/Subways, following items shall invariable be ensured before putting the cranes to use:-

- (i) No machine shall be selected to do any lifting on a specific job until its size and characteristics are considered against the weights, dimensions and lift radii of the heaviest and largest loads.
- (ii) The contractor shall ensure that a valid Certificate of Fitness is available before use of Road Cranes.
- (iii) Contractors should utilize the services of any competent person as defined in Factories Act, 1948 and approved by Chief Inspector of Factories.
- (iv) The laminated photocopies of fitness certificate issued by competent persons, the operators' photo, manufacturer's load chart and competency certificate shall always be either kept in the operator cabin or pasted on the visible surface of the lifting appliances.
- (v) All lifting appliances including all parts and gears thereof, whether fixed or movable shall be thoroughly tested and examined by a competent person once at least in every six months or after it has undergone any alterations or repairs liable to affect its strength or stability.

- 7.0 Contractor shall indemnify DFCCIL against any loss/damage to public property, travelling public, DFCCIL or his own staff due to his (contractor's) negligence. In case there is any mishap, a fact finding inquiry will be conducted by DFCCIL. A show cause notice will be issued to the contractor, in case he is prima-facie held responsible. Contractor's reply to show cause notice will be considered by the Engineer in Charge before taking final decision. In case contractor is found responsible for the mishap, recovery from him will be affected for only tangible direct losses.

Annexure-A

Competency Certificate

Certified that Shri _____ Supervisor/Operator of M/s. _____ has been trained and examined in safety measures to be followed while working in the vicinity of running DFCCIL track for the work _____.

His knowledge has been found satisfactory and he is capable of supervising the work safely.

This certificate is valid only for the work mentioned in this certificate only.

Signature and designation of the officer

C. GENERAL WORK PROCEDURE

1. Maintenance work to be carried out as per DFCCIL OHE manuals.

2.0 Further Drawing and Instructions:

- (i) Chief General Manager, DFCCIL shall have full power to make and issue further drawings or instructions or direction from time to time as may appear necessary and proper to the contractor for efficient construction, completion and maintenance of the works. The contractor shall be bound by the same as fully as be if they had been mentioned or referred to in the contract, and the contractor shall not be entitled to any extra payment in respect of any work or materials shown or directed to be done supplied by such further drawings or instructions required for completion of unless the Chief General Manager, DFCCIL have given an extra order for the same in writing. The contractor shall be responsible for close scrutiny of the drawings.
- (ii) If the works are required to be done in DFCCIL Yards and Tracks are to be crossed, the tenderer shall inspect the site and make himself thoroughly acquainted with site condition and quote rate considering these aspects.
- (iii) The work shall have to be done in such a manner that the normal working of the Railway within the railway yard does not get disturbed. No material/temporary structures should be kept adjacent to the running track which may infringe rail traffic. The contractor shall take necessary precaution to prevent/cause damage to the DFCCIL/Railway property & staff during the execution of the work.
- (iv) All the work to be executed as per approved drawings and no any extra payment shall be considered for protection etc. except Engineer's prior written instructions for the same approved by Chief General Manager, DFCCIL

2.9 Commencement of the construction work at site:

The contractor shall commence the construction work when and as soon as, but not until, he receives instructions from Engineer to do so. On such order being given, possession of site/authority shall be given to the contractor of such portion or portions of the site as the Engineer may determine.

2.10 Contractor to Study Drawing & Specification etc. and His Liability:

The contractor shall be responsible for close scrutiny of the approved drawings supplied by the DFCCIL, For any discrepancies, error or omission in the drawings or other particulars indicated therein, the contractor shall approach the DFCCIL immediately for rectification of indicated therein, the contractor shall approach the DFCCIL immediately for rectification of such discrepancies, errors and omission. If any dimension/figure/features etc. on approved drawings or plans differ from those drawings or plans issued to the contractors at the time of calling the tender, the dimensions as figured upon the approved drawings or plans shall be taken as correct.

2.11 Contractor to Submit his Time Table:

The contractor shall submit a monthly progress of work done during the month by the 4th day of the following month. He will also give the programme of coming month by 25th of each month. The programme will be subject to alteration at the discretion of the DFCCIL officials.

2.12 Any Doubted Points to be referred to the Chief General Manager, DFCCIL: Should there be any doubt or obscurity as to anything to be done or not to be done by the contractor or as

to these instructions or as to any matter or thing, the contractor must set forth such doubt or obscurity in writing and submit the same to Chief General Manager DFCCIL. Only such reply as the said Chief General Manager, DFCCIL may be in writing given shall be taken as the authoritative interpretation of the point in doubt or obscurity.

2.13 Contractor's Liability:

Any fitting, accessory or apparatus which may not have been mentioned in this specification or the drawings, but which are usual or necessary in the execution of such work, are to be provided by the Contractor without extra payment. The whole work must be completed in all details, whether mentioned in this specification or not, with the exception of such work as has been specified in the schedule of items to be separately provided for in the Contract.

Notwithstanding the specifications and conditions stated in the contract, the contractor shall keep the Engineer/ Employer authority fully indemnified and free from all liabilities and risks consequential to any lapse on his part in respect of material quality, standard of workmanship, accuracy of fabrication and the like. He shall provide all labour and material required for execution of the work as per all standards and specifications.

2.14 DFCCIL desires that successful contractor should establish (at his own cost) the fabrication workshop near the site only for close monitoring of all the quality aspects of this contract work. Contractor's request for establishing workshop/using workshop proposed/located away from the bridge site shall require prior approval.

2.15 Contractor shall establish fully equipped laboratory for all the tests required on materials/processes/products as per provisions of the contract, Specifications and the direction/approval of the Engineer. Costs of these are deemed to be included in the quoted rates. Prior approval of the engineer shall be obtained for non-installation of such testing equipments which cannot be installed in normal course due to any reason. However, engineer's decision (for installation and non-installation) in this regard shall be final binding and conclusive.

2.16 Site Facilities by the Contractor:

Contractor shall provide office / site facilities at the approach site / other locations for ensuring smooth and efficient communication and work execution. Cost of these facilities deemed to be included in the quoted rates and nothing extra shall be paid for this item.

Contractor shall (at his own cost) depute / nominate safety officers(s) for supervising safety aspects of all works/process including enabling arrangements for execution and inspection of the work. Safety systems/arrangements should be made for each activity of fabrication/erection and its inspection and same should be certified by nominated safety officer.

TECHNICAL CONDITIONS OF CONTRACT

1.0 INTRODUCTION

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

CGM /Jaipur unit have jurisdiction from New Rewari to Madar and connection line with IR.

2.0 Definitions

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" shall mean the President of the Republic of India or the Administrative Officers of the Railway/DFCCIL or of the successor Railway 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 (New Rewari – Madar) 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 in corporate 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, Form of Bid, 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 General Manager Coordination of DFCCIL/ Jaipur (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 General Manager Coordination/Jaipur 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 GENERALMANAGER COORDINATION /Jaipur / DFCCIL regarding the interpretation shall be final and binding.

3.0 GENERAL DESCRIPTION OF SITE AREA & CLIMATIC CONDITIONS

- 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 & order conditions.

4.0 **SCOPE OF WORK** -

4.1 The scope of work includes “Maintenance of 2x25kV Power Supply Installation in New Rewari- Madar section of DFCCIL including the Phulera UP & DN link lines, Kishangarh Balawas, Kathuwas connection to Indian Railways for a period of 24 (Twenty Four) months under CGM Jaipur Unit.”.

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 PSI Equipment between of New Rewari - Madar section.
 - b) 05 nos. TSSs at Ateli (02 nos. traction transformer), Maonda (01 no. traction transformer), Ringus (02 no. traction transformer), Phulera (01 no. traction transformer) and Kishangarh (02 nos. traction transformer) in which transformers in Scott connection each of 60(ONAN)/84(ONAF)/100 (OFAF) MVA , 132kV/55kV at Ateli and remaining of 220kV/55kV,Auto Transformers (12.3 MVA) 4 nos. at each TSS along with requisite Circuit Breakers, Isolators, C&R Panel, C.T., P.T., auxiliary transformers and all other associated accessories inside TSS.
 - c) 05 SP, each having 4 nos. auto transformers of capacity 8.0 MVA ONAN along with associated circuit breaker, switchgear control & relay panel etc. including control room.
 - d) (i) 09 nos. SSP and 1 ATS each having 2 nos. auto transformers of capacity 8MVA ONAN along with associated circuit breaker, switchgear control & relay panel etc.
(ii) 15 nos. SSP type B and B2 modified without auto transformers along with associated circuit breaker, switchgear control & relay panel etc. and 4 nos. of Paralleling post in the section
 - e) To maintain these, DFCCIL has established 02 no. IMD (Integrated Maintenance Depot) at New Rewari and New SMPR, 06 nos. IMSD (Integrated maintenance sub depot) at New Ateli, New Dabla New Bhagega, New PMCK, New Sakhun and New Kishangarh. The tools and plants maintained by the DFCCIL 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 generally provided by the DFCCIL. The material required for the maintenance shall be issued by authorized representative of CGMJP available at IMD/IMSD. Rest all other required tools and plants for maintenance shall be arranged by contractor.

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. Immediate attention for any breakdown in the 2x25 kV A.C. Traction PSI Equipment and quick restoration.

iii. Details of Equipments at TSS is under:

S.N.	Equipment Name	TSS					Total
		Ateli	Maonda	Ringus	Phulera	Kishangarh	
1	Scott Transformer 60/84/100 MVA	2	1	2	1	2	8
2	132/220kV TP SF-6 Circuit Breaker	2	1	2	1	2	8
3	132/220kV Current Transformer Protection	6	3	6	3	6	24
4	132/220kV Current Transformer (Metering)	12	12	12	12	12	60
5	132/220kV Current Transformer (Metering)	12	12	12	12	12	60
6	20/198 kV Lightning Arrester	12	9	12	9	12	54
7	132/220kV TP Motorised Isolator with or without Earth Heel	2	2	2	2	2	23
		3	2	3	2	3	
8	55 kV Current Transformer	8	4	8	4	8	72
		8	8	8	8	8	
	PFC Bay	8	8	8	8	8	40
9	55/72.2 kV DP SF-6 Circuit Breaker	8	6	8	6	8	46
	PFC Bay	2	2	2	2	2	
10	55 /72.5 kV DP Motorised Isolator	12	10	12	10	12	86
	PFC Bay	6	6	6	6	6	
11	60 kV Lightning Arrester	8	4	8	4	8	92
	42 kV Lightning Arrester	8	8	8	8	8	
	PFC Bay	4	4	4	4	4	
12	55kV/27.5 kV, 12.3 MVA Auto Transformer	4	4	4	4	4	20
13	25 kV Potential Transformer Protection PT	4	4	4	4	4	20
14	25 kV Current Transformer	8	8	8	8	8	40
15	25 kV DP Circuit Breaker at ATS	4	4	4	4	4	20
16	25 kV DP Motorised Isolator without earthing heel	8	8	8	8	8	40
17	25 kV DP Interrupter	2	2	2	2	2	10

18	25kV/240V, 100 kVA LT Auxiliary	2	2	2	2	2	10
19	55kV/0.65 kV, 3 MVA Transformer	2	2	2	2	2	10
20	2500 KVAR CAPACITOR BANK INCLUDING SERIES REACTOR	2	2	2	2	2	10
21	25 kV Neutral Current Transformer	2	2	2	2	2	10
22	battery & battery charger maintenance of TSS	1	1	1	1	1	5
23	Buried Rail Connection	1	1	1	1	1	5

iv. Equipment Details at SP, SSP, ATS and PPs is as under:

S.N.	Equipment Name	5 SPs	20 SSPs and ATS	4 PPS	Total
1	8 MVA Auto Transformer	20	20	0	80
2	25 kV DP Interrupter	10	107	4	238
3	25 kV DP Isolator (Manual)	60	248	8	624
4	25 kV SP Isolator (Manual)	0	4	0	8
5	25 kV Potential Transformer (Type-I)	0	49	0	98
6	25 kV Potential Transformer (Type-II)	20	0	0	40
7	42 kV Lightning Arrester	40	293	16	682
8	25kV/240V, 10kVA LT Auxiliary Transformer	10	50	8	128
9	25 kV SP Interrupter	0	13	0	26
10	25 kV CT for Auto Transformer	40	40	0	160

v. **Explanatory notes on the schedule items.**

Explanatory notes are given below for all items given in the 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 if any as applicable and GST shall be extra
d)	Generally, All HIGH-RISE PSI components are to be supplied by the DFCCIL.
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 CGMJP, 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 HIGH RISE PSI equipments including AOH & POH as case may be shall be carried out in line with maintenance manual and as per Latest SMIs if any during contract period OR as per the Procedure in vogue in TRD organization of respective sections. No additional payment will be made for any additional man power employment in attending to latest maintenance instructions if any. In-case of disputes between above standards if any, the decision of concerned CGMJP 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. No additional payment will be made for night working.
k)	<i>The D-form against sales tax will not be issued. Service Tax/GST if claimed by the contractor will be processed separately after finance concurrence and sanctioned by the competent authority. Claim of service tax/GST should be supported by deposit receipt from service tax/GST department, without documentary proof the claim shall not been entertained by the DFCCIL Authority.</i>

**PARTICULARS OF SCHEDULE OF ITEMS
& EXPLANATORY NOTES**

4.2 Explanatory Notes: Explanatory notes for the various schedule items are depicted for guidance purpose only. Contractor has to abide any change in scope of maintenance activity as per guidelines/Special maintenance instructions issued by DFCCIL/RDSO from time to time and to be carried out as per the instructions of DFCCIL In-charge. In case of any dispute regarding the scope of maintenance activity as detailed in the Explanatory Notes, the decision of DFCCIL's Engineer-in-Charge of work shall be final and binding on the Contractor

Schedule 1 Maintenance of Traction Sub Stations

Item no. 01- Monthly Maintenance of 132/ 220 kV/55kV, 60/84/100 MVA Traction Power Transformer.

The job shall cover checking & Monthly maintenance of 132/ 220 kV/55kV, 60/84/100 MVA Traction Power Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 02-Half Yearly Maintenance of 132/ 220 kV/55kV, 60/84/100 MVA Traction Power Transformer.

The job shall cover checking & Half Yearly maintenance of 132/ 220 kV/55kV, 60/84/100 MVA Traction Power Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 03 -Yearly Maintenance of 132/ 220 kV/55kV, 60/84/100 MVA Traction Power Transformer

The job shall cover checking & Yearly maintenance of 132/ 220 kV/55kV, 60/84/100 MVA Traction Power Transformer as per maintenance schedule given in Annexure-Z this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 04 - Monthly Maintenance of 132/220kV TP SF-6 Circuit Breaker.

The job shall cover checking & Monthly maintenance of 132/220kV TP SF-6 Circuit Breaker.as per maintenance schedule given in Annexure Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 05 - Half Yearly Maintenance of 132/220kV TP SF-6 Circuit Breaker

The job shall cover checking & Half Yearly maintenance of 132/220kV TP SF-6 Circuit Breaker.as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 06 - Yearly Maintenance of 132 kV/220kV TP SF-6 Circuit Breaker

The job shall cover checking & Yearly maintenance of 132/220kV TP SF-6 Circuit Breaker.as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 07 – Three Yearly Maintenance of 132 kV/220kV TP SF-6 Circuit Breaker

The job shall cover checking & Three Yearly maintenance of 132/220kV TP SF-6 Circuit Breaker.as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 08 - Monthly Maintenance of 132/220kV Current Transformer (Protection)

The job shall cover checking & Monthly maintenance of 132/220kV Current Transformer (Protection) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 09 - Half Yearly Maintenance of 132/220kV Current Transformer (Protection).

The job shall cover checking & Half Yearly maintenance of 132/220kV Current Transformer (Protection) as per maintenance schedule given in Annexure –Z of this tender document. The work Involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 10 - Yearly Maintenance of 132/220kV Current Transformer (Protection)

The job shall cover checking & Yearly maintenance of 132/220kV Current Transformer (Protection) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 11 - Three Yearly Maintenance of 132/220kV Current Transformer (Protection)

The job shall cover checking & Three Yearly maintenance of 132/220kV Current Transformer (Protection).as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 12 - Monthly Maintenance of 132/220kV Current Transformer (Metering)

The job shall cover checking & Monthly maintenance of 132/220kV Current Transformer (Metering) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 13 - Half Yearly Maintenance of 132/220kV Current Transformer (Metering)

The job shall cover checking &Half Yearly maintenance of 132/220kV Current Transformer (Metering) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 14 - Yearly Maintenance of 132/220kV Current Transformer (Metering)

The job shall cover checking & Yearly maintenance of 132/220kV Current Transformer (Metering).as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 15 – Three Yearly Maintenance of 132/220kV Current Transformer (Metering)

The job shall cover checking & Three Yearly maintenance of 132/220kV Current Transformer (Metering).as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 16 - Half Yearly Maintenance of 132/220kV Potential Transformer (Metering PT)

The job shall cover checking & Quarterly maintenance of 132/220kV Potential Transformer (Metering PT) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 17 - Yearly Maintenance of 132/220kV Potential Transformer (Metering PT)

The job shall cover checking & Yearly maintenance of 132/220kV Potential Transformer (Metering PT) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 18 - Monthly Maintenance of 120/198 kV Lightning Arrester

The job shall cover checking & Monthly maintenance of 120/198 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 19 - Quarterly Maintenance of 120/198 kV Lightning Arrester

The job shall cover checking & Quarterly maintenance of 120/198 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 20 - Half Yearly Maintenance of 120/198 kV Lightning Arrester

The job shall cover checking & Half Yearly maintenance of 120/198 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any.

Item no. 21 - Yearly Maintenance of 120/198 kV Lightning Arrester

The job shall cover checking & Yearly maintenance of 120/198 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 22- Monthly Maintenance of 132/220kV TP Motorized Isolator with or without earthing heel.

The job shall cover checking & Monthly maintenance of 132/220kV TP Motorized Isolator with or without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 23 - Half Yearly Maintenance of 132/220kV TP Motorized Isolator with or without earthing heel.

The job shall cover checking & Half Yearly maintenance of 132/220kV TP Motorized Isolator with or without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 24 - Yearly Maintenance of 132/220kV TP Motorized Isolator with or without earthing heel

The job shall cover checking & Yearly maintenance of 132/220kV TP Motorized Isolator with or without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 25 - Monthly Maintenance of 55 kV Current Transformer

The job shall cover checking & Monthly maintenance of 55 kV Current Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 26 - Half Yearly Maintenance of 55 kV Current Transformer

The job shall cover checking & Half Yearly maintenance of 55 kV Current Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 27 - Yearly Maintenance of 55 kV Current Transformer

The job shall cover checking & Yearly maintenance of 55 kV Current Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 28 – Three Yearly Maintenance of 55 kV Current Transformer

The job shall cover checking & Three Yearly maintenance of 55 kV Current Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 29 - Monthly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker

The job shall cover checking & Monthly maintenance of 55/72.2kV DP SF-6 Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 30 - Half Yearly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker

The job shall cover checking & Half Yearly maintenance of 55/72.2kV DP SF-6 Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 31 - Yearly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker

The job shall cover checking & Yearly maintenance of 55/72.2kV DP SF-6 Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 32 - Three Yearly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker

The job shall cover checking & Three Yearly maintenance of 55/72.2kV DP SF-6 Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 33 - Monthly Maintenance of 55 /72.5 kV DP Motorized Isolator without earthing heel

The job shall cover checking & Monthly Maintenance of 55 /72.5 kV DP Motorized Isolator without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 34 - Half Yearly Maintenance of 55/72.5 kV DP Motorized Isolator without earthing heel

The job shall cover checking & half yearly Maintenance of 55 /72.5 kV DP Motorized Isolator without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 35 - Yearly Maintenance of 55/72.5 kV DP Motorised Isolator without earthing heel

The job shall cover checking & Yearly Maintenance of 55 /72.5 kV DP Motorized Isolator without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 36 - Monthly Maintenance of 42/ 60 kV Lightning Arrester.

The job shall cover checking & Monthly Maintenance of 42/ 60 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 37 - Quarterly Maintenance of 42/ 60 kV Lightning Arrester.

The job shall cover checking & Quarterly Maintenance of 42/ 60 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 38- Half Yearly Maintenance of 42/60 kV Lightning Arrester.

The job shall cover checking & Half Yearly Maintenance of 42/ 60 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and

Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 39- Yearly Maintenance of 42/60 kV Lightning Arrester.

The job shall cover checking & Yearly Maintenance of 42/ 60 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no.40-Monthly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformers.

The job shall cover checking & Monthly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformers as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 41 - Half Yearly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformer

The job shall cover checking & Half Yearly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformers as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 42- Yearly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformer

The job shall cover checking & Yearly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformers as per maintenance schedule given in Annexure –Z of this tender document. The work involves Checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 43- Quarterly Maintenance of 25 kV Potential Transformer Protection PT

The job shall cover checking & Quarterly Maintenance of 25 kV Potential Transformer Protection PT as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL

and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 44 - Half Yearly Maintenance of 25 kV Potential Transformer Protection PT

The job shall cover checking & Half Yearly Maintenance of 25 kV Potential Transformer Protection PT as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 45 - Yearly Maintenance of 25 kV Potential Transformer Protection PT

The job shall cover checking & Yearly Maintenance of 25 kV Potential Transformer Protection PT as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 46 - Monthly Maintenance of 25 kV Current Transformer at Auto Transformer

The job shall cover checking & Monthly Maintenance of 25 kV Current Transformer at Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 47 - Half Yearly Maintenance of 25 kV Current Transformer

The job shall cover checking & Half Yearly Maintenance of 25 kV Current Transformer at Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 48 - Yearly Maintenance of 25 kV Current Transformer.

The job shall cover checking & Yearly Maintenance of 25 kV Current Transformer at Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of

DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 49 – Three Yearly Maintenance of 25 kV Current Transformer.

The job shall cover checking & Three Yearly Maintenance of 25 kV Current Transformer at Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 50 - Monthly Maintenance of 25 kV DP Circuit Breaker.

The job shall cover checking & Monthly Maintenance of 25 kV DP Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 51 - Half Yearly Maintenance of 25 kV DP Circuit Breaker.

The job shall cover checking & Half Yearly Maintenance of 25 kV DP Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 52 - Yearly Maintenance of 25 kV DP Circuit Breaker.

The job shall cover checking & Yearly Maintenance of 25 kV DP Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 53 - Monthly Maintenance of 25 kV DP Motorized Isolator without earthing heel.

The job shall cover checking & Monthly Maintenance of 25 kV DP Motorized Isolator without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of

DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 54 - Half Yearly Maintenance of 25 kV DP Motorized Isolator without earthing heel

The job shall cover checking & Half Yearly Maintenance of 25 kV DP Motorized Isolator without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 55 - Yearly Maintenance of 25 kV DP Motorized Isolator without earthing heel

The job shall cover checking & Yearly Maintenance of 25 kV DP Motorized Isolator without earthing heel as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 56 - Monthly Maintenance of 25 kV DP Interrupter.

The job shall cover checking & Monthly Maintenance of 25 kV DP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 57 - Half Yearly Maintenance of 25 kV DP Interrupter.

The job shall cover checking & Half Yearly Maintenance of 25 kV DP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 58 - Yearly Maintenance of 25 kV DP Interrupter.

The job shall cover checking & Yearly Maintenance of 25 kV DP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and

Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 59 -Quarterly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer-

The job shall cover checking & Quarterly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 60- Half Yearly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer

The job shall cover checking & Half Yearly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 61 - Yearly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer

The job shall cover checking & Yearly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL

Item no. 62 - Monthly Maintenance of 55kV/0.65 kV, 3 MVA Transformers of capacitor bank.

The job shall cover checking & Monthly Maintenance of 55kV/0.65 kV, 3 MVA Transformers of capacitor bank as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 63 - Half Yearly Maintenance of 55kV/0.65 kV, 3 MVA Transformers of capacitor bank.

The job shall cover checking & Half Yearly Maintenance of 55kV/0.65 kV, 3 MVA Transformers of capacitor bank as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved

drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 64 - Yearly Maintenance of 55kV/0.65 kV, 3 MVA Transformers of capacitor bank.

The job shall cover checking & Yearly Maintenance of 55kV/0.65 kV, 3 MVA Transformers of capacitor bank as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 65- Quarterly maintenance of 2500 KVAR CAPACITOR BANK INCLUDING SERIES REACTOR

The job shall cover checking & quarterly maintenance of 2500 KVAR Capacitor Bank including Series Reactor in line with RDSO SMI No. TI/MI/0026(07/03) or latest, DFCCIL Maintenance instructions if any. The price shall include outdoor fixed capacitor bank as well as variable units installed indoor with its accessories i.e. cooling fan, ducts etc. Each unit of payment shall constitute one 2500KVAR outdoor capacitor bank, series reactor and indoor 2500KVAR variable units. The indoor unit shall include Air Circuit breaker, cooling fans, control panel for fans, ducting etc. The maintenance of Capacitor bank shall be in line with RDSO SMI No. TI/MI/0026(07/03) or latest, OEM guidelines, DFCCIL Maintenance instructions if any.

- 1.Clean the dust over the insulators with the help of a damp cloth. In case of oily deposits carbon tetrachloride or any other suitable solvent may be used for cleaning of the insulators.
- 2.Observe for any dielectric leakage/seepage, if any leakage/seepage is found, rectify it.
- 3.Observe for any birdcages in and around the traction substations.
- 4.Observe physically for any abnormal temperature rise of the capacitor units.
- 5.Check and & set right the anti-bird nest.
- 6.Check duplicate earth connection& tightened.
- 7.Check the bus bar /jumper terminal connection tightness.
- 8.Refer the OEM manual and carry out necessary maintenance and testing as prescribed.

The quarterly maintenance of reactor shall be carried out in accordance of OEM manual and DFCCIL guidelines. Following schedule should be complied:-

1. Cleaning of all post insulators by dry cloth. Check for any deposit of dust, dirt, oily deposit on reactor and clean by cloth.
2. Checking tightness of all fasteners, bus bar clamps and terminals.
3. Visual examination of series reactor for any deformation, cracks, heating mark or any other abnormalities.
4. Check for any abnormal sound.
5. Measure IR value of series reactor after disconnecting from capacitor bank.
6. Refer the OEM manual and carry out necessary testing as prescribed.

Maintenance of Indoor unit: Open the indoor units after shutdown and carry out general cleaning with dust blowing, Spraying insecticides under DFCCIL supervision. Check functioning of cooling fans and measure currents. Attend ducting for any leakage/ damage etc. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's

qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 66 - Half yearly maintenance of 2500 KVAR CAPACITOR BANK INCLUDING SERIES REACTOR

The job shall cover checking & Half Yearly maintenance of 2500 KVAR Capacitor Bank including Series Reactor in line with RDSO SMI No. TI/MI/0026(07/03) or latest, DFCCIL Maintenance instructions if any. The price shall include outdoor fixed capacitor bank as well as variable units installed indoor with its accessories i.e. cooling fan, ducts etc. Each unit of payment shall constitute one 2500KVAR outdoor capacitor bank, series reactor and indoor 2500KVAR variable units. The indoor unit shall include, Air Circuit breaker, cooling fans, control panel for fans, ducting etc. During Half Yearly maintenance, the following checks also to be done along with the checks mentioned item no. 65 above):

For capacitor bank & Series reactor.

1. Check the excessive tension on any of the connectors. Ease out the tension on the bushings, if required.
2. Observe for any rust collection/corrosion marks on the metallic parts and clean them.
3. Observe the current and voltage variations for the capacitor bank for at least 24 hours (Hourly readings of voltage and current for the capacitor bank should be recorded. If continuous recording facility is available, the same may be used).
4. Compare the records of measurements with last recorded readings. Measurements with Digital meters shall be ideal. Examine and execute the changes for the past few years.
5. Measured combined capacitance value of capacitor bank & record.
6. Measure the inductance of series reactor and record.
7. Open all connectors and clean by emery paper/ contact cleaner and refix. Replace any corroded, over heated or pitted item.
8. Open the indoor units after shutdown and carry out general cleaning with dust blowing, spraying insecticides under DFCCIL supervision.
9. Check the connections for tightness and replace any defective parts as per DFCCIL direction.

The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 67 - Yearly maintenance of 2500 KVAR CAPACITOR BANK INCLUDING SERIES REACTOR

The job shall cover checking & Yearly maintenance of 2500 KVAR Capacitor Bank including Series Reactor in line with RDSO SMI No. TI/MI/0026(07/03) or latest, DFCCIL Maintenance instructions if any. During Yearly maintenance, the following checks also to be done along with the checks mentioned in Item No. 65 & 66 above.

For capacitor bank & Series reactor:

1. Ensure proper tightening of the fasteners and the connectors.
2. Measure the capacitance value and tan delta of the capacitor units at nearly the same temperature. Compare with last measured values.
3. Measure the IR value & capacitance value of each capacitor unit & combined value of IR & Capacitance value.
4. Check and recorded the spill voltage.
5. Paint the reactor/ Cap. units as per direction of DFCCIL.

The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 68 - Quarterly Maintenance of 25 kV Neutral Current Transformer.

The job shall cover checking & Quarterly Maintenance of 25 kV Neutral Current Transformer shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL with its latest correction slips, if any.

1. Clean externally the tank and bushing with dry cloth.
2. Check explosion vent diaphragm for any damage and presence of oil.
3. Check for any oil leakages at all joints, valves, plugs etc., rectify the leakage parts if found and restore the oil level.
4. Check all bonding & earthing connection.
5. Check and record oil level in bushes
6. Check terminal connectors.

The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 69 - Yearly Maintenance of 25 kV Neutral Current Transformer

The job shall cover checking & Yearly Maintenance of 25 kV Neutral Current Transformer shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL with its latest correction slips, if any.

1. Clean externally the tank bushing with dry cloth.
2. Check explosion vent diaphragm for any damage and presence of oil.
3. Check for any oil leakage. 4. Check all bonding & earth connection.
5. Record IR values with 2.5 kV megger.
6. Check and record oil level in the bush.
7. Check terminal connectors.

The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 70 - Fortnightly battery & battery charger maintenance of TSS.

The job shall cover checking & Fortnightly Maintenance of battery & battery charger of TSS as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any.

The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 71 - Yearly battery & battery charger maintenance of TSS

The job shall cover checking & Yearly Maintenance of battery & battery charger of TSS as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and

Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 72 - Half Yearly maintenance of Earthing station

The job shall cover checking Half Yearly maintenance of Earthing station as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 73 - Yearly maintenance of Earthing station

The job shall cover checking Yearly maintenance of Earthing station as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 74 – Yearly Maintenance of Buried Rail Connection

The price shall cover Yearly maintenance of Buried rail, connection with 400 sq. mm XLPE cable

1. Check all bonding & earth connection duly excavate.
2. Intactness of welding & Bonding Bolt needs to be ensured.
3. Painting of bond and welded joints.
4. If corroded, same shall be replaced or attended. (As per Schedule 03 item no. 16/17)
5. If earth value is below the prescribed value the same to be improved.

Item no. 75 - Half Yearly Maintenance of Thermal Imaging of Equipment connector.

The job shall cover Thermal Imaging of Equipment connectors as per directives of DFCCIL/RDSO /OEM In instructions if any.

1. Thermal Imaging of Equipment connectors shall be done during loaded condition.
2. The Images shall be stored in Heat format. Necessary backup shall be made available in Depot systems for verifying on later date.
3. Thermal Imaging devices will be supplied by DFCCIL.
4. Defects noticed during the check shall be escalated to depot in charge and as well as to DFCCIL officers and steps to be taken to attend the same at the earliest.

Item no. 76 - Yearly Maintenance of Earth Screen Conductor

The job shall cover checking & Yearly maintenance of Earth Screen Conductor

1. Tightness checking of earth flat and its accessories.
2. Visual checking of corrosion & strands cut if any.
3. Painting of earth flat and its accessories.

Item no. 77 - Yearly maintenance of Cable Trench Cleaning

The job shall cover checking & Yearly maintenance of Cable Trench Cleaning

1. Cleaning of cable trenches for any dust/ dirt/ webs.

2. Cleaning of all cables by cloth
 3. Attend the dressing of cable as required.
 4. Closing of all the entries by POP/ any sealant as given by DFCCIL.
 5. Checking of all entries and exit of cable in trenches and GI pipes for any sharp bend and ease out the same. Close all the entries by POP/ any sealant.
 6. Painting of trench cover frame by Red- Oxide and black bituminous paint.
 7. Repairing of minor damage of cable trench and its cover.
 8. Sprinkling of DDT/Gamaxene or any other insecticide in the trenches after cleaning.
- DFCCIL may ask to carry out above schedule on half yearly basis as per site conditions.

Item no. 78 - Reclamation of DCP (5kG, 10 kG&25 kG), CO2 (9kG) & foam type fire extinguisher.

The job shall cover Servicing & maintenance of,

- 1) Dry-chemical powder (DCP) type: 5, 10 Kg & 25Kgs.
- 2) CO2: 9 Kg.
- 3) Foam type Fire Extinguisher

Servicing of Fire extinguisher will be done once in quarter and replacement of dry chemical powder will be done once in 2 years. All accessories required for replacement to be arranged by the contractor. Details of servicing/replacement are to be stenciled on fire extinguisher.

Item no. 79 - Refilling of DCP (5kG, 10 kG & 25 kG), CO2 (9kG) & foam type fire extinguisher.

The job shall cover refilling of,

- 1) Dry-chemical powder (DCP) type: 5, 10 Kg & 25Kgs.
- 2) CO2: 9 Kg.
- 3) Foam type.

Details of refilling are to be stenciled on fire extinguisher.

Note: As the Contractor's each gang of staff is head quartered at respective TSS, the TSS yard shall be maintained vegetation free for which no additional payments are admissible.

Schedule 2 SP/SSPs/ATS/PP Maintenance:

Item no.1 - Monthly Maintenance of 8 MVA Auto Transformer.

The job shall cover checking & Monthly Maintenance of 8 MVA Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 2 - Half Yearly Maintenance of 8 MVA Auto Transformers

The job shall cover checking & Half Yearly Maintenance of 8 MVA Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 3 - Yearly Maintenance of 8 MVA Auto Transformers.

The job shall cover checking & Yearly Maintenance of 8 MVA Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 4 - Monthly Maintenance of 25 KV Current Transformer at Auto Transformer.

The job shall cover checking & Monthly Maintenance of 25 KV Current Transformer at Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 5 - Half Yearly Maintenance of 25 kV Current Transformer at Auto Transformer.

The job shall cover checking & Half Yearly Maintenance of 25 KV Current Transformer at Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 6 -Yearly Maintenance of 25 kV Current Transformer at Auto Transformer.

The job shall cover checking & Yearly Maintenance of 25 KV Current Transformer at Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any.

Item no. 7 -Three Yearly Maintenance of 25 kV Current Transformer at Auto Transformer.

The job shall cover checking & Three Yearly Maintenance of 25 KV Current Transformer at Auto Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any.

The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 8 - Monthly Maintenance of 25 kV DP Circuit Breaker.

The job shall cover checking & Monthly Maintenance of 25 kV DP Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 9 - Half Yearly Maintenance of 25 kV DP Circuit Breaker.

The job shall cover checking & Half Yearly Maintenance of 25 kV DP Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 10 - Yearly Maintenance of 25 kV DP Circuit Breaker.

The job shall cover checking & Yearly Maintenance of 25 kV DP Circuit Breaker as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 11 - Monthly Maintenance of 25 kV DP Interrupter.

The job shall cover checking & Monthly Maintenance of 25 kV DP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 12 – Half Yearly Maintenance of 25 kV DP Interrupter. The job shall cover checking & Half Yearly Maintenance of 25 kV DP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 13 - Yearly Maintenance of 25 kV DP Interrupter. The job shall cover checking & Yearly Maintenance of 25 kV DP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 14 - Monthly Maintenance of 25 kV DP Isolator (Manual).

The job shall cover checking & Monthly Maintenance of 25 kV DP Isolator (Manual) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 15 - Half Yearly Maintenance of 25 kV DP Isolator (Manual)

The job shall cover checking & Half Yearly Maintenance of 25 kV DP Isolator (Manual) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 16 - Yearly Maintenance of 25 kV DP Isolator (Manual).

The job shall cover checking & Yearly Maintenance of 25 kV DP Isolator (Manual) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 17 - Monthly Maintenance of 25 kV SP Isolator (Manual).

The job shall cover checking & Monthly Maintenance of 25 kV SP Isolator (Manual) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 18- Half Yearly Maintenance of 25 kV SP Isolator (Manual).

The job shall cover checking & Half Yearly Maintenance of 25 kV SP Isolator (Manual) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 19 -Yearly Maintenance of 25 kV SP Isolator (Manual).

The job shall cover checking & Yearly Maintenance of 25 kV SP Isolator (Manual) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 20 -Quarterly Maintenance of 25 kV Potential Transformer (Type-I)

The job shall cover checking & Quarterly Maintenance of 25 kV Potential Transformer (Type-I) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 21 -Half Yearly Maintenance of 25 kV Potential Transformer (Type-I)

The job shall cover checking & Half Yearly Maintenance of 25 kV Potential Transformer (Type-I) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 22 -Yearly Maintenance of 25 kV Potential Transformer (Type-I).

The job shall cover checking & Yearly Maintenance of 25 kV Potential Transformer (Type-I) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 23 -Quarterly Maintenance of 25 kV Potential Transformer (Type-II)

The job shall cover checking & Quarterly Maintenance of 25 kV Potential Transformer (Type-II) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 24 -Half Yearly Maintenance of 25 kV Potential Transformer (Type-II)

The job shall cover checking & Half Yearly Maintenance of 25 kV Potential Transformer (Type-II) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 25 -Yearly Maintenance of 25 kV Potential Transformer (Type-II).

The job shall cover checking & Yearly Maintenance of 25 kV Potential Transformer (Type-II) as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 26 -Monthly Maintenance of 42 kV Lightning Arrester

The job shall cover checking & Monthly Maintenance of 42 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 27 -Quarterly Maintenance of 42 kV Lightning Arrester

The job shall cover checking & Quarterly Maintenance of 42 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 28 - Half Yearly Maintenance of 42 kV Lightning Arrester

The job shall cover checking & Half Yearly Maintenance of 42 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 29 - Yearly Maintenance of 42 kV Lightning Arrester

The job shall cover checking & Yearly Maintenance of 42 kV Lightning Arrester as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 30 - Quarterly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer.

The job shall cover checking & Quarterly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 31 - Half Yearly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer

The job shall cover checking & Half Yearly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 32 - Yearly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer

The job shall cover checking & Yearly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 33 - Fortnightly battery & battery charger maintenance at SCPs

The job shall cover checking & Fortnightly Maintenance of battery & battery charger maintenance at SCPs as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 34 - Yearly Maintenance of Battery and Battery Charger.

The job shall cover checking & Yearly Maintenance of battery & battery charger maintenance at SCPs as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 35 - Half Yearly maintenance of Earthing station.

The job shall cover checking & Half Yearly Maintenance of Earthing station as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 36 - Yearly maintenance of Earthing station

The job shall cover checking & Yearly Maintenance of Earthing station as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 37- Yearly Buried Rail Connection

The price shall cover Yearly maintenance of Buried rail, connection with 400 sq. mm XLPE cable

1. Check all bonding & earth connection duly excavate.
2. Intactness of welding & Bonding Bolt needs to be ensured.
3. Painting of bond and welded joints.
4. If corroded, same shall be replaced or attended. (As per Schedule 03 item no. 16/17)
5. If earth value is below the prescribed value the same to be improved

Item no. 38 - Monthly Maintenance of 25 kV SP Interrupter

The job shall cover checking & Monthly Maintenance of 25 kV SP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 39 - Half Yearly Maintenance of 25 kV SP Interrupter

The job shall cover checking & Half Yearly Maintenance of 25 kV SP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 40 - Yearly Maintenance of 25 kV SP Interrupter

The job shall cover checking & Yearly Maintenance of 25 kV SP Interrupter as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 41 - Half Yearly Thermal Imaging of Equipment connector.

The job shall cover checking & Half Yearly Thermal Imaging of Equipment connector shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL with its latest correction slips, if any.

1. Thermal Imaging of Equipment connectors shall be done during loaded condition.
2. The Images shall be stored in Heat format. Necessary backup shall be made available in Depot systems for verifying on later date.
3. Thermal Imaging devices will be supplied by Railway.
4. Defects noticed during the check shall be escalated to depot in charge and as well as to Railway officers and steps to be taken to attend the same at the earliest.
5. The temperature of Hot spots shall be compared with adjacent / nearby similar components and depending upon variation following action shall be taken.
 - Variation > 20° C- To be attended within 24 Hrs.
 - 10 ° C < variation < 20 ° C - To be attended within 10 Days.
 - 5 ° C < variation < 10 ° C - To be attended within a Month.
 - Variation < 05 ° C - Normal.

Item no. 42 - Yearly Maintenance of Earth Screen Conductor

The job shall cover checking & Yearly maintenance of Earth Screen Conductor

1. Tightness checking of earth flat and its accessories.
2. Visual checking of corrosion & strands cut if any.
3. Painting of earth flat and its accessories.

Item no. 43 - Yearly maintenance of Cable Trench Cleaning

The job shall cover checking & Yearly maintenance of Cable Trench Cleaning as under:

1. Cleaning of cable trenches for any dust/ dirt/ webs/ Garbage.
 2. Cleaning of all cables by cloth
 3. Attend the dressing of cable as required.
 4. Closing of all the entries by POP/ any sealant as given by DFCCIL.
 5. Checking of all entries and exit of cable in trenches and GI pipes for any sharp bend and ease out the same. Close all the entries by POP/ any sealant.
 6. Painting of trench cover frame by Red- Oxide and black bituminous paint.
 7. Repairing of minor damage of cable trench and its cover.
 8. Sprinkling of DDT/Gamaxene or any other insecticide in the trenches after cleaning.
- DFCCIL may ask to carry out above schedule on half yearly basis as per site conditions.

Item no. 44 -Reclamation of DCP (5kG, 10kG & 25kG), CO2 (9kG) & foam type fire extinguisher.

The job shall cover Servicing & maintenance of,

- 1)Dry-chemical powder (DCP) type: 5, 10 Kg & 25Kgs.
- 2)CO2: 9 Kg.
- 3)Foam type Fire Extinguisher

Servicing of Fire extinguisher will be done once in quarter and replacement of dry chemical powder will be done once in 2 years. All accessories required for replacement to be arranged by the contractor. Details of servicing/replacement are to be stenciled on fire extinguisher.

Item no. 45-Refilling of DCP (5KG, 10 KG & 25 KG), CO2 (9kG) & foam type fire extinguisher.

The job shall cover refilling of,

- 1)Dry-chemical powder (DCP) type: 5, 10 Kg &25Kgs.
- 2)CO2: 9 Kg.
- 3)Foam type.

Details of refilling are to be stenciled on fire extinguisher.

Schedule 3: Panels & Gantry Bus Bar insulator other Maintenance

Item no. 1 -Monthly Panel maintenance in TSS.

The job shall cover checking & Monthly Maintenance of Panel maintenance in TSS as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. The various panels at TSS includes Main control and relay panels for Scott & Feeder protection/IR connection if any, AC distribution board, DC distribution boards, Main and standby battery chargers, Panels of NIFPS, Multifunction meter cum energy data communication panel, AFL, RTU, CRP Panel for PQCR equipments etc. however, any other panel may be added and same will be in the scope of work. As such all the panels situated in TSS in control room building shall be included in this item. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge

of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 2 -Monthly Panel maintenance in SP/SSP

The job shall cover checking & Monthly Maintenance of Panel maintenance in TSS as per maintenance schedule given in Annexure-Z of this tender document. The work involves checking, testing, and measurements of various parameters as laid down in the schedule. The maintenance activity shall be carried out in line with Maintenance Manual/Approved drawings (As Build Drawings)/Specifications of DFCCIL/OEM instructions with latest correction slips, if any. All the panels situated in SCPs in control room building shall be included in this item. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 3 -Half yearly Cross gantry or any others Gantry Bus Bar maintenance of TSS

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 work shall involves following maintenance activities:-

1. Checking and maintenance of track side overhead cross feeders and jumpers of UP & DN line at TSS. Cleaning of 9- ton and pedestal Insulators of terminations/ jumper support as provided on UP&DN gantry above OHE. The jumpers ex TSS to cross feeders and feeders to OHE/ along track feeder are included into it. The PG clamps shall be thoroughly inspected by opening and re-fitted duly cleaned by emery paper.
2. Checking and maintenance of all 55KV/25KV bus-bars with terminal connectors, bus bar splice, joints, T- connectors, expansion joints or any other fitting. The overheated / problematic fittings shall be attended/ replaced as required. The entire bus bar arrangement of 55KV/25KV side from 55KV bushing of Scott TRF to 42KV LA gantry including PQCR equipment bus-bar arrangement are included in it.
3. Checking and maintenance of all 220KV side bus-bar arrangement with jumpers, PG clamps, T- connectors, expansion joints etc. the entire 220KV side bus- bar arrangement ex 220KV incoming line to Scott TRF 220KV bushing are included in it.
4. Contractor shall open up any terminal connector, splice, joints, expansion joints for thorough inspection of inner parts and bi-metallic strips and clean as required as per direction of DFCCIL Engineer based on condition.
5. The work shall involve checking of termination of 220KV side bus-bar including cleaning of strain insulators and earthing of Towers.
6. The work shall involve cleaning of all 220KV side & 55KV side Pedestal insulator and replacing the same if found damage/ flashed.

The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 4 -Half yearly Cross gantry or any others Gantry Bus Bar maintenance of SP/SSPs/ATS.

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 work shall involves following maintenance activities:-

1. Checking and maintenance of track side overhead cross feeders and jumpers of UP & DN line at SCPs. Cleaning of 9- ton and pedestal Insulators of terminations/ jumper support as provided on UP&DN gantry above OHE. The jumpers ex SCPs to cross feeders and feeders to OHE/ along track feeder are included into it. The PG clamps shall be thoroughly inspected by opening and re-fitted duly cleaned by emery paper.
2. Checking and maintenance of all 55KV/25KV bus-bars (fixed aluminum bus bar or strung type ACSR/AAAC busbar) with terminal connectors, bus bar splice, joints, T-connectors, expansion joints or any other fitting. The overheated / problematic fittings shall be attended/ replaced as required. The entire bus bar arrangements of SCPs connecting various equipments are included in it.
3. Contractor shall open up any terminal connector, splice, joints, expansion joints for thorough inspection of inner parts and bi-metallic strips and clean as required as per direction of DFCCIL Engineer based on condition.
4. The work shall involve checking of termination of 55 KV side bus-bar including cleaning of strain insulators and earthing of Towers.
5. The work shall involve cleaning of all 55KV Pedestal insulator and replacing the same if found damage/ flashed. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 5 -Half yearly Cross gantry or any others Gantry Bus Bar maintenance of PPs.

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 work shall involves following maintenance activities:-

1. Checking and maintenance of track side overhead cross feeders and jumpers of UP & DN line at PP. Cleaning of 9- ton and pedestal Insulators of terminations/ jumper support as provided on UP&DN gantry above OHE. The jumpers ex PP to cross feeders and feeders to OHE/ along track feeder are included into it. The PG clamps shall be thoroughly inspected by opening and re-fitted duly cleaned by emery paper.
2. Checking and maintenance of all bus-bars with terminal connectors, bus bar splice, joints, T- connectors, expansion joints or any other fitting. The overheated / problematic fittings shall be attended/ replaced as required. The entire bus bar arrangement of PP are included in it.
3. Contractor shall open up any terminal connector, splice, joints, expansion joints for thorough inspection of inner parts and bi-metallic strips and clean as required as per direction of DFCCIL Engineer based on condition.
4. The work shall involve checking of termination of 55KV side bus-bar including cleaning of strain insulators and earthing of Towers.
5. The work shall involve cleaning of all 55KV side Pedestal insulator and replacing the same if found damage/ flashed.

The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 6 -Removal and re-erection of PSI Equipment.

Removal and re-erection of PSI Equipments shall be done as per OEM manual. This job shall cover replacement of PSI equipments viz CTs, PTs, ATs, LAs, Capacitors, Isolators, Interrupters, CBs etc. The rates are calculated for each occasion. The supply of material and tools will be provided by

DFCCIL. The manpower deputed shall leave the work spot with the permission of engineer in charge. All released materials to be handed over to DFCCIL. The DFCCIL may order to dismantle/remove any of the PSI equipments viz. CTs, PTs, ATs, LAs, Capacitors, Isolators, Interrupters, CBs etc. The work involves removal of foundation bolts and dismantling of equipment following correct procedure as per OEM guidelines. No damage to the dismantled equipments shall be caused. The cost shall also include erection of new equipments as per OEM guidelines and testing and commissioning of the same. The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL.

Item no. 7 -Supply & Erection of Caution Board.

The payment under this item shall cover supply and erection of Retro-reflective type boards- 25 KV AC danger board, danger board for height gauge, public/ staff caution boards and special boards on uniform basis as decided by the DFCCIL Engineer.

Item no. 8 -Supply and spreading of ballast/Pebbles/Gravels in Switching Stations/TSS yard.

The price shall cover the supply and spreading of 20 mm crushed stone ballast / pebbles / gravels in Switching Stations / TSS yard. The graded ballast shall be between 30 mm to 15mm machine crushed without any mixing of soil. The price shall also cover the spreading and leveling of ballast in switch yard smoothly with a good workmanship. This price shall also include the following: a)Removal of wild vegetation in switch yard in existing ballast areas along with its roots. b)Cleaning of existing ballast and screening of soil from existing ballast. c)Smoothing and re-spreading of existing ballast so collected. The rates are calculated in CUM as per requirement for the entire section. The manpower deputed shall leave the work spot with the permission of engineer in charge

Item no. 9 -Reinforce concrete for cable trench & cover

The price shall cover the provision of cable Trenches and its cover made with Reinforced concrete including digging of soil/surface as per instruction of Engineer in charge at site. The rates are calculated in Sqm as per requirement for the entire section. The manpower deputed shall leave the work spot with the permission of engineer in charge. All released materials to be handed over to DFCCIL

Item no. 10 - Supply and repainting of PSI Equipment like Transformer CT ,PT ,LA BM, CB, AT as per site requirement with waterproof grey enameled paint by approved brand i.e. Asian Berger etc. as per IS 2932 or latest

The price shall cover the supply of paint and complete repainting of PSI equipments like Traction Transformer, CB, BM, PT, AT etc. as per site requirement with water proof grey enameled paint from any of RDSO approved brand paint i.e. Asian or Berger brand / make paint confirming to IS: 2932 or latest including rubbing / scrubbing of surface to remove corrosion/foreign material etc from PSI equipments as per instruction of Engineer in charge at site. The small patches or small patch rusting painting will be covered under maintenance schedule. Only complete repainting of any equipment will be paid under this item. The rates are calculated in Sq. m as per requirement for the entire section. The man power deputed shall leave the work spot with the permission of engineer in charge. This work will be executed as per satisfaction of DFCCIL Engineer.

Item no. 11 - Supply and repainting of PSI assets i.e. Fencing Panels, Fencing UP right, barbed wire, Tubular pole at TSS/SP/SSP with Aluminum Paint i.e. Asian Berger etc. as per IS 2339 or latest

The price shall cover the supply of paint and repainting of PSI assets i.e. Fencing Panels / uprights, barbed wires, TSS / Switching posts and Tubular Poles at TSS in electrified section with Aluminum

Paint from any of RDSO approved brand / make confirming to IS:2339 or latest as per instruction of Engineer in charge at site. The rates are calculated in Sqm as per requirement for the entire section. This work will be executed as per satisfaction of DFCCIL Supervisor.

Item no. 12 - Supply and erection of Earth Pit cover & Box.

The price shall cover the Supply and erection of Earth Pit Box with cover as per RDSO specification/ drawing available latest. The rates are calculated in numbers of Earth Pit Box with cover provided as per requirement for the entire section.

Item no. 13 - Provision of Shock Treatment Chart

The price shall cover the supply and provision of Shock Treatment charts at TRD depots, TPC Control, TSS, Switching Stations and Level Crossing Gates as per requirement. The rates are calculated in the number of Shock Treatment Charts provided by the contractor as per DFCCIL approved drawing and site requirement. The matter of shock treatment chart shall confirm to ACTM Vol-1.

Item no. 14 - Drilling of holes in mast/ rails with contractor own labour and T&P complete.

The price shall cover the drilling and champehring of holes in mast / rails with contractor's own labour and T&P complete in the supervision of Engineer in charge and as per requirement of site. The rates are calculated in the number of holes drilled in masts/rails as per requirement. The man power deputed shall leave the work spot with the permission of Engineer in charge. All released materials to be handed over to Railways.

Item No. 15 - Monthly removal of Wild vegetation in TSS/SP/SSPs

The price shall cover the complete removal of wild vegetation in Sub Station except Switching yard (Kacha Yard) on Monthly schedule basis or as per requirement and as per instruction of Engineer in charge at site. The contractor shall provide the requisite chemical for spraying to destroy the wild vegetation and requisite T&P to the staff deployed to ensure complete and effective removal of wild vegetation in in Sub Station except Switching yard (Kacha Yard). The rates are calculated in Sq.m for in Sub Station except Switching yard (Kacha Yard) in the entire section. The manpower deputed shall leave the work spot with the permission of engineer in charge.

Item no. 16 - Supply and erection of earth leads 75 x 8 mm mild steel flat laid in the ground or exposed as per site requirement"

The price shall cover supply and installation per meter length of 75x8mm mild steel flat, buried at a depth of 60 cm below ground level. The price shall also cover connections of the steel flats to the earth electrodes to constitute the main earth ring and to the earthed terminals of the power transformers etc. as required. The price shall also cover supply and installation per meter length of 75x8 mm mild steel flat, painted all around with two coats of painting with red oxide and two coats of colour grass green shade-218 of IS:5 passing through cable trench or exposed above ground level. The price shall also cover the connections of the steel flats to the earth electrodes, to constitute the main earth ring and to the earthed terminals of the various equipments as required.

Item no. 17 - Supply and erection of earth leads 50 x6 mm mild steel flat laid in the ground or exposed as per site requirement"

The price shall cover supply and installation per meter length of 50x6mm mild steel flat buried at a depth of 60cm below ground level. The price shall also cover connections of the steel flats to the

main earth ring and to the steel structures and metallic frame work/ terminals of various equipments, as required. The price shall cover supply and installations per meter length of 50x6 mm mild steel flat painted all around with two coats of painting with red oxide and two coats of colour grass green shade-218 of IS:5 passing through cable trench or exposed above ground level. The price shall also cover the connections of the steel flats to the main earth ring and to the steel Signature of tenderer (s) Date: For CGM/DFCCIL/Ahmedabad Page 165 of 279 structures and metallic frame work/terminals of various outdoor equipments as required

Item no. 18 - Supply and erection of 8 SWG GI Wire for earthing

The price shall cover supply, shaping and erection of 8 SWG G.I wire per metre used for earthing of control panels, LT, AC and DC distribution boards, battery chargers, etc. at sub- station control rooms. The requirement of fencing panel earthing to the nearest fencing upright shall also be included and paid for under this item.

Item No. 19 - Loading, Unloading & Transportation of DFCCIL Supplied material (Applicable for material more than 2 MT)

The price shall cover the Loading, Unloading & Transportation of DFCCIL Supplied material (Applicable for material more than 2 MT). The rates are calculated in numbers of Loading, Unloading & Transportation of DFCCIL Supplied material (Applicable for material more than 2 MT) as per requirement for the entire section.

Item no. 20 - Hiring of 15T crane on hourly basis :

The job shall cover Hiring of 15T capacity road crane and crane operator with more than 10 mtr zip height. The requirement of crane is on need basis as on when required over DFCCIL Jaipur unit. Payment will be made on Hourly basis. All tools & materials required for crane operation to be arranged by contractor.

Item no. 21 - Supply, fixing & commissioning of 300 mm sweep exhaust fan with lower shutter. As per specification

The price shall cover Supply, fixing, testing and commissioning of 300 mm exhaust fan by providing suitable size reg bolts/fasteners & washers etc. with lowers/guard ensuring all safety aspects as required & connected with 3 core flexible copper wire & earthed properly. Contractor will also make arrangement to make openings & fix the exhaust fan where masonry work is required, at his own cost.

Item no. 22 - Supplying and Fixing of fire bucket stand made out of MS angle with one coat of primer and two coat of enamel paint of approved shade including platform and associated civil works each stand should have four nos fire buckets of 24 gauge galvanized steel sheet, standard 9 liter capacity and of round bottom shape, painted white inside and red outside and black on the bottom, inscribed with letters" Fire" in black and gold at approved location as per direction of Engineer in charge.

The price shall cover Supplying and Fixing of fire bucket stand made out of MS angle with one coat of primer and two coat of enamel paint of approved shade including platform and associated civil works each stand should have four nos. fire buckets of 24 gauge galvanized steel sheet, standard 9 liter capacity and of round bottom shape, painted white inside and red outside and black on the bottom letters "Fire" in black and gold at approved location as per direction of Engineer in charge.

Item no. 23 – Supply of First Aid Box made of GI/AL Sheet, ISI Marked filled with Medicines as per Railway standards with suitable locking arrangement & approved by DFCCIL

The price shall cover the Supply of First Aid Box made of GI/AL Sheet, ISI Marked filled with Medicines as per Railway standards with suitable locking arrangement & approved by DFCCIL

Item no. 24 – Supply and fixing of 160W or above LED Floodlight comprising Die cast aluminium housing with toughened glass complete with Electronic driver, Luminaries has the System lumen efficacy of 100lumen/Watt as per specification.

The price shall cover the Supply and fixing of 160W or above LED Flood light comprising Die cast aluminum housing with toughened glass complete with Electronic driver, Luminaries has the System lumen efficacy of 100 lumen/Watt, IP-66, Colour temperature 5700K to 7000K, CRI ≥ 80 . Beam Angle ≥ 120 degree, Driver Efficiency $\geq 85\%$, Minimum Power Factor 0.9, THD $\leq 15\%$, Minimum Driver Surge Protection 2.5kV, Lamp shell: Polycarbonate, Compliance to EMC Test, Luminaries shall be specially designed with suitable lamp housing and control gears for LED flood lights 150/160W. Certificate: BIS Registration, Minimum Warranty 3 years through Gem and 5 years other than Gem. Applicable Standards: IS: 10322, LM80, LM79". The luminaries shall be tested as per Indian standards and test reports shall be submitted along with the materials. The luminaries shall be suitable for installation on high masts.

Item no. 25 – Rubber mat (ISI marked) non stick type suitable for 11 kv AC supply of size 2000x1000x25mm as per specification.

The price shall cover the Supply & installation of Rubber mat (ISI marked) nonstick type suitable for 11 kV AC supply of size 2000x1000x25m as per specification.

Item no. 26 – Supply and erection of earth lead using 75x8 mm GI flat laid in ground/exposed as per the site requirement.

The price shall cover the Supply and erection of earth lead using 75x8 mm GI flat laid in ground/exposed as per the site requirement.

Item no. 27 – Provision of Fire Buckets of 10 liter capacity:

The price shall cover the cost of supply of Fire Buckets capacity of 10 liter With confirming to IS : 2546 (1974) or latest.

Item no. 28 – N2 Gas Filling including testing of cylinder

The price shall cover the cost of N2 Gas Filling including testing of cylinder.

Schedule 4 -TSS Manning & House keeping

Item no. 1 – Regular House Keeping of TSS.

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

1. Regular cleaning of equipment, installed at traction substations.
2. Cleaning of vegetation in yard.
3. Safe guarding of TSS premises from any unwanted movements of stranger or animals.

4. Time to time checking for ensuring no reptiles are found in equipment box or any other location which create unwanted faults or short circuits.
5. Any other work that does not require excavation or access to the switchyard that can be undertaken without disturbing the operation of the substation.
6. He should not operate any equipment in any condition.
7. He should not climb in any structure on live condition.

Item no. 2 – Manning of TSS

The job shall cover the Manning of TSS as mentioned below,
Contract staff:

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

1. Replacement of defective LED, indication lamps of relay panel, ACDB & DCDB panel.
2. Battery maintenance distilled water topping work.
3. Replacement of HRC fuse and rotary switch of ACDB, DCDB and control and relay panel.
4. Provision of naphthalene balls at control and other equipment supplied by DFCCIL.

A. Duties of operator (manning) staff –

1. He should go through the instructions/messages written in handing over charge/Taking over charge register before taking over charge of duty.
2. He should check the condition of all indication lamps and status of equipment.
3. He should obtained the HT meter readings if any such as KWH,KVAH,KVARH,MD,PF etc from the supply authority meters at 00-00Hrs daily and convey to on duty TPC.
4. He should check the counter reading of Equipment and relays at 00-00Hrs daily.
5. He should record the Transformer current, bus voltage, Feeder Voltage, Capacitor current, WTI, OTI, Ambient temperature, Gas Pressure and Air pressure of equipment's every hours in daily log sheet. Daily log sheet shall be arranged by the quotationer.
6. He should record the time of CB tripping, 132KV supply failures and the feed extensions in concerned register.
7. He should check the Trickle/Boost current, Voltage of Battery charger.
8. He should neatly clean the battery cell surfaces daily.
9. He should check the condition of equipment for any abnormality such as heating of terminal connector, bus splice, bus connectors, un-usual sound, sparking ect. If any abnormality noticed shall be informed immediately to the on duty TPC and act accordingly.

10. He should check the oil level in conservator tank of Transformer, leakage of oil from the Transformer, CT, PT and ATs and to be informed immediately to the on duty TPC and act accordingly.
11. He should check the of safety equipment such as Fire extinguisher, Fire buckets with sand etc.
12. He should check the functioning of telephones provided.
13. He should operate the equipments as per instructions of TPC on duty.
14. He should check the safe custody of T & P items and other stores kept at TSS.
15. He should clean the control panel and equipment provided at control room.
16. He should carry out minor repairs under guidance of in-charges of TSS.
17. He should switch on & off of Yard lights, pump at TSS.
18. He should follow any instructions given by TPC & In-charges of TSS.
19. He should look after any other duty assigned by In-charges of TSS.
20. He should register all incoming and outgoing calls on register.
21. Do not allow un-authorized staff into the sub-station.
22. Do not allow co-staff to operate the control panel/equipment without his knowledge.
23. Ensure communication facilities are in working order. If any defect noticed, report to CTPC/TSS in-charges.
24. Check all safety items/equipment, such as discharge rod, hand gloves, Helmets, safety belts for sound condition.
25. Ensure firefighting equipment for a periodical checking and refilling.
26. Operate the equipment only on instructions of the TPC under clear message duly exchanging PN number.
27. Report any abnormalities noticed to TPC and carry out the operations as per direction of TPC. In case of failure of equipment, such as PT, CT, AT, LA, TM, CB, DM. Isolate the defect equipment under the instructions from TPC duly under power block and permit to work.
28. Check and record the specific gravity & the voltage of Battery, top up with distilled water if necessary. Check and record the charging current so the charging voltage is 120 to 125V.
29. Check the condition of silica gel in breathers of Power Transformer and Auxiliary Transformer, CBs and record and inform to TPC if condition are bad.
30. In case of 132KV power supply failure report TPC immediately to facilitate feed extension. On resumption of 132KV supply, informs TPC and normalizes upon the instructions of TPC.
31. In case of 25KV supply voltage falling below 19 kV/increasing above 27.5 kV inform immediately to on duty TPC for appropriate action.
32. All local operations are done under the instructions of TPC daily, and duly keeping the switches in local condition.
33. During duty hours operator shall bear tight fitting clothes and shoes.
34. During hourly yard checking he shall keep himself alert, 2meter safe distance away from electrical live parts and bear helmet.
35. He shall not attempt to climb a structure, until permission granted by TPC/In-charge and proper earthing and equipped with all safety gears.
36. He shall not carry boom, ladder in standing position in the yard to access the equipment.
37. He shall bear hand gloves for operation of isolator to isolate the faulty equipment after getting the TPC's instructions and exchange of private number.
38. He shall not carry umbrella in yard in any season.

39. Recording of Electrical parameters, events and alarms at TSS and TPC will take status of all equipments of TSS from the manning staff on hourly basis.

Schedule 5 -Break down attention

Item no. 1 – Breakdown attention of PSI equipments at TSS/SP/SSPs

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

The job shall cover Supply of Man Power for restoration of all 2x 25kV PSI equipments such as circuit breakers, Interrupters, Potential transformers, AT, CT, Capacitor bank ,Bus bar etc. during Break down round the clock on hourly basis for all restoration of 25kV PSI Equipments

.The Contractor is required to deploy one Supervisors, One Technicians and Two Helpers who are competent to attend Failures in PSI equipments. The job against this item is applicable for Supply of Man Power on hourly basis consisting of the above staff in one Gang.

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

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

Item no. 2 – Maintenance of 25 KV dropout fuse AT TSS/SP/SSP

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

Item no. 3 - Manning of SP/SSP in case of Emergency

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

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

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

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

4. The manning staff on shift duty is forbidden to leave the post station unless he is relieved by another person. No interchange of duties or variation of duty hours is permitted without the prior

permission of TPC, and staff who are unable from any cause to take their shift, shall at once notify TPC.

5. One man day in this part of schedule is for 12 hours. Contractor has to arrange for transport of the personnel manning the SP/SSP. The man so deployed shall have mobile phone which shall be advised to TPC immediately he is assigned for manning duty.

Item No. 4 - Excavation and casting foundation and plinth by Concrete in all kind of soil including hard soil and rocky soil:

The price shall cover cost of excavation, supply and handling of all materials and accessories, temporary arrangement for excavation in all type of soil (hard / rocky / normal / black cotton), casting concrete including frame work wherever necessary, temping of concrete, grouting of PSI steel structures /towers/columns and OHE portal /gantry structure and finishing the top of concrete foundation or anchor blocks as per approved designs/drawings. The price shall also cover cost of dismantling of all connected unused structures (cement/ steel) during excavation & casting for foundation, back filling for exposed foundations with soil and compaction of the same up to the required height and width as per drawings to ensure safety of foundation and removal of extra soil out of the railway boundary. If any special foundation is required due to site conditions, prior approval of drawing of special foundation to be taken from competent authority i.e. JP Divisional office/NWR Head Quarter Office/ RDSO. For the computation of volume, the volume of steel work shall be ignored. The prices shall also cover the cost of diversion of masonry/earth drain wherever necessary for casting of foundation. OHE/PSI structures foundation shall be casted as prescribed in RDSO drawing/specifications. As per RDSO Drg. No – ETI/C/0209 REV-C or latest, Foundation Concrete for foundations of PSI structures should be of Grade M-15 where concrete is in contact or buried under non-aggressive soil/ground water and of Grade M-20 where concrete is exposed. Foundation casting shall be done in compliance of IS: 456:2000 or latest in each & every respect particularly material quantity, mixing, casting curing, frame work etc. Material used i.e. cement, aggregate and water shall be confirming to IS 458 or relevant latest IS. Note 1-

- a) The price shall be same for any shape for size of concrete blocks. In calculating the individual volume of concrete, fraction of a cubic meter beyond the third decimal shall be rounded off to the next nearest third decimal.
- b) The prices shall apply for concreting of all foundations for masts, gantries, portals, BM, CB, DPI, SPI, PI, towers, columns, anchor blocks for guy rods, and fencing uprights etc.
- c) Cost of all concrete will be paid for only under this item and the prices of other item shall not include.
- d) For purposes if compilation of concrete the volume of each muff for all masts shall be taken as 0.02 cum., except for masts with balance weights and for column of portal, each head span masts, 2 or 3 track cantilever masts and special fabricated masts for which the volume of muff shall be taken as 0.08 cum. Irrespective of the size and shape of muff on a flat basis.
- e) Mixture for casting of foundation shall be 1:2:4 and mixture for grouting shall be 1:1.5:3 the gradation of concrete mixture is as per IS 456 – 2000 & IS 10262:2009 or latest.
- f) Curing of foundation shall be done by contractor for 21 days or as desired by concern Executive/JE according to site condition.
- g) Contractor has to arrange casting scroll on his own, it will not be supplied by Railway.

- h) Contractor has to prepare standard cube of size 150x150x150mm as a sample for every 50 cum of foundation cast & is to be tested as per IS-516/1959(or Latest) to obtain the result as per IS 456/2000 (or latest). The sample of the concrete from which test specimens are made shall be representative of entire batch. All the test on the test cubes shall be carried out from approved laboratory/ institutes and cost of test shall be borne by the contractor. Cube test report must be submitted to concern SR.EXECUTIVE/EXECUTIVE (TRD). Total number of cubes will be worked out as Total volume of NIT quantity with variation divided by 50cum, rounding off to previous number for fractions.
- i) Cement used shall confirm to IS: 12269-1987 or latest & grade 53.
- j) The cement manufactured by any one of recognized brand i.e. Ultra-tech, Gujrat Ambuja, JK Laxmi, or equivalent for casting purpose shall only be procured.
- k) To make cubicle for OHE structure foundation, digging, earth excavation should be carried out very cautiously avoiding damage to Electrical /Telecommunication /Signaling cable passing nearby or under the site of excavation. If any Electrical/Telecommunication /Signaling cable gets damaged during foundation work, then as per HQ/RB guidelines penalty amount of the same shall be borne by contractor.
- l) The prices shall include cost of embodiment of drain pipes, conduits for cable or earthing flats where necessary.
- m) The price also cover cost for smooth plasters on exposed foundation and muff.
- n) The price shall also cover cost of excavation and all re-inforced concrete work for foundation including supply of cement and other material including bending, binding laying the reinforcement, shoring wherever necessary for casting concrete including frame work wherever necessary, grouting and finishing the tops of foundation blocks.
- o) Payment of steel which are used in reinforcement work will be paid under NS-7. Note 2: Nominal reinforcement will be necessary in black cotton soil foundations for which no extra payment shall be made

Schedule 6 Additional PSI maintenance Activity

Item no. 1 – Dismantling, supply, erection & commissioning of LA, CT, PT, CB & BM in case of break down/bursting of the equipment- As per Appendix A.

The prices shall include cost of Supply of spares required during maintenance break downs for a period of 2 years- As per **Appendix A.**

The spares required for attending the breakdown & preventive maintenance will be arranged by the contractor from OEM / authorized dealer of OEM. The contractor will be paid the cost of the spare / materials supplied as per price list of Appendix A along with the released materials to the consignee.

Schedule 7: Maintenance of Traction Sub Stations /SCPs (Optional)

Item no. 1 to 3 - Oil Filtration for power Transformer: Streamline Oil filtration work & Conservator tank This shall cover the cost towards oil filtration for Power Transformer during topping up of oil or during any replacement of gasket / Bushing. Oil filtration needs to be done to improve oil BDV.

Item no. 4 to 17- Bushings Oil leakage attention in Transformer:

Streamline Oil filtration work & Conservator tank This shall cover the cost towards Oil leakage attention in Transformer bushings.

Item no. 18 to 20- Oil Leakage attention and overhauling of TAP changer:

Leakage attention to OLTC tapping gear and new Gasket O ring changing work. This shall cover the cost towards Oil leakage attention and overhauling of TAP changer of Power Transformers.

Item no. 21 - Calibration of Measuring instruments [Will be paid based on the submission of proof of bill of calibrated instruments in the NABL accredited labs]

This job shall cover calibration of measuring instruments supplied by DFCCIL at the NABL accredited labs. It also includes the transportation of instruments from Depot to Labs and return. The payment for this item will be made based on the submission of certificate for the calibrated instruments with original bill/invoice from the NABL accredited labs. The periodicity of calibration will be as per extant rule and as advised by authorized DFCCIL in-charge.

Schedule 8: Maintenance & Replacement of OEM Recommended spare including Erection chares 10 %

Item No. A (1 to 36): 220 kV , 2000A Crompton greaves Make Triple Pole SF-6 Circuit Breaker

The prices shall include cost of Supply of spares required during maintenance of 220 kV , 2000A Crompton greaves Make Triple Pole SF-6 Circuit Breaker.

The spares required for maintenance of 220 kV, 2000A Crompton greaves Make Triple Pole SF-6 Circuit Breaker will be arranged by the contractor from OEM / authorized dealer of OEM. The contractor will be paid the cost of the spare / materials supplied as per price list along with the released materials to the consignee.

Item No. B (37 to 78): 132kV, 1600A Crompton greaves Make Triple Pole SF-6 Circuit Breaker

The prices shall include cost of Supply of spares required during maintenance of 132kV, 1600A Crompton greaves Make Triple Pole SF-6 Circuit Breaker.

The spares required for maintenance of 132kV, 1600A Crompton greaves Make Triple Pole SF-6 Circuit Breaker will be arranged by the contractor from OEM / authorized dealer of OEM. The contractor will be paid the cost of the spare / materials supplied as per price list along with the released materials to the consignee.

Item No. C (79 to 124): 66kV, 2000A Crompton greaves Make Double Pole SF-6 Circuit Breaker

The prices shall include cost of Supply of spares required during maintenance of 66kV, 2000A Crompton greaves Make Double Pole SF-6 Circuit Breaker.

The spares required for maintenance of 66kV, 2000A Crompton greaves Make Double Pole SF-6 Circuit Breaker will be arranged by the contractor from OEM / authorized dealer of OEM. The contractor will be paid the cost of the spare / materials supplied as per price list along with the released materials to the consignee.

Item No. D (125 to 136): Statcon Make SMPS Based 80 A Battery Charger used in TSS & 20A Battery Charger used in A-Type SSPs, SPs & ATS

The prices shall include cost of Supply of spares required during maintenance of Statcon Make SMPS Based 80 A Battery Charger used in TSS & 20A Battery Charger used in A-Type SSPs, SPs & ATS.

The spares required for maintenance of Statcon Make SMPS Based 80 A Battery Charger used in TSS & 20A Battery Charger used in A-Type SSPs, SPs & ATS will be arranged by the contractor from OEM / authorized dealer of OEM. The contractor will be paid the cost of the spare / materials supplied as per price list along with the released materials to the consignee.

Item No. E (137 to 143): System & Service Make 100KVA, 50KVA & 25KVA ACO Panels in ALH & TH

The prices shall include cost of Supply of spares required during maintenance of System & Service Make 100KVA, 50KVA & 25KVA ACO Panels in ALH & TH.

The spares required for maintenance of System & Service Make 100KVA, 50KVA & 25KVA ACO Panels in ALH & TH will be arranged by the contractor from OEM / authorized dealer of OEM. The contractor will be paid the cost of the spare / materials supplied as per price list along with the released materials to the consignee.

Item No. F (144 to 148): Control card spares

The prices shall include cost of Supply of spares required during maintenance of Control card.

The spares required for maintenance of Control card will be arranged by the contractor from OEM / authorized dealer of OEM. The contractor will be paid the cost of the spare / materials supplied as per price list along with the released materials to the consignee.

Schedule 9: Execution of any civil work as per requirement.

The prices shall include the cost of Any Civil work in CPWD DSR 2021 consider rate 38 % below as per Railway board letter no. HQ0ENGG (WKS)/73/2021 dated 19.01.2023 and same to taken care by the Contractor before quoting this Head.

Schedule 10: Supply of Tools and Plants

The prices shall include cost of Supply of tools and Plants in Schedule-10 as per DFCCIL requirement. The contractor will be paid the cost of the tools and plants as pro rata basis. The Item No 1 to 58 make and specifications will be as per RDSO approved. Other items make and model shall be approved from GM/Elect. From reputed make.

Maintenance Schedule of Power Supply Installations (PSI)

Normally all Maintenance Schedule should be followed as per DFCCIL Maintenance Manual for all type of Transformers, Circuit Breakers, Isolators, CT, PT etc. PSI equipment of different voltage levels in TSS, SP, SSP and ATS etc.

A. FORTNIGHTLY SCHEDULE

Battery

SN	Item	Inspection And Work to be Carried Out	Remarks
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 & clean sulphation on terminal connectors and apply petroleum jelly, if required.	
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 room	Clean the room and ensure proper ventilation.	

B. MONTHLY SCHEDULE
1. General Works on TSS, SSP & SP

SN	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.	

2. Power Transformer (Scott Connected / V Connected)

SN	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"> • In case of sealed bushing, if no oil./less than minimum level indication. Measure Tan-Delta & capacitance and compare the test values recorded earlier. • In case of oil filled bushing, if any leakage is observed, the same shall be attended 	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"> • Check breather for choking due to insect/dirt. If breather is choked, remove the dirt etc. • 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. • Check oil level in oil cup. Fill up oil in cup, if required. 	If BDV is less than 50 kV, filter the oil till it reaches 50 kV.

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). Check pressure of nitrogen gas in the dial gauge as per OEM recommendation.	

3. Auto Transformer (8 MVA / 12.3 MVA / 14.3 MVA / 16.5 MVA)

SN	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"> In case of sealed bushing, if no oil./less than minimum level indication. Measure Tan-Delta & capacitance and compare the test values recorded earlier. 	Max. allowable tan-Delta-0.007 and capacitance is 110% of the factory set value respectively or as per OEM

		<ul style="list-style-type: none"> In case of oil filled bushing, if any leakage is observed, the same shall be attended. 	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"> Check breather for choking due to insect/dirt. If breather is choked, remove the dirt etc. 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. Check oil level in the oil cup. Fill up oil in cup, if required. 	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). Check pressure of nitrogen gas in the dial gauge as per OEM recommendation.	

4. 220 KV / 132 KV Triple Pole SF-6 Circuit Breaker

SN	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: - Before maintenance - After maintenance	
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° C or
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.	

5. 66 KV Double Pole SF-6 Circuit Breaker

SN	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 CB: Before maintenance After maintenance	
3.	Gas pressure	Check & record gas pressure with temperature	7.0Kg/ sq at cm 20°C temp.
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 30°C – 35°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 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 proper interlocking with isolator.	

6. 25 kV Double Pole Vacuum Circuit Breaker

SN	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 drive link assembly, if applicable	Check presence of dust, looseness of bolts 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.	

SN	Item	Inspection And Work to be Carried Out	Remarks
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 pumpin g device for CB	Check the function of APD for proper operation. If defective, attend the same.	
16.	Interlocking	Check the proper interlocking with isolator.	

7. 220/132 kV Triple Pole Motorized Isolator

S N	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 smooth hand 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	

8. 220/132 kV Triple Pole Motorized Bus Coupler

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	

9. 25 KV Double Pole Motorized Isolator

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	

10. 220 KV/132 KV/ 66 KV/ 25 kV Current Transformer 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	

11. 220 KV /132 KV / 66 kV/ 25 kV Lightning Arrester

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Visual inspection of lightning arrester	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.	

12. Battery Charger

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.	

i. Control and Relay Panel

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	

C. QUARTERLY SCHEDULE

1. General Works on TSS, SSP & SP

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 by thermovision camera	Check nut, bolt & washers for overheating. Replace, if necessary.	

2. Auxiliary Transformer

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"> Check the condition of silica gel. If color is pink reactivate/replace. Check oil in the cup of breather. Top up the oil in cup, if required. 	
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.	Caution board 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, over heated and non-standard fuse wire, if any.	

3. 25 kV Potential Transformer

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Inspection of PT	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 40 KV
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.	

4. 25 KV Motorized Isolator Type – Double Pole

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.	

5. 220 / 132 / 66 / 25 kV Lightning Arrester

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

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 pin plug/socket.	
6.	Termination ends of the cable	Check & tight all termination ends of the cable, if loose.	

7. AC/ DC Distribution Panel

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	

D. HALF YEARLY SCHEDULE

1. General Works on TSS, SSP & SP

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	

2. Traction Power Transformer (Scott / V Connected)

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 10 sec., 60 sec. and 600 sec. for HV-LV, HV-E and LV-E. Calculate PI (Polarization index)</p> <ul style="list-style-type: none"> • Insulation resistance values should be compared with the last recorded value. • Compare PI values with values at the time of commissioning/ last recorded. • PI Insulation/ condition <ul style="list-style-type: none"> ▪ < 1.0 Dangerous ▪ Poor ▪ 1.25 Questionable ▪ 1.25 - 2.0 Satisfactory ▪ >2.0 Good • If PI value is less than 1.1, oil should be filtered. In case, the value does not 	<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>

		improve even after filtrations, periodic overhauling should be under taken.	
4.	PRD Explosion vent	Check and 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.	

3. Auto Transformer (8 MVA / 12.3 MVA / 14.3 MVA / 16.5 MVA)

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	
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 10 sec., 60 sec. and 600 sec. for HV-LV, HV-E and LV-E. Calculate PI (Polarization index)</p> <ul style="list-style-type: none"> • Insulation resistance values should be compared with the last recorded value. • Compare PI values with values at the time of commissioning/ last recorded. • PI Insulation/ condition <ul style="list-style-type: none"> ▪ < 1.0 Dangerous ▪ Poor ▪ 1.25 Questionable ▪ 1.25 - 2.0 Satisfactory ▪ >2.0 Good • 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>Ensure that transformer is disconnected.</p> <p>Ensure busing are clean and free from moisture and temperature on which IR value is recorded</p> <p>The OEM's manual may also be referred.</p>
4.	PRD Explosion vent	Check and 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.	

4. 25 kV Double Pole Vacuum Circuit Breaker

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 'VI'
3.	All circlip, 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: Top-Bottom- for continuity Top & Bottom -Earth Check with multimeter & 2.5/5 KV megger.	IR More than 5000 MΩ
8.	Insulation Resistance of Motor Closing coil Tripping coil AC&DC wiring	Check & record IR value of: Motor Closing coil Tripping coil iv. AC wiring & DC wiring Check with 500 V megger	i. Motor- more than 2 MΩ 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.	

5. 220 KV / 132 KV Triple Pole SF-6 Circuit Breaker

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 2 MΩ
7.	Mechanism box	Check penetration of rain water, rust and door hinges. Arrest the reason and rectify.	Weather sealant as per annexure 'V'
8.	Main terminal 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.

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

6. 66 KV Double Pole SF-6 Circuit Breaker

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.	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: i. Top-Bottom- for continuity ii. Top & Bottom -Earth Check with multimeter & 2.5/5.0 KV megger.	More than 1500 MΩ
5.	Insulation Resistance between control circuit to round	Measure & record the Insulation Resistance between control circuits to ground by 500 V megger	More than 2 MΩ Record the make & serial number of megger
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 2 MΩ
7.	Mechanism box	Check penetration of rain water, rust and door hinges. Arrest the reason and rectify.	Weather sealant as per annexure 'V'
8.	Main terminal connector	Check overheated & rusted nuts, bolts, washers ad bi-metallic strips. Replace, if required.	Replace and use conducting compound
9.	Shock observer	Check for oil leakage, if leakages attend it.	Attend or Replace
10.	Charging time of closing spring	Check and record charging time of closing spring	15 sec. or as per OEM'S manual.

7. Auxiliary Transformer

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.	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 ^o Temperature.

8. 25 kV Potential Transformer

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	

9. 220/132/25 kV Current Transformer

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. 2000 MΩ min. for 220/132 kV (use 2.5 kV megger) 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. 200 MΩ Min. for 220/132 kV (use 2.5 kV megger) 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.	

10. 220/132 kV Triple Pole Isolator

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.	

11. 25 KV Double Pole Motorized Isolator

SN	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

12. 198/120/42 kV Lightning Arrester

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

13. Control and Relay Panel

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.	

14. Condition Based Maintenance through Thermo vision Camera (Traction Substation) AC TRD (Traction Sub- Station)

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 switch yard and outgoi ng switch gear	- Check thermal scanning by thermo vision camera. - The temperature of hot spots is compared with adjacent/nearby similar components.	
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 bas 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.	

15. Earthing & Bonding

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 \square and SP and SSP < 2.0 \square

16. Battery Charger

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 change over switch	Check & tight connection of all terminal connectors and working: i. Rectifier, ii. Coarse/fine control switch iii. Trickle/Boost change over switch	

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

17. AC/DC Distribution Panel

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	

E. YEARLY SCHEDULE

1. General Works on TSS, SSP & SP

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Building	Check for roof cleaning, leakage and condition of building.	
3.	Lightning screen (earth screen wire)	Check strain clamps of wire. If any defect is observed, attend it.	
4.	Structure and fencing	Check Structure and fencing for soundness, loose connection etc.	
5.	Trenches	Open and clean trenches for possibility of lizard and other insects entry in control panels/equipments.	
6.	Tree & branches	Check & prune the tree branches near to live conductor as required.	

2. Traction Power Transformer (Scott / V Connected)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Transformer tank, bushings, taps, changer, radiator and connection joints	Infrared temperature scanning is to be done preferably at the time of full load to find any over heating parts & compare with previous results.	

3.	Oil Immersed Paper (OIP) condenser bushing	Measure, record & compare the test for Tan-delta, capacitance and IR(Shearing bridge may be used for tan delta & capacitance). Compare with earlier value. In case of deviation in reading from standard value, replace or consult manufacture. -Bushing should be cleaned for dust and moisture. - Test should be done on sunny day. - Max allowable Tan- delta is 0.007 - Max allowable capacitance 110%	OEM's manual may also be referred to.
4.	Gasket joints of transformer	Check & tight the bolts evenly to avoid uneven pressure in case of leakage only.	Tightening of bolts to be done in proper sequence.
5.	Rod gap setting of bushing	Check rod gap setting. Adjust, if required.	
6.	Test oil in transformer	The oil sample is tested as per IS-1866-2000. If the oil value does not meet the requirement, oil to be replaced.	The oil test results should confirm IS 1866- 2000 or latest or as per OEM's manual.
7.	Dissolved gas analysis (DGA) on oil	Oil sample taken for DGA as per OEM's manual.	The DGA test results should meet as per OEM's manual
8.	Working of tap changer switch	Move the tap setting switch up and down full range so that by self-wiping action good contacts are assured.	
9.	Relays, alarm & their circuits	Check relay and alarm contacts, their Operation, fuses etc. and relay accessories. Clean the components, replace contacts and fuses, if necessary. Change the relay setting only if necessary.	
10.	Control boxes & Terminal boxes/cable	Check for water tightness of boxes & terminal boxes. Replace gasket, if required	
11.	Temperature indicators	Check for thermometer holding pockets, oil to be replenished, if required.	
12.	Dial type oil gauge	Check pointer for free movement. Adjust, if required.	
13.	Earth resistance	Measure & record earth resistance by earth tester. Take suitable action, if earth resistance is high.	Less than 10 ohms

14.	Buchholz relay	Check operation and measure the insulation resistance by 500V megger and continuity test for contacts with test lock screw set as 5°.	IR not less than 20 mega ohm. On continuity test relay shall operate.
15.	Voltage ratio test with wheat stone bridge, voltmeter	Precautions to be taken as per normal practice being followed for measurements with wheat stone bridge. Compare the trends of the ratio with reference to pre commissioning/ factory value/ earlier test	The sudden variation in ratio from the last measured value should call for further investigation.
16.	Winding resistance test with wheat stone bridge voltmeter-ammeter	The test conducted on principal tap by applying DC current. The measured value should be converted to 75°C for Conversion. Compare the value with the pre- commissioning/ factory test values. Deviation in absolute value should be less than $\pm 5\%$ of pre-commissioning or factory set value.	This test shall be last test on winding to avoid DC flux remaining in core resulting in incorrect values in the other tests.

3. Auto Transformer (8 MVA, 12.3 MVA, 14.3 MVA / 16.5 MVA)

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Transformer tank, bushings, taps, changer, radiator and connection joints	Infrared temperature scanning is to be done preferably at the time of full load to find any over heating parts & compare with previous results.	
3.	Oil Immersed Paper (OIP) condenser bushing	Measure, record & compare the test for Tan-delta, capacitance and IR (Shearing bridge may be used for tan delta & capacitance). Compare with earlier value. In case of deviation in reading from standard value, replace or consult manufacturer. -Bushing should be cleaned for dust and moisture. - Test should be done on sunny day. - Max allowable Tan- delta is 0.007 - Max allowable capacitance 110%	OEM's manual may also be referred to.
4.	Gasket joints of transformer	Check & tight the bolts evenly to avoid uneven pressure in case of leakage only	Tightening of the bolts to be done in proper sequence.
5.	Rod gap setting of bushing	Check rod gap setting. Adjust, if required.	
6.	Test oil in transformer	The oil sample is tested as per IS-1866-2000. If the oil value does not meet the requirement, oil to be replaced.	The oil test results should confirm IS 1866-2000 or latest or as per OEM's Manual.
7.	Dissolved gas analysis (DGA) on oil	Oil sample taken for DGA as per OEM's manual.	The DGA test results should meet as per OEM's manual
8.	Relays, alarm & their circuits	Check relay and alarm contacts, their Operation, fuses etc. and relay accessories. Clean the components, replace contacts and fuses, if necessary. Change the relay setting only if necessary.	
9.	Control boxes & Terminal boxes/cable	Check for water tightness of boxes & terminal boxes. Replace gasket, if required	
10.	Temperature indicators	Check for thermometer holding pockets, oil to be replenished, if required.	
11.	Dial type oil gauge	Check pointer for free movement. Adjust, if required.	

12.	Earth resistance	Measure & record earth resistance by earth tester. Take suitable action, if earth resistance is high.	Less than 10 ohms
13.	Buchholz relay	Check operation and measure the insulation resistance by 500V megger and continuity test for contacts with test lock screw set as 5°.	IR not less than 20 mega ohm. On continuity test relay shall operate.
14.	Voltage ratio test with wheat stone bridge, voltmeter	Precautions to be taken as per normal practice being followed for measurements with wheat stone bridge. Compare the trends of the ratio with reference to pre commissioning/ factory value/ earlier test	The sudden variation in ratio from the last measured value should call for further investigation.
15.	Winding resistance test with wheat stone bridge voltmeter-ammeter	The test conducted on principal tap by applying DC current. The measured value should be converted to 75°C for conversion. Compare the value with the pre-commissioning/ factory test values. Deviation in absolute value should be less than ± 5% of pre-commissioning or factory set value.	This test shall be last test on winding to avoid DC flux remaining in core resulting in incorrect values in the other tests.

4. 25 kV Vacuum Circuit Breaker

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Auxiliary switches connected in conjunction with mechanism	Check for correct position of the aux. switches and carry out few close & open operations. Signals occurred correctly and driving level is correctly positioned auxiliary switch.	
3.	Cable glands	Check tightness of the fairleads and locked. The free fairleads must be covered with relative plate and blocked.	
4.	Terminal connectors	Check & clean connector, nuts, bolt, washer and bimetallic strip Polish the surface and freely plate bimetallic strip properly, if provided	
5.	Travel Graph Recorder Test	Measure & record the closing and tripping timing in mili second as per OEM manual:	
		Travel of contact in mm.	
		Measure the Contact resistance in Micro ohms as per OEM:	

**5. 220 KV / 132 kV SF-6 Circuit
Breaker Type – 120 – SFM – 32A,
MAKE – CGL**

SN	Item	Inspection And Work To Be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Surface of rollers and sliding	Check & lubricate the bearing surface of rollers and sliding surfaces of lever.	Lubricate as per annexure 'III'
3.	Mechanism	Check manual operation of mechanism slowly at 80% of normal voltage. Ensure that link and lever should move freely.	Operate at 88% Volt DC
4.	Tripping mechanism	Check the clearance ST (solenoid magnet stroke) between armature and core by feeler gauge.	Between armature and core 2.0 to 2.4 mm
		Check & record the clearance GT between plunger and trigger by feeler gauge.	0.5 to 0.9 mm
		Check the clearance & record of ST, GT	1.5 to 1.7 mm
5.	Closing Mechanism	Check the clearance SC (solenoid magnet between Armature and core SC	4.5 to 5.5 mm
		Check the pumping prevention pin to latch distance clearance "P" between anti pumping Pin and latch	P=1 to 2 mm
6.	Pole and Mechanism setting Check & record mechanism setting of interrupter & operating mechanism:		
	Operating Mechanism	Check over stroke "SO" completely open position to stop position.	6+1 mm (B2-B1)
	Interrupter	Measure the stroke and contact wipe between fix contact and moving contact of pole	Stroke (A1) – (A3) = 180=2 mm, -5 mm Wipe (A2-A3) = 36+ 2mm
Operation Mechanism Stroke:- Check stroke "S" from closed portion to completing opened position		Stroke (B3-B2) = 40+1 MM – 3 MM	
7.	DC motor:		
	i. Inlet filter	Check & clean inlet filter. Replace, if damaged.	
	ii. Carbon brushes	Check & clean condition of carbon brush and commutator. Replace, if defective carbon brush.	
	iii. 'V'Belt of motor	Check condition and tension of belt motor to compressor. Replace the belt, if defective or loose.	Tension <2 times of belt diameter.

SN	Item	Inspection And Work To Be Carried Out		Remarks
8.	Operation timing	Check & record closing & opening timing with timer	70 - SFM-32A	i. Closing time <100ms ii. Opening time < 30ms
			120-SFM-32A	i. Closing time <100 ms ii. Opening time <30 ms
9.	Contact resistance (CB close position)	Check & record contact resistance of fixed & moving contact with contact resistance meter.		< 50 $\mu \Omega$
10.	Safety valves	Check the control valve for air leakage and safety valve for function.		Working condition
11.	Checking of setting of			
		70-SFM-40AA		120-SFM-32B
	Gas pressure	Normal	5.0 kgf/cm ²	7.0 kgf/cm ²
		Alarm	5.5 kgf/cm ²	6.5 kgf/cm ²
		Lockout	5.0 kgf/cm ²	6.0 kgf/cm ²

Note: The above values/settings need to be matched from the manual of respective OEM, in case of any variation of above parameters.

6. Auxiliary Transformer

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.	Carry out following work in addition to half yearly schedule		
2.	Winding continuity	Measure & record winding continuity on all tapings with multimeter /500 V megger.	
3.	Tap changer	Check the smooth operation of tap changer on all tapings	
4.	Acidity of oil	Check the acidity of transformer oil.	Maximum 0.5mg KOH/gm
5.	Ratio test	Conduct ratio test by applying AC supply to HV winding and measure the voltage at LV side winding.	
6.	Jumpers	Check HT and LT jumpers & lugs for loose & flash mark. Replace, if loose & flash.	
7.	Painting	Paint to be done, if color of tank is faded/rusted. Paint to be done with epoxy and polyurethane paints as per A& C slip no. 8 to the RDSO specification no. ETI/PSI/118(10/93) or as per OEM's manual.	
8.	DO fuse wire	Replace the fuse wire with new one.	

7. 220 KV/132 KV/ 25 kV Potential Transformer

SN	Item	Inspection And Work To Be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Duplicate earthing	Check duplicate earth conditions for broken & loose. Attend the same	
3.	Oil testing if possible	Test the oil with BDV tester. If possible	
4.	Ratio test	Conduct ratio test by applying AC supply to HV winding and measure the voltage at LV side winding	
5.	Painting	Paint to be done, if color of tank is faded/rusted. Paint with epoxy and polyurethane paints or as per OEM manual.	

8. Current Transformer 220 kV/132 /66 kV/25kV 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 half yearly schedule		
2.	Arching horn gap, if provided	Check & measure arching horn gap as required.	
3.	Oil testing, if possible	Test the oil with BDV tester	BDV more than 40 KV
4.	Painting	Paint to be done, if color of tank if faded/rusted. Paint with epoxy and polyurethane paints as per OEM's manual.	
5.	Polarity test	Conduct polarity test and check the direction of current.	
6.	Ratio test	Conduct ratio test by applying AC supply to HV winding and measure the voltage at LV side winding.	

9. 220/132/ kV Isolator Type –Triple Pole

SN	Item	Inspection And Work To Be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Operation of isolator (double & Triple Pole)	Check the operation of isolator slowly and check for simultaneous operation of blades on the poles and correct alignment of blade tips in the fixed contact jaws of the poles	
3.	Insulation resistance	Measure & record IR values of pedestal and tie rod insulators with 2.5 KV megger.	More than 1000 MΩ
4.	Operating handle of main blade and earth blade, if provided	Check the locking arrangement to the operating handle of main blade and earth blade	
5.	Bearing	Check & clean the bearings of rotating bushings of insulator and lubricate with grease.	
6.	Bus connections and bimetallic strips	Check & clean for tightness, sigh of oxidation on bus connections and bimetallic strips correct if necessary. Replace bimetallic, if required.	
7.	Paint	Check & replace rusted parts and paint the on rusted parts, if any.	Cold galvanizing paint

10. Motorised Isolator, 25 kV Type – Double Pole

SN	Item	Inspection And Work To Be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Insulation resistance of motor	Measure & record Insulation resistance of winding with 500V megger	More than 2 MΩ
3.	Commutator	Check & clean commutator with dry cotton cloth	
4.	Carbon brushes	Check carbon brushes for under size. Replace, if necessary.	
5.	Arching horn, if provided	Check correct setting and alignment of arcing horn. Adjust, if required	

11. 220 KV 132 KV / 66 KV / 25 KV Lightning Arrester

SN	Item	Inspection And work to be carried out	Remarks
1.	Carry out following	work in addition to half yearly schedule.	
2.	Lightning arrester (LV side) HT –E	Check, measure & record insulation resistance of each unit of lightning arrester with by 2.5/5.0 kV megger.	IR value more than 1000 M ohms
3.	Lightning arrester (HV side) HT-E	Check, measure & record insulation resistance of each unit of lightning arrester with by 2.5/5.0 kV megger.	IR value more than 1000 M ohms
4.	Earth resistance	Check & record the earth resistance of each earth connection with earth resistance meter.	Not more than 0.5 ohms
5	Lightning arrester details	Check & record the following: i. Location ii. Rating iii. Make iv. Sr no v. Date of MFG vi. Date of commission vii. Date of measurement viii. IR value ix. THRC value of leakage current, x. No. of Lightenings passed	Record
6.	THRC leakage current value	Check & record leakage current before and after cleaning of LA with THRC meter.	If the leakage current between 350- 500 μ A, keep it under close observation & beyond 500 μ A, remove from service.

12. Control and Relay Panel

SN	Item	Inspection And work to be carried out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Operation of relay	Check & record operation of all relays	
3.	Testing of relay	Conduct relay testing by testing instrument and record. Compare as per previous settings.	
4.	Contactors, push button, switches	Check & clean al contactors, push button and switches from burnt, carbonize or corroded marks, Replace if defective.	
5.	Check voltage	Check & record voltage between + (ve) to Earth & -(ve) to Earth. If observe more difference, then necesary take action.	

13. Condition Based Maintenance through Thermo vision Camera (Traction Substation)

1. AC TRD (Traction Sub-station, SP and SSP)

SN	Item	Inspection And Work to be carried out	Remarks
1.	Carry out all works as in half yearly schedule		

14. Earthing & Boding

SN	Item	Inspection And Work to be carried out	Remarks
1.	Carry out all work in half yearly schedule		
2.	Buried rail	Check condition of connections traction rail to buried rail and mat to buried rail. Clean & tighten all connections	

15. Battery Charger

SN	Item	Inspection And Work to be carried out	Remarks
1.	Carry out all work in addition to half yearly schedule		
2.	Transformer winding	Measure & record the insulation resistance of winding at room temperature with 500 V megger.	More than 2 M Ω
3.	Electrolyte condenser	Measure & record the capacitance value with LCR meter. Replace if open circuited/short circuited.	
4.	Cable glands	Check cable holes and unwanted holes. Provided proper size of glands, close unwanted holes and gaps.	
5.	Cable ends	Check for crimping of cable ends with connectors\lugs and cable ends crimped with suitable size of connectors/lugs.	

16. AC/DC Distribution Panel

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to half yearly schedule		
2.	Cable glands	Check cable holes and unwanted holes. Provide proper size of glands, close unwanted holes and gaps.	Cork gasket and HOLDITE compound
3.	Cable ends	Check for crimping of cable ends with connector/lugs and cable ends crimped with suitable size of connectors/lugs.	Proper crimped
4.	Insulation resistance of cable	Measure & record insulation resistance of cable at room temp. with 500 V megger.	More than 2 MΩ
5.	Stickers/paint	Check stickers/paint to MCBs/rotary switch. Paste new sticker/paint to MBCs/rotary switch, if faded.	
6.	Painting	Paint to be done, if color of panel is faded/rusted. Paint with epoxy and polyurethane paints as per A & C slip no. 8 to the RDSO specification no. ETI/PSI/118 (10/93) or as per OEM manual.	

F. THREE YEARLY SCHEDULE

1. SF-6 Circuit Breaker

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to yearly schedule		
2.	Mechanical travels	Measurement & record of mechanical travels, Adjust if required.	As per maintenance manual
3.	Door gasket & hinges	Replace & check the door gasket of the operating mechanism and hinges for damages. Replace with new one.	
4.	Movement of rollers	Check the free movement of rollers. If not free, replace the same	
5.	Contact resistance	Measure the value of contact resistance of pole between upper terminal and lower terminal. If value is more than 120% of the design value specified in maintenance manual contact manufacturer.	Approach the manufacturer for rectification

2. 220 kV/132 kV/66 KV / 25kV Current Transformer

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Primary injection test	Conduct primary injection test and record reading. Compare with pre commissioning test.	

G. FIVE YEARLY SCHEDULE

1. Power Transformer/Auto Transformer

SN.	Item	Inspection And Work to be Carried Out	Remark
1.	Carry out following work in addition to monthly, half yearly & yearly schedule		
2.	Painting of transformer tank, conservator radiator and other exposed parts	Clean the exposed parts thoroughly. Transformer tank and other parts should be painted with epoxy and polyurethane paints as per OEM recommendation	-In case of previous enamel paints, the repainting may be carried out after 3 years polluted area. -In case of previous epoxy and polyurethane pants the repair painting may be carried out after 5 years
3.	Pipe work	Check for any damages, misalignment and leakages. If any misalignment the pipe should be realigned and joint made.	-----
4.	Test oil in transformer	Measure the inhibitor content in the oil. In the new oil it has to be within 0.25-0.30% by total weight of oil. If the inhibitor content in the oil reduces to 0.15% it should be re- inhibited by adding required amount of DBPC (2,6 Ditertiary Butyl para Cresol) or as per OEM recommendation	
5.	Magnetizing current test with voltmeter, ammeter and lamp	Check by applying 230 V AC supply preferably on LV side with series lamp. Compare the value with respect to pre commissioning value. Any abnormal increase to the order of 50 times indicates that these are a fault inside	Ensure that the comparison is done to the value taken at LV side only
6.	Winding resistance test with wheat stone bridge, voltmeter and ammeter	The test conducted on principal tap by applying DC current. The measure value should be converted to 75 ⁰ C. Compare the value	This test should be last the test on winding to avoid DC flux remaining in core resultin

		with the pre-commissioning/ factory test values. Deviation in absolute value shall be less than +- 5% pre-commissioning or factory test value.	g erroneous value in the other test
7.	Impedance test with voltmeter and ammeter	Test to be conducted on principal tap applying 230V single-phase AC to the HV side with LV side shorted and calculate V/I and convert to percentage impedance. Compare the value with the pre-commissioning value, any deviation beyond 5% calls for further analysis.	Any deviation beyond 2% from the earlier values shall be considered for keeping watch on the transformer.

H. Vacuum Circuit Breaker

The operating mechanism should be checked/attended (without dismantling the circuit breaker/interrupter) if circuit breaker has completed 5 years of service or 10,000 electrical switching operations.

a. SIX YEARLY SCHEDULE

1. SF-6 Circuit Breaker, Make-ABB & CGL

The following items should be checked/attended (without dismantling the circuit breaker/interrupter) if circuit breaker has completed 6 years of service or 2000 electrical switching operations or 5000 mechanical CO operations.

In case of interrupter, if it has completed 6 years of service or 5000 Electrical/Mechanical CO operations.

SN.	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in addition to monthly, half yearly, yearly, three yearly schedule		
2.	Inspection and re-adjustment of Operating mechanism	Measurement of mechanism dimension, Lubricating the mechanism, leakage check of dash pot oil, Looseness of circlips and nuts, check free movement of antipumping pin and trip & closing plungers, Replacement of some parts of mechanism.	

3.	Connecting rod end joint and Bellows	Check the crack of connecting rod end joint and Bellows. Replace, if crack	Replace
4.	Lubricate the mechanism linkages	Check & clean lubricating mechanism linkage with dry cotton cloth	As per annexure
5.	Contacts and nozzle of interrupting pole	Check contact and nozzle. Renew them, if required	As per maintenance manual
6.	Absorbent	Check absorbent for SF6 gas by-products. Renew the absorbent for SF6 gas by-products	Renew
7.	Moisture sealant	Check moisture sealant to all cemented joints of porcelain. Apply moisture sealant to all cemented joints of porcelain.	Apply moisture sealant
8.	Shock absorber	Replace Shock absorber	Replace
9.	Gas system	Check setting of gas density switch	As per maintenance manual
10	Compressor	Take out the compressor after every six year refit the items which are damaged.	Replace the defective items

Any Preventive PSI maintenance activity/ Schedule maintenance should be as per DFCCIL maintenance Manual.

5.0 TIME SCHEDULE

5.1. TIME OF START AND COMPLETION

1. The completion period for said maintenance work is **02 (Two) years**.
2. The Contractor shall be expected to mobilize and commence supply of maintenance services as per instruction received from competent authority of DFCCIL to start the work.
3. If the Contractor fails to start the awarded work **within 30 days**, DFCCIL shall without prejudice to any other right or remedy, be at liberty to forfeit the full Earnest Money Deposit and retention money along with Performance Guarantee of the Contractor.

6.0 Organization Structure:

6.1 Manpower Organization: The Contractor is required to deploy Supervisors, Technicians and Helpers round the clock for all PSI maintenance activities and shall ensure the required minimum educational qualifications & experience for his deployed Supervisors, Technicians and Helpers.

The Tenderer shall have adequate Manpower Organization required for the execution of the tendered work. The details are given below.

(i) Manpower deployed by the Contractor:

The Contractor should employ the following personnel for execution of the contract/ maintenance work, with the minimum qualification & experience as given in the para 6.2 (a) below:

- (a) Supervisor In-charge
- (b) Asst. Supervisor
- (c) Technicians/Fitters (Highly Skilled)
- (d) Skilled
- (e) Semi Skilled (PSI)
- (f) Helpers (Un-Skilled)

(ii) The contractor shall maintain the minimum manpower at the PSI depots /TSS as under apart from Break down Gangs in Schedule-02 :

Requirement for PSI depots								
	REJN	AELN	DBLN	SMPN	PMPN	FLN	KSGN	Total
Supervisor	0	1		1		1		3
Assistant Supervisor	1	1	1	1	1	1	1	7
Highly Skilled / Skilled	3	3	3	3	3	3	3	21
Unskilled/ Helpers	3	3	3	3	3	3	3	21
Total	7	8	7	8	7	8	7	52

Note: In case the deployed Supervisor will take leave or out of his headquarters, contractor will deploy another employee/s having equivalent educational & experienced as “Supervisor” for the work. At no time the gang shall be permitted to work at site without contractor’s supervisor.

(iii) Required gang size:

The contractor should proportionately increase the size of the gang (i.e. Technicians and Helpers) during Break down/ power block/ night / special engineering works to cater the requirements.

(iv) Suitable reliever:

Since PSI 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 Railways. Each gang should work under the instruction of DFCCIL Engineer. 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.

- (v)** The work shall be taken up in accordance to GCC & SCC services in which all provisions such as Safety of property & life's including all minimum wages act etc. Contractor is bound to follow all the conditions stipulated in GCC & SCC services.

6.2 Qualification of the contractor's Personnel for 25kV OHE & PSI Maintenance work:

- (a)** Since the contract is primarily manpower oriented, therefore qualification and competence of the manpower deployed by the contractor is a crucial factor. Therefore, Contractor is required to deploy Supervisors, Technicians and Helpers round the clock, for all maintenance and restoration of 25kV OHE/PSI Breakdown works. The contractor shall ensure the required minimum educational qualifications & experience for his deployed Supervisors, Technicians and Helpers as tabulated below:

- (i) Supervisor-in-Charge/ Design Engineer:** The supervisory staff posted by the contractor should at least be Engineering degree holder in Electrical/ Mechanical/ Electronics/computer discipline OR Diploma in Electrical / Mechanical / Electronics / Computer engineering & should have 3 years' experience in similar works OR should have worked at the supervisory level (SR.EXECUTIVE/EXECUTIVE of OHE/PSI/RC) in Railway for a minimum period of 3 years.
- (ii) Assistant Supervisor:** Assistant supervisory staff posted by the contractor should at least be Diploma in Electrical/Mechanical/Electronics/Computer Engineering & should have 1 year experience in similar works OR should have worked at the Assistant supervisory level (JE/Sr.Tech of OHE/PSI/RC) in Railway for a minimum period of 1 year.
- (iii) Technician/Fitter (Highly Skilled & Skilled):** Should have certificate of ITI issued by any recognized institution and with minimum 3 years' experience in relevant field OR Should have worked as OHE/PSI technician in Railways for a minimum period of 2 years
OR 5 Years' Experience in the relevant OHE field.

- (i) **Semi-Skilled** Should have passed Matriculation and have minimum 3 years' experience in relevant field.
- (ii) **Unskilled:** Should have minimum 2 years' experience in the relevant field.

- Note:**1. Photostat copies above educational qualification Certificates shall be self-attested by the concerned person. The certificate of experience shall be submitted duly countersigned by the successful tenderer.
2. The service provider shall provide the list of shortlisted /Suitable candidate to DFCCIL. Screening of candidate will be carried out by DFCCIL for suitability of maintenance works and suitable candidates will be allowed for deployment.
3. Relaxation for experience /Qualification for Suitable candidate will be purview of Dy. CPM/elect. or GM/Elect.

(a) Training to the contractor's personnel :

Training for the Contractor's personnel will be given free of cost by DFCCIL. The training for different level of staff will be different and shall be decided by GM/EL .All the personnel desired to be deputed for this work including supervisors have to undergo a scrutinizing test conducted by GM/EL or his representative for their Jurisdiction. Candidates found suitable will be given an Identity card and a "competency certificate" valid for a period of currency of contract before they are put on the job. They have to keep both Id Cards and "Competency Certificate" with them while on duty and for their movements in the Railway premises. Contractor is required to deploy Supervisors, Technicians and Helpers round the clock for all PSI maintenance activities and shall ensure the required minimum educational qualifications & experience for his deployed Supervisors, Technicians and Helpers.

6.3 Competency Certificate for 25kV 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 GM/EL/JP shall only be allowed to work.

All the Supervisory Staff & Technicians of the contractors shall attend to the nominated officer of GM/EL/JP of respective division to take the counseling & training to operate 25 kV Isolators (SP/DP) with or without Earthing Heel. The competent staff shall be given a "Competency Certificate for 25kV Isolators" by the above nominated officer and it shall be carried by such staff while on duty on the section/location.

6.4 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. It shall be ensure that Minimum wages Act 1948, EPF, ESI act and Workmen compensation act 1923, Contract Labour act 1970, Miscellaneous Provision Act 1952 under about Law etc. rules & regulation as may be enacted by government or any modification thereof or any other law relating thereof and rules made there under time to time. In the event of non-Compliance of the contractor would undertake to indemnify DFCCIL on any cost or liability it may incur on account of such non compliance

- (i) 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.

6.5 Medical fitness certificates:

All the personnel whether undergone training as per Para 6.1(b) above OR having experienced as per Para 6.1(a) above shall undergo a scrutinizing test conducted by authorized representative of CGM /JP of the respective section. Candidates found suitable shall be issued with competency certificate by respective authorized representative of CGM /JP .

All such selected staff of contractor shall medically fit for Railway'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. The contractor's personnel should be habitual to work on the height and no fear (Acrophobia) to working on height.

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 Indian Railway Medical manual conducted by the Railway 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.

6.6 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"**.

6.7 Commencement of PSI Maintenance Contract at field:

The contractor shall commence HIGH RISE OHE maintenance work at field within 30 days from obtain a letter from competent authority of DFCCIL duly stating actual date of commencement of subject HIGH RISE OHE and PSI equipment maintenance work and accordingly the completion period of contract (Twenty Four months) will be reckoned.

6.8 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.

6.9 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 HIGH RISE OHE Maintenance work.

The personnel who are found to be qualified and suitable in the scrutiny by representative of CGM /JP 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 works pots.

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.

The Contractor shall provide the PPE kit & safety item i.e. Safety belts, Helmets, First Aid Box, Safety Jackets (retro reflective) to his staff at his own cost.

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 HIGH RISE 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 DFCCIL authority.

6.10 Safety during O.H.E & P.S.I. Maintenance work at field:

The contractor shall ensure the safety of all the staff provided for maintenance of 2x25kV HIGH RISE 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 authorized to work on the HIGH RISE 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 Depot within 30 minutes in day time and 45 minutes at night time after receipt of the information from DFCCIL representative and to report the DFCCIL 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 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 HIGH RISE 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.

6.11 Progress Monitoring of Maintenance Schedule:

Progress of PSI maintenance shall cover all the equipment uniformly. Completion of total no of PSI Locations should ensure completion of maintenance of all the pertaining equipment. Depot in-charges shall closely monitor the progress of maintenance activities on daily basis. The Contractor representative shall fill up the various maintenance schedule proforma/Check list on daily basis or as per periodicity as defined in the Maintenance schedule and the same shall be jointly signed by Railway representative and contractor representative/supervisor. The format for these proforma/check lists to be as per DFCCIL Maintenance Manual/ Practices.

6.12 Tools and plants management:

- (a) Tools & plants etc. Per Depot/Gang (03 nos.), as per list in Annexure-1 should be owned and maintained by the contractor. Before ordering the T&P equipment, the successful tenderer shall seek approval from concerned GM/Elect./JP regarding the latest list of approved suppliers for the equipments. The ladder trolley provided by DFCCIL shall be kept in good condition by the contractor.
- (b) Any additional tools and plants as required other than the tools for maintenance of the HIGH RISE OHE/PSI shall be arranged by the contractor.
- (c) 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. Contractor has to ensure to take over the load bearing T&P items after jointly testing the equipments with Railway Supervisor. There after these will be maintained in good working condition by the contractor during entire contract period.

- (d) Each Gang shall maintain and carry tool boxes having full set of required tools. These tool boxes shall be arranged by the contractor.
- (e) Consumable items of OHE & PSI to be supplied by contractor as per Annexure-2.

Note: Contractor must have all necessary T&P Items like Tirfor, Pull-lift, steel sling pulleys, ladder, manila rope, lights, safety belts, helmets, discharge rod, operating rod etc. and measuring instrument like Magger, Earth tester, Binocular etc. and consumable items like Oil Kerosene, Toilet soap, cotton waste, Tape insulation black, Hacksaw Blade, Cell for hand torch, Paint Brush, Emery cloth paper, Duster cloth white khadi, petroleum jelly, soap bar etc. order to execute maintenance / Breakdown work at PSI. If the work is delayed due to Non-availability of above items necessary Penalty as per the Para-7.0 as given below in this part of this tender document will be imposed.

6.13 The RECONCILIATION OF MATERIALS SUPPLIED BY THE DFCCIL:

All the material supplied by the DFCCIL and also released from the existing OHE/PSI maintenance shall be correctly accounted for and quantities reconciled on completion of the work by the contractor.

On completion of work, all surplus materials supplied by the DFCCIL together with the ones found defective or that have become defective or broken on account of manufacture defect, will be handed over to concerned OHE/PSI depot.

6.14 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 CGM/JP 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 Railway officers, scrutiny of this inventory should be one of the important items in order that the required stores are always made available.
- (c) PSI 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 PSI 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.

6.15 Guarantee Bond for Indemnification of DFCCIL Materials:

- (a) The materials supplied as per requirement under "Scope of the work and Special conditions" shall be covered by the **Guarantee Bond For Indemnification of DFCCIL Materials of sufficient requisite amount** on stamp paper of requisite value of the material supplied by DFCCIL to be submitted by the contractor before lifting the material from DFCCIL depots.
- (b) **Reconciliation of Materials supplied by the DFCCIL:** All the material supplied by the purchaser and also released from the existing 2x25kV PSI installations & Power Supply Installation shall be correctly accounted for and quantities reconciled on completion of the work by the contractor.
- (c) On completion of work, all surplus materials supplied by the purchaser together with the ones found defective or that have become defective or broken on account of defective materials, the surplus DFCCIL supplied material to be handed over to concerned depot. For the purpose of measurement of 2x25kV PSI equipment, the length of the conductor will be taken from termination to termination and erection tolerance of 0.5% will be allowed.
- (d) **Release of the Guarantee Bond for Indemnification:** After according approval to the "Materials Reconciliation Statement" "Guarantee Bond for Indemnification will be released with approval of CGM/JP of respective unit.

6.16 Contractor Vehicles:

The vehicles used by contractor must be fully & comprehensively insured covering the risk to the Driver & all passengers also

All kinds of repairs/maintenance costs, charges of fuels, oil, lubricant, mobile phone charges, fee towards licences /registration taxes, challans, salary/overtime of the driver, insurance premium etc. are responsibility of the contractor and shall be borne by the

contractor all along the contract duration,

6.17 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 permit 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' 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.

6.18 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 HIGH RISE 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.

6.19 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 HIGH RISE OHE/PSI 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.

6.20 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 HIGH RISE OHE/PSI 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 HIGH RISE OHE/PSI 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/railway stations, shall be maintained depot-wise/station-wise by TPC.
- (c) **Importance of Expeditious Repairs:** Every breakdown of HIGH RISE OHE/PSI, 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.

6.21 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 HIGH RISE OHE should be left out in a state of obstruction to running of trains and the HIGH RISE 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.

7.0 NON-PERFORMANCE OF THE CONTRACT CONDITIONS

7.1 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 / Unskilled 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 up to 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 HIGH RISE 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 HIGH RISE OHE& PSI 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 HIGH RISE 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.

8.0 ORDER OF PRIORITY OF CONTRACT DOCUMENTS:

The documents forming the Contract agreement 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) Form of bid
- 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)
- x) General Conditions of Contract

9.0 Jurisdiction of Courts

In case of any disputes/differences between contractor & DFCCIL the jurisdiction shall be of Jaipur Courts only.

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

PART-VI
MILESTONES AND TIME SCHEDULE

MILESTONES AND TIME SCHEDULE

1.0 Time Schedule:

1.1 Time of start and completion:

The time allowed for execution of the works is 24 (Twenty-Four Months) from the date of issue of letter of acceptance from DFCCIL.

The contractor shall be expected to mobilize to the site of works and commence execution of the works within 10 (days) from issue of Acceptance Letter by DFCCIL.

The contractor shall be expected to complete the whole work ordered on the contractor within 24 (Twenty-Four Months) from the date of issue of Acceptance Letter by DFCCIL.

If the contractor commits defaults in commencing execution of the works as afore stated, DFCCIL shall without prejudice to any other right to remedy, be at liberty to forfeit fully the Earnest Money Deposit and performance guarantee of the contractor.

1.2 Progress of works:

The contractor shall submit a programme of work in the form of a Bar Chart of all the activities in consistence. In case this bar chart requires to be modified, the Engineer and the contractor shall agree upon a time and progress chart. The chart shall be prepared in direct relation to the time stated as 24 months for the completion of the works as the milestone targets specified below of these special conditions. It shall indicate the forecast of the dates of commencement and completion of various activities of the work and may be amended as necessary by agreements between the Engineer and the contractor within the limitation of 04 (Four Months) as overall completion period.

PART-VII
TENDER ANNEXURES & FORMS

Annexures /form no.	Subject
Annexure no I	Tender form
Annexure no II	Agreement for zone contract (Not Applicable for this Tender)
Annexure no III	Work order under zone contract (Not Applicable for this Tender)
Annexure no IV	Contract agreement of works
Annexure no V	Format for certificate to be submitted / uploaded by tenderer along with the tender documents
Annexure no VI	Tenderer's credentials (bid capacity) (Not Applicable for this Tender)
Annexure –VIA	(Bid security) bank guarantee bond from any scheduled commercial bank of India.
Annexure –VIB	Annual contractual turnover data for the previous 3/4 years
Annexure no VII	Proforma for time extension
ANNEXURE – VIIA	Proforma of 14 days' notice for offloading of part of contract
ANNEXURE – VIIB	Notice for part of contract work offloaded
Annexure no VIII	Certificate of fitness
Annexure no IX	Proforma of 7 days' notice for works as a whole/ in parts
Annexure no X	Proforma of 48 hrs. Notice for whole work
Annexure no XI	Proforma of termination notice
Annexure no XII	Proforma of 48 hrs. Notice
Annexure no XIII	Proforma of termination notice
Annexure no XIV	Final supplementary agreement
Annexure no XV	Agreement towards waiver under section 12(5) and section 31a (5) of arbitration and conciliation (amendment) act
Annexure no XVII	Performance Bank Guarantee
Form no.1	Schedule of prices & total prices Tender schedule
Form no. 2	Tenderer's credentials
Form no 2A	Technical eligibility criteria details
Form No.2B	Statement of works in progress for bid capacity (Not Applicable for this Tender)
Form-2C	Applicant's party information form
Form no. 3	ECS/ NEFT / RTGS mandate form

Form no. 4	Sample standing indemnity bond for “on account” payments
Form no.5	Pre contract integrity pact
Form No. 6	Anti-profiteering declaration to whomsoever it may concern
Form no 7	Draft memorandum of understanding (MOU) for Joint venture participation. (Not Applicable for this Tender)
Form no. 8	Draft format of joint venture agreement (Not Applicable for this Tender) (Not Applicable for this Tender)
Form no 9	Pro-forma letter of participation from each partner of joint venture (jv) (Not Applicable for this Tender)
Form no 10	Format for power of attorney for authorised signatory of joint venture (jv) partners (Not Applicable for this Tender)
Form no 11	Format for power of attorney to lead partner of joint venture (jv) (Not Applicable for this Tender)
Annexure-1	BARE MINIMUM TOOLS & PLANTS TO BE ARRANGED BY CONTRACTOR FOR PSI MAINTENANCE FOR EACH GANG.
Annexure-2	CONSUMABLE ITEMS TO BE MADE AVAILABLE BY CONTRACTOR

TENDER FORM

Tender No:- DFCC-JP-EL-REJN-KSGN-T-30

Name of Work :- **Maintenance of 2x25kV Power Supply Installation in New Rewari-Madar section of DFCCIL including the Phulera UP & DN link lines, Kishangarh Balawas, Kathuwas connection to Indian Railways for a period of 24 (Twenty Four) months under CGM Jaipur Unit.**

To

The President of India

Acting through the Chief General Manager/ DFCCIL/Jaipur

I/We _____ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this offer open for acceptance for a period of _____ days from the date fixed for closing of the tender and in default thereof, I/We will be liable for forfeiture of my/our "Bid Security". I/We offer to do the work for _____ DFCCIL, at the rates quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to complete the work in all respects within _____ months from the date of issue of letter of acceptance of the tender.

2. I/We also hereby agree to abide by the Indian DFCCIL/Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by DFCCIL in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.
3. A Bid Security of ₹ _____ has already been deposited online/ submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:
 - (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
 - (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the DFCCIL that such documents are ready; and
 - (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.
- 4.(a) I/We am/are a Startup firm registered by Department of Industrial Policy and Promotion (DIPP) and my registration number is valid upto (Copy enclosed) and hence exempted from submission of Bid Security.
5. We are a Labour Cooperative Society and our Registration No. is withand hence required to deposit only 50% of Bid Security.
6. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Witnesses:

(1) _____

(2) _____

Signature of Tenderer(s)

Date _____

Address of the Tenderer(s)

AGREEMENT FOR ZONE CONTRACT

ANNEXURE – II

Deleted

ANNEXURE - III

WORK ORDER UNDER ZONE CONTRACT

Deleted

ANNEXURE - IV

DFCCIL

CONTRACT AGREEMENT OF WORKS

CONTRACT AGREEMENT NO. _____ DATED _____

ARTICLES OF AGREEMENT made this _____ day of _____ 20____ between President of India acting through the DFCCIL Administration hereafter called the "DFCCIL" of the one part and _____ herein after called the "Contractor" of other part.

WHEREAS the Contractor has agreed with the DFCCIL for performance of the works _____ set forth in the Bill(s) of Quantities hereto annexed upon the Standard General Conditions of Contract, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Specifications of _____ updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the applicable Standard Schedule of Rates (SSOR) of _____ updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Special Conditions and Special Specifications, if any and in conformity with the drawings here-into annexed AND WHEREAS the performance of the said works is an act in which the public are interested.

NOW THIS INDENTURE WITNESSETH that in consideration to the payments to be made by the Railways/DFCCIL, the Contractors will duly perform the said works in the said Bill(s) of Quantities set forth and shall execute the same with great promptness, care and accuracy in a workman like manner to the satisfaction of the DFCCIL and will complete the same in accordance with the said specifications and said drawings and said conditions of contract on or before the _____ day of _____ 20__ and will maintain the said works for a period of _____ Calendar months from the certified date of their completion and will observe, fulfill and keep all the conditions therein mentioned (which shall be deemed and taken to be part of this contract, as if the same have been fully set forth herein), AND the DFCCIL, both hereby agree that if the Contractor shall duly perform the said works in the manner aforesaid and observe and keep the said terms and conditions, the DFCCIL will pay or cause to be paid to the Contractor for the said works on the final completion thereof the amount due in respect thereof at the rates specified in the Bill(s) of Quantities hereto annexed.

Contractor _____ (Signature) DFCCIL: Designation _____
Address _____ (For President of India)
Date _____ Date _____

Signature of **Witnesses** (to Signature of Contractor) with address:

Witnesses:

ANNEXURE-V

FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

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 tender No._____ of _____(*DFCCIL*)**, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

2. I/we the tenderer (s) am/are signing this document after carefully reading the contents.
3. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
4. I/we hereby declare that I/we have downloaded the tender documents from Indian DFCCIL 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 Administration shall be final and binding upon me/us.
5. 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.
6. **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 upon me/us.**
7. **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.**
8. I/we certify that I/we the tenderer(s) is/are not blacklisted or debarred by DFCCIL/Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
9. I/we understand that if the contents of the certificate 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 Bid Security besides banning of business for a period of upto five year. Further, I/we (*insert name of the tenderer*) **_____ and all my/our constituents understand that my/our offer shall be summarily rejected.
10. I/we also understand that if the contents of the certificate 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 Bid Security/Security Deposit and Performance guarantee besides any other action provided in the contract including banning of business for a period of upto five year.

11. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed)

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.*

This certificate is to be given by each member of JV or Partners of Partnership firm/LLP/etc.

(As per advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

TENDERER'S CREDENTIALS (BID CAPACITY) (Not Applicable)

For tenders having advertised value more than Rs 20 crore wherein eligibility criteria includes bid capacity also, the tenderer will be qualified only if its available bid capacity is equal to or more than the total bid value of the present tender. The available bid capacity shall be calculated as under:

$$\text{Available Bid Capacity} = [A \times N \times 2] - 0.33 \times N \times B$$

Where,

A = Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender), taking into account the completed as well as works in progress.

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

B = Existing commitments and balance amount of ongoing works with tenderer as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender.

Note:

(a) The Tenderer(s) shall furnish the details of -

- (i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) for calculating A, and
- (ii) Existing commitments and balance amount of ongoing works with tenderer as per the prescribed proforma of DFCCIL for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender for calculating B. In case of no works in hand, a 'NIL' statement should be furnished.

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant.

(b) In case if a bidder is JV, the tenderer(s) must furnish the details of

- (i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) by each member of JV for calculating A, and
- (ii) Existing commitments and balance amount of ongoing works with each member of JV either in individual capacity or as a member of other JV as per the prescribed proforma of DFCCIL for statement of all works in progress and also the works which are awarded to each member of JV either in individual capacity or as a member of other JV but yet not started upto the date of inviting of tender for calculating B. In case of no works in hand, a 'NIL' statement should be furnished.

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant.

(c) Value of a completed work/work in progress/work awarded but yet not started for a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned bid capacity in the tender under consideration.

(d) The arithmetic sum of individual "bid capacity" of all the members shall be taken as

JV's "bid capacity".

- (e) In case, the tenderer/s failed to submit the above statement along with offer, their/his offer shall be considered as incomplete and will be rejected **summarily**.
- (f) The available bid capacity of tenderer shall be assessed based on the details submitted by the tenderer. In case, the available bid capacity is lesser than estimated cost of work put to tender, his offer shall not be considered even if he has been found eligible in other eligibility criteria/tender requirement.

(As per Advance Correction Slip No. 1, As per Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

Bid Security

Bank Guarantee Bond from any scheduled commercial bank of India
(On non-judicial stamp paper, which should be in the name of the Executing Bank).

Name of the Bank: -----

President of India,
Acting through,
Chief General Manager/DFCCIL/Jaipur,

Beneficiary: DFCCIL

Date:.....

Bank Guarantee Bond No.:

Date:-----

In consideration of the President of India acting through----- (*Designation & address of Contract Signing Authority*), DFCCIL,, (hereinafter called "The DFCCIL") having invited the bid for_____through Notice inviting tender (NIT) No.._____, We have been informed that *[Insert name of the Bidder]*..... (hereinafter called "the Bidder") intends to submit its bid (hereinafter called "the Bid") .

WHEREAS, the Bidder is required to furnish Bid Security for the sum of *[Insert required Value of Bid Security]*, in the form of Bank Guarantee, according to conditions of Bid.

AND

WHEREAS,*[Insert Name of the Bank]*, with its Branch*[Insert Address]* having its Headquarters office at..... *[Insert Address]*, hereinafter called the **Bank**, acting through*[Insert Name and Designation of the authorised persons of the Bank]*, have, at the request of the Bidder, agreed to give guarantee for Bid Security as hereinafter contained, in favour of the DFCCIL:

1. KNOW ALL MEN that by these present that I/We the undersigned *[Insert name(s) of authorized representatives of the Bank]*, being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay to the DFCCIL full amount in the sum of *[Insert required Value of Bid Security]* as above stated.
2. The Bank undertakes to immediately pay on presentation of demand by the DFCCIL any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the DFCCIL on the Bank shall be final, conclusive and binding, absolute and unequivocal on the Bank notwithstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Bidder or Bank.
3. The Bank shall pay the amount as demanded immediately on presentation of the demand by DFCCIL without any reference to the Bidder and without the DFCCIL being required to show grounds or give reasons for its demand of the amount so demanded.
4. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Bidder.
5. The Bank agrees that no change, addition, modifications to the terms of the Bid document or to any documents, which have been or may be made between the DFCCIL and the Bidder, will in any way absolve the Bank from the liability under this guarantee; and the Bank,

hereby, waives any requirement for notice of any such change, addition or modification made by DFCCIL at any time.

6. This guarantee will remain valid and effective from.....*[insert date of issue]*till*[insert date, which should be minimum 90 days beyond the expiry of validity of Bid]*. Any demand in respect of this Guarantee should reach the Bank within the validity period of Bid Security.
7. The Bank Guarantee is unconditional and irrevocable.
8. The expressions Bank and DFCCIL herein before used shall include their respective successors and assigns.
9. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the DFCCIL. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.758.
10. The Bank hereby confirms that it is on the SFMS (Structured Financial Messaging System) and shall invariably send the advice of this Bank Guarantee to the following bank details –

IFSC CODE	
IFSC TYPE	
BANK NAME	
BRANCH NAME	
CITY NAME	
ADDRESS	
DISTRICT	
STATE	
BG ENABLED	

11. The Guarantee shall be valid in addition to and without prejudice to any other security Guarantee(s) of Bidder in favour of the DFCCIL. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the DFCCIL.

Date

Place.....
signature(s)

Bank's Seal and authorized

[Name in Block letters]
[Designation with Code No.].....

[P/Attorney] No.

Witness:

- 1 Signature, Name & Address & Seal
- 2 Signature, Name & address & Seal

Bank's Seal

Note: All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.

Each Bidder or each member of a JV must fill in this form separately:

NAME OF BIDDER/JV PARTNER:

Annual Contractual Turnover Data for the Previous 3/4 Years (Contractual Payment only)			
Year	Amount Currency	Exchange Rate	Indian National Rupees Equivalent
Average Annual Contractual Turnover for last 3 years			

1. The average annual contractual turnover shall be calculated as an average of “total contractual payments” in the previous three financial years. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.
2. The information supplied shall be substantiated by data in the audited balance sheets and profit and loss accounts for the relevant years in respect of the bidder or all members constituting the bidder.
3. Contents of this form should be certified by a Chartered Accountant duly supported by Audited Balance Sheet duly certified by the Chartered Accountant.

SEAL AND SIGNATURE OF THE BIDDER

Certified that all figures and facts submitted in this form have been furnished after full consideration of all observations/notes in Auditor’s reports. _____

(Signature of Chartered Accountant)

Name of CA: _____

Registration No: _____

(Seal)

ANNEXURE – VII

PROFORMA FOR TIME EXTENSION

No. _____ Dated: _____

Sub: (i) _____ (name of work).

(ii) Acceptance letter no. _____

(iii) Understanding/Agreement no. _____

Ref: _____ (Quote specific application of Contractor for extension to the date received)

Dear Sir,

1. The stipulated date for completion of the work mentioned above is _____. From the progress made so far and the present rate of progress, it is unlikely that the work will be completed by the above date (or 'However, the work was not completed on this date').
2. Expecting that you may be able to complete the work if some more time is given, the competent authority, although not bound to do so, hereby extends the time for completion from _____ to _____.
3. Please note that an amount equal to the liquidated damages for delay in the completion of the work after the expiry of _____ (give here the stipulated date for completion with/without any liquidated damage fixed earlier) will be recovered from you as mentioned in Clause 17B of the Standard General Conditions of Contract for the extended period, notwithstanding the grant of this extension. You may proceed with the work accordingly.
4. The above extension of the completion date will also be subject to the further condition that no increase in rates on any account will be payable to you.
5. Please intimate within a week of the receipt of this letter your acceptance of the extension of the conditions stated above.
6. Please note that in the event of your declining to accept the extension on the above said conditions or in the event of your failure after accepting or acting upto this extension to complete the work by _____ (here mention the extended date), further action will be taken in terms of Clause 62 of the Standard General Conditions of Contract.

Yours faithfully

For and on behalf of the President of India

**PROFORMA OF 14 DAYS NOTICE FOR OFFLOADING OF PART OF CONTRACT
WORK**

DFCCIL

(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

In spite of repeated instructions to you by the subordinate offices as well as by this office through various letters of even no. _____, dated _____; you have failed to show adequate progress of work so as to complete the contract within the original / extended date of completion of contract and part(s) of contract work are yet to be started/ still lagging behind the agreed program of work, listed as under:

(Details of part(s) of work which is delayed and can be executed independently, to be mentioned).

2. Your attention is invited to this office/Chief Engineer's office letter no. _____, dated _____ in reference to your representation, dated _____.
3. As you have failed to abide by the instructions issued to commence the work /to show adequate progress of work, you are hereby given 14 days' notice in accordance with Clause 40A of the Standard General Conditions of Contract to deploy adequate resources i.e. *(the details of resource requirement, to be mentioned)* and commence / to make good the progress for part(s) of works detailed above, failing which action as provided in Clause 40A of the Standard General Conditions of Contract shall be commenced after expiry of 14 days' notice period viz. to offload few/ all part(s) of work mentioned above to any of the existing or new contractor without your participation and at your Risk & Cost, not exceeding the value of Performance Guarantee of this contract, which may please be noted.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

NOTICE FOR PART OF CONTRACT WORK OFFLOADED

DFCCIL

(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. Fourteen days' notice under Clause 40A of the Standard General Conditions of Contract was given to you under this office letter of even no., dated _____; but you have taken no/inadequate action to deploy adequate resources to commence the part(s) of work/show adequate progress of the part(s) of work, mentioned therein.

As you have failed to abide by the instructions issued to commence the part(s) of work/show adequate progress of the part(s) of work even at the lapse of 14 days' notice period under Clause 40A of the Standard General Conditions of Contract, few part(s) of the work under the contract have been offloaded and being executed by other mode(s) at the cost detailed below:

Or,

1. Please refer your request letter no..... dated, wherein it was requested under clause 40 A of the Standard General Conditions of Contract to offload part(s) of works at your risk & cost. The details of part(s) of the work under the contract which have been offloaded and being executed by other mode(s) at the cost detailed below:

(List of Part(s) of work offloaded, Details of mode of execution of such offloaded work alongwith approximate cost thereof to be mentioned)

2. The final measurement of work(s) already executed for above part(s) of work recorded as per clause 45 (A) or/and 45 (B) of the Standard General Conditions of Contract is enclosed herewith.

3. The Bill(s) of Quantities for Part(s) of work offloaded is enclosed herewith.

4. The additional cost in execution of offloaded work through mode(s) mentioned in para (1) above is determined as Rs. _____, over& above the cost of execution under this contract (including the PVC amount payable as per contract, as on the date of issue of this notice). This additional cost shall be recovered from your next on account bill(s)

or any other dues payable to you under contract.

5. The Contract value gets reduced to Rs.....:

6. You are requested to continue with the balance work in the contract subsequent to offloading of above part(s) of work.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

CERTIFICATE OF FITNESS

1. (a) Serial Number _____
(b) Date _____
2. Name of person examined _____
3. Father's Name: son/daughter of _____
Residing at _____
4. Sex _____
5. Residence:

6. Physical fitness _____
7. Identification marks _____
8. Date of birth, if available, and/or certified age _____

I certify that I have personally examined (name) _____ who is desirous of being employed in a factory or on a work requiring manual labour and that his/her age as nearly as can be ascertained from my examination, is _____ years.

I certify that he/she is fit for employment in a factory or on a work requiring manual labour as an adult/child.

9. Reasons for :
(a) Refusal to grant certificate, or _____
(b) Revoking the certificate _____

Signature or left hand

Thumb impression of the person examined.

Signature of Certifying Surgeon

Note: In case of physical disability, the exact details and cause of the physical disability should be clearly stated.

ANNEXURE – IX

**PROFORMA OF 7 DAYS NOTICE FOR WORKS AS A WHOLE/ IN PARTS
(DETAILS OF PART OF WORK TO BE MENTIONED)**

_____ **DFCCIL**
(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. In spite of repeated instructions to you by the subordinate offices as well as by this office through various letters of even no. _____, dated _____; you have failed to start work/show adequate progress and/or submit detailed programme for completing the work/ part of work (details of part of work to be mentioned).
2. Your attention is invited to this office/Chief Engineer's office letter no. _____, dated _____ in reference to your representation, dated _____.
3. As you have failed to abide by the instructions issued to commence the work /to show adequate progress of work you are hereby given 7 days' notice in accordance with Clause 62 of the Standard General Conditions of Contract to commence works / to make good the progress, failing which further action as provided in Clause 62 of the Standard General Conditions of Contract viz. to terminate your Contract and complete the balance work without your participation will be taken.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

ANNEXURE – X

Reference Para 62(1)

Registered Acknowledgement Due

PROFORMA OF 48 HRS. NOTICE FOR WHOLE WORK

DFCCIL

(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. Seven days' notice under Clause 62 of the Standard General Conditions of Contract was given to you under this office letter of even no., dated _____; but you have taken no action to commence the work/show adequate progress of the work.
2. You are hereby given 48 hours' notice in terms of Clause 62 of the Standard General Conditions of Contract to commence works / to make good the progress of works, failing which and on expiry of this period your above contract will be rescinded and the work under this contract will be carried out independently without your participation and your Security Deposit shall be forfeited and Performance Guarantee shall also be encashed and any other consequences which may please be noted.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

ANNEXURE – XI

Reference Para 62.(1)

Registered Acknowledgement Due

PROFORMA OF TERMINATION NOTICE

DFCCIL

(Without Prejudice)

No. _____

Dated _____

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

Forty eight hours (48 hrs.) notice was given to you under this office letter of even no., dated _____; but you have taken no action to commence the work/show adequate progress of the work.

Since the period of 48 hours' notice has already expired, the above contract stands rescinded in terms of Clause 62 of the Standard General Conditions of Contract and the balance work under this contract will be carried out independently without your participation. Your participation as well as participation of every member/partner in any manner as an individual or a partnership firm/JV is hereby debarred from participation in the tender for executing the balance work and your Security Deposit shall be forfeited and Performance Guarantee shall also be encashed.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

ANNEXURE – XII

Reference Para 62.(1)

Registered Acknowledgement Due

PROFORMA OF 48 HRS. NOTICE FOR PART OF THE WORK.....

(DETAILS OF PART OF WORK TO BE MENTIONED)

_____ DFCCIL

(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. Seven days' notice under Clause 62 of the Standard General Conditions of Contract was given to you under this office letter of even no., dated _____; but you have taken no action to commence the work/show adequate progress of the part of work.....(details of part to be mentioned).
2. You are hereby given 48 hours' notice in terms of Clause 62 of the Standard General Conditions of Contract to commence works / to make good the progress of works, failing which and on expiry of this period your above part of work.....(Details of part to be mentioned) in contract will be rescinded and the work will be carried out independently without your participation.
3. Your full Performance Guarantee for the contract shall be forfeited and you shall not be issued any completion certificate for the contract. However, no additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract.
4. The contract value of part terminated contract shall stands reduced to

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

ANNEXURE – XIII

Reference Para 62.(1)

Registered Acknowledgement Due

**PROFORMA OF TERMINATION NOTICE FOR PART OF THE WORK.....
(DETAILS OF PART OF WORK TO BE MENTIONED)**

DFCCIL

(Without Prejudice)

No. _____

Dated _____

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. Forty eight hours (48 hrs.) notice was given to you under this office letter of even no., dated _____; but you have taken no action to commence the work/show adequate progress of the part of work.....(details of part to be mentioned).
2. Your above part of work in contract(details of part to be mentioned) stands rescinded in terms of Clause 62 of the Standard General Conditions of Contract and the same will be carried out independently without your participation. Your participation as well as participation of every member/partner in any manner as an individual or a partnership firm/JV is hereby debarred from participation in the tender for executing the balance work
3. Your full Performance Guarantee for the contract shall be forfeited and you shall not be issued any completion certificate for the contract. However, no additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract.
4. The contract value of part terminated contract stands reduced to

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

FINAL SUPPLEMENTARY AGREEMENT

1. Articles of agreement made this day _____ in the year _____ between the President of India, acting through the _____ DFCCIL Administration having his office at _____ herein after called the DFCCIL of the one part and _____ of the second part.
2. Whereas the party hereto of the second part executed an agreement with the party hereto of the first part being agreement Number _____ dated _____ for the performance _____ herein after called the 'Principal Agreement'.
3. 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.
4. And whereas the party hereto of the first part already made payment to the party hereto of the second part diverse sums from time to time aggregating to ₹ _____ including the Final Bill bearing voucher No. _____ dated _____ of value _____ duly adjusted as per price variation clause, if applicable (the receipt of which is hereby acknowledged by the party hereto of the second part in full and final settlement of all his /its claims under the principal agreement.

And whereas the party hereto of the second part have received sum of ₹ _____ through the Final Bill bearing voucher No. _____ dated _____ duly adjusted as per price variation clause (PVC), if applicable (the receipt of which is hereby acknowledged by the party thereto of the second part) from the party hereto of the first part in full and final settlement of all his/its disputed claims under 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 excluding the Security Deposit, the party hereto of the second part have no further dues of claims against the party hereto of the first part under the said Principal Agreement. It is further agreed by and between the parties that the 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.

(Applicable in case Final Supplementary Agreement is signed after release of Final Payment)

Or

And whereas the party hereto of the first part already made payment to the party hereto of the second part diverse sums from time to time aggregating to ₹ _____ through various On Account Bills (the receipt of which is hereby acknowledged by the party hereto of the second part).

And whereas the party hereto of the second part have received sum of ₹ _____ through various On Account Bills (the receipt of which is hereby acknowledged by the party thereto of the second part) from the party hereto of the first part and party hereto of the second part have accepted final measurements recorded on Page No..... to Page No.... of Measurement Book No.....and corresponding Final Bill duly adjusted as per price

variation clause (PVC), if applicable, for full and final settlement of all his/its disputed claims under principal agreement.

Now, it is hereby agreed by and between the parties in the consideration of sums already paid through various On Account Bills and sums to be paid through Final Bill duly adjusted as per price variation clause (PVC), if applicable, based on accepted final measurements including the Security Deposit 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, the party hereto of the second part have no further dues of claims against the party hereto of the first part under the said Principal Agreement.

(Applicable in case Final Supplementary Agreement is signed before release of Final Payment)

5. 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 be deemed to be non-existent for all purposes.

Signature of the Contractor/s _____

for and on behalf of the President of India

Witnesses _____

ADDRESS: _____

Agreement towards Waiver under Section 12(5) and Section 31A (5) of Arbitration and Conciliation (Amendment) Act

I/we..... (Name of agency/Contractor) with reference to agreement no..... raise disputes as to the construction and operation of this contract, or the respective rights and liabilities, withholding of certificate and demand arbitration in respect of following claims :

Brief of claim:

- (i) Claim 1- Detailed at Annexure-
- (ii) Claim 2 –
- (iii) Claim 3 –

I/we..... (post of Engineer) with reference to agreement no..... hereby raise disputes as to the construction and operation of this contract, or the respective rights and liabilities, withholding of certificate and demand arbitration in respect of following claims:

I/we.....do/do not agree to waive off applicability of section 12(5) of Arbitration and Conciliation (Amendment) Act.

Signature of Claimant_____ Signature of Respondent

Agreement under Section 31(5)

zzI/we..... (Name of claimant) with reference to agreement no..... hereby waive off the applicability of sub section 31-A (2) to 31-A (4) of the Arbitration and Conciliation (Amendment) Act. We further agree that the cost of arbitration will be shared by the parties as per Clause 64(6) of the Standard General Conditions of Contract.

.

Signature of Claimant_____ Signature of Respondent_____

*Strike out whichever not applicable.

**Certification by Arbitrators appointed under Clause 63 & 64 of Indian Railways
General Conditions of Contract**

1. Name:
2. Contact Details:
3. Prior experience (Including Experience with Arbitrations):
4. **I do not have more than ten on-going Arbitration cases with me.**
5. I hereby certify that I have retired from Railways w.e.f. _____ and empanelled as DFCCIL Arbitrator as per 'The Arbitration and Conciliation Act- 1996'.
6. I have no any past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind.
Or
I have past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind. The list of such interests is as under:
7. I have no any past or present relationship with or interest in any of the parties whether financial, business, professional or other kind, which is likely to give rise to justifiable doubts as to my independence or impartiality in terms of The Arbitration and Conciliation Act-1996.
Or
I have past or present relationship with or interest in any of the parties whether financial, business, professional or other kind, which is likely to give rise to justifiable doubts as to my independence or impartiality in terms of The Arbitration and Conciliation Act-1996. The details of such relationship or interests are as under:
8. There are no concurrent Circumstances which are likely to affect my ability to devote sufficient time to the arbitration and in particular to finish the entire arbitration within twelve months.
Or
There are Circumstances which are likely to affect my ability to devote sufficient time to the arbitration and in particular to finish the entire arbitration within twelve months. The list of such circumstances is as under:

ANNEXURE-XVII

Format of Bank Guarantee for Performance Security

Bank Guarantee No. :.....

Dated :.....

To,

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

Acting through Chief General Manager JP DFCCIL, CGM/JP, DFCCIL, C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur – 302020.

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 not withstanding 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 :.....

FINANCIAL OFFER

Form no-1

Description of Work:- Maintenance of 2x25kV Power Supply Installation in New Rewari-Madar section of DFCCIL including the Phulera UP & DN link lines, Kishangarh Balawas, Kathuwas connection to Indian Railways for a period of 24 (Twenty Four) months under CGM Jaipur Unit.

PSI Maintenance Activity

Schedule 1 Maintenance of Traction Sub Stations:

S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
1	Monthly Maintenance of 132/220 kV/55kV, 60/84/100 MVA Traction Power Transformer.	Each	160	1667.21	266753.60
2	Half Yearly Maintenance of 132/ 220 kV/55kV, 60/84/100 MVA Traction Power Transformer.	Each	16	2230.94	35695.04
3	Yearly Maintenance of 132/220 kV/55kV, 60/84/100 MVA Traction Power Transformer.	Each	16	3487.34	55797.44
4	Monthly Maintenance of 132/220kV TP SF-6 Circuit Breaker	Each	160	1115.47	178475.20
5	Half Yearly Maintenance of 132/220kV TP SF-6 Circuit Breaker	Each	16	1737.68	27802.88
6	Yearly Maintenance of 132 kV/220kV TP SF-6 Circuit Breaker	Each	16	2090.00	33440.00
7	Three Yearly Maintenance of 132/220kV TP SF-6 Circuit Breaker	Each	8	2090.00	16720.00
8	Monthly Maintenance of 132/220kV Current Transformer (Protection)	Each	480	551.73	264830.40
9	Half Yearly Maintenance of 132/220kV Current Transformer	Each	48	828.31	39758.88

10	Yearly Maintenance of 132/220kV Current Transformer (Protection)	Each	48	1115.47	53542.56
11	Three Yearly Maintenance of 132/220kV Current Transformer	Each	24	1115.47	26771.28
12	Monthly Maintenance of 132/220kV Current Transformer (Metering)	Each	2400	551.73	1324152.00
13	Half Yearly Maintenance of 132/220kV Current Transformer (Metering)	Each	240	833.60	200064.00
14	Yearly Maintenance of 132/220kV Current Transformer (Metering)	Each	240	1115.47	267712.80
15	Three Yearly Maintenance of 132/220kV Current Transformer (Metering)	Each	120	1115.47	133856.40
16	Half Yearly Maintenance of 132/220kV Potential Transformer (Metering PT)	Each	240	551.73	132415.20
17	Yearly Maintenance of 132/220kV Potential Transformer (Metering PT)	Each	240	1115.47	267712.80
18	Monthly Maintenance of 120/198 kV Lightning Arrester	Each	864	1400.90	1210377.60
19	Quarterly Maintenance of 120/198 kV Lightning Arrester	Each	216	1400.90	302594.40
20	Half Yearly Maintenance of 120/198 kV Lightning Arrester	Each	108	1115.47	120470.76
21	Yearly Maintenance of 120/198 kV Lightning Arrester	Each	108	1115.47	120470.76
22	Monthly Maintenance of 132/220kV TP Motorised Isolator with or without earthing heel	Each	460	552.58	254186.80
23	Half Yearly Maintenance of 132/220kV TP Motorised Isolator with or without earthing heel	Each	46	833.60	38345.60
24	Yearly Maintenance of 132/220kV TP Motorised Isolator with or without earthing heel	Each	46	1256.40	57794.40
25	Monthly Maintenance of 55 kV Current Transformer	Each	2240	551.73	1235875.20

26	Half Yearly Maintenance of 55 kV Current Transformer	Each	224	833.60	186726.40
27	Yearly Maintenance of 55 kV Current Transformer	Each	224	1115.47	249865.28
28	Three Yearly Maintenance of 55 kV Current Transformer	Each	112	1115.47	124932.64
29	Monthly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker	Each	920	422.49	388690.80
30	Half Yearly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker	Each	92	833.60	76691.20
31	Yearly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker	Each	92	1665.52	153227.84
32	Three Yearly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker	Each	46	1665.52	76613.92
33	Monthly Maintenance of 55 /72.5 kV DP Motorised Isolator without earthing heel	Each	1720	829.43	1426619.60
34	Half Yearly Maintenance of 55/72.5 kV DP Motorised Isolator without earthing heel	Each	172	1396.46	240191.12
35	Yearly Maintenance of 55/72.5 kV DP Motorised Isolator without earthing heel	Each	172	2089.13	359330.36
36	Monthly Maintenance of 42/ 60 kV Lightning Arrester	Each	1472	422.49	621905.28
37	Quarterly Maintenance of 42/60 kV Lightning Arrester	Each	368	422.49	155476.32
38	Half Yearly Maintenance of 42/60 kV Lightning Arrester	Each	184	692.67	127451.28
39	Yearly Maintenance of 42/ 60 kV Lightning Arrester	Each	184	692.67	127451.28
40	Monthly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformer	Each	400	1666.63	666652.00
41	Half Yearly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformer	Each	40	2229.22	89168.80

42	Yearly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformer	Each	40	3485.59	139423.60
43	Quarterly Maintenance of 25 kV Potential Transformer Protection PT	Each	80	551.73	44138.40
44	Half Yearly Maintenance of 25 kV Potential Transformer Protection PT	Each	40	833.88	33355.20
45	Yearly Maintenance of 25 kV Potential Transformer Protection PT	Each	40	1115.47	44618.80
46	Monthly Maintenance of 25 kV Current Transformer at Auto Transformer	Each	800	551.73	441384.00
47	Half Yearly Maintenance of 25 kV Current Transformer	Each	80	833.88	66710.40
48	Yearly Maintenance of 25 kV Current Transformer	Each	80	1115.47	89237.60
49	Three Yearly Maintenance of 25 kV Current Transformer	Each	40	1115.47	44618.80
50	Monthly Maintenance of 25 kV DP Circuit Breaker	Each	400	422.80	169120.00
51	Half Yearly Maintenance of 25 kV DP Circuit Breaker	Each	40	833.60	33344.00
52	Yearly Maintenance of 25 kV DP Circuit Breaker	Each	40	1667.21	66688.40
53	Monthly Maintenance of 25 kV DP Motorised Isolator without earthing heel	Each	800	833.88	667104.00
54	Half Yearly Maintenance of 25 kV DP Motorised Isolator without earthing heel	Each	80	1397.34	111787.20
55	Yearly Maintenance of 25 kV DP Motorised Isolator without earthing heel	Each	80	2090.00	167200.00
56	Monthly Maintenance of 25 kV DP Interrupter	Each	200	422.80	84560.00
57	Half Yearly Maintenance of 25 kV DP Interrupter	Each	20	833.60	16672.00

58	Yearly Maintenance of 25 kV DP Interrupter	Each	20	1667.21	33344.20
59	Quarterly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer	Each	40	422.80	16912.00
60	Half Yearly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer	Each	20	833.60	16672.00
61	Yearly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer	Each	20	2230.94	44618.80
62	Monthly Maintenance of 55kV/0.65 kV, 3 MVA Transformer capacitor bank	Each	200	422.49	84498.00
63	Half Yearly Maintenance of 55kV/0.65 kV, 3 MVA Transformer capacitor bank	Each	20	829.43	16588.60
64	Yearly Maintenance of 55kV/0.65 kV, 3 MVA Transformer capacitor bank	Each	20	2229.22	44584.40
65	Quarterly maintenance of 2500 KVAR CAPACITOR BANK INCLUDING SERIES REACTOR	Each	40	833.60	33344.00
66	Half yearly maintenance of 2500 KVAR CAPACITOR BANK INCLUDING SERIES REACTOR	Each	20	2230.94	44618.80
67	Yearly maintenance of 2500 KVAR CAPACITOR BANK INCLUDING SERIES REACTOR	Each	20	3346.41	66928.20
68	Quarterly Maintenance of 25 kV Neutral Current Transformer	Each	60	833.60	50016.00
69	Yearly Maintenance of 25 kV Neutral Current Transformer	Each	20	1667.21	33344.20
70	Fortnightly battery & battery charger maintenance of TSS	Each	220	551.73	121380.60
71	Yearly battery & battery charger maintenance of TSS	Each	10	13373.66	133736.60
72	Half Yearly maintenance of Earthing station	Each	874	211.41	184772.34
73	Yearly maintenance of Earthing station	Each	874	211.41	184772.34

74	Yearly maintenance of Buried Rail Connection	Each	10	22297.42	222974.20
75	Half Yearly maintenance of Thermal Imaging of Equipment connector	Each	3000	551.73	1655190.00
76	Yearly Maintenance of Earth Screen Conductor	Each	10	2090.00	20900.00
77	Yearly maintenance of Cable Trench Cleaning	Each	10	11142.71	111427.10
78	Reclamation of DCP (5kG,10 kG & 25 kG),CO2(9kG) & foam type fire extinguisher.	Each	20	84.40	1688.00
79	Refilling of DCP(5kG,10 kG & 25 kG),CO2(9kG) & foam type fire extinguisher.	Each	20	687.46	13749.20
	Total			Total Schedule 01	17092632.10

Schedule 2 SP/SSPs/ATS/PP Maintenance :

S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
1	Monthly Maintenance of 8 MVA Auto Transformer	Each	800	1666.63	1333304.00
2	Half Yearly Maintenance of 8 MVA Auto Transformer	Each	80	2229.22	178337.60
3	Yearly Maintenance of 8 MVA Auto Transformer	Each	80	3485.59	278847.20
4	Monthly Maintenance of 25 kV Current Transformer at Auto Transformer	Each	1600	551.73	882768.00
5	Half Yearly Maintenance of 25 kV Current Transformer	Each	160	833.88	133420.80
6	Yearly Maintenance of 25 kV Current Transformer	Each	160	1115.47	178475.20
7	Three Yearly Maintenance of 25 kV Current Transformer	Each	80	1115.47	89237.60
8	Monthly Maintenance of 25 kV DP Circuit Breaker	Each	50	422.80	21140.00
9	Half Yearly Maintenance of 25 kV DP Circuit Breaker	Each	50	833.60	41680.00

10	Yearly Maintenance of 25 kV DP Circuit Breaker	Each	50	1667.21	83360.50
11	Monthly Maintenance of 25 kV DP Interrupter	Each	2420	422.80	1023176.00
12	Half Yearly Maintenance of 25 kV DP Interrupter	Each	242	833.60	201731.20
13	Yearly Maintenance of 25 kV DP Interrupter	Each	242	1667.21	403464.82
14	Monthly Maintenance of 25 kV DP Isolator (Manual)	Each	6080	829.43	5042934.40
15	Half Yearly Maintenance of 25 kV DP Isolator (Manual)	Each	608	1397.34	849582.72
16	Yearly Maintenance of 25 kV DP Isolator (Manual)	Each	608	2090.00	1270720.00
17	Monthly Maintenance of 25 kV SP Isolator (Manual)	Each	520	422.49	219694.80
18	Half Yearly Maintenance of 25 kV SP Isolator (Manual)	Each	52	833.60	43347.20
19	Yearly Maintenance of 25 kV SP Isolator (Manual)	Each	52	1256.40	65332.80
20	Quarterly Maintenance of 25 kV Potential Transformer (Type-I)	Each	180	551.73	99311.40
21	Half Yearly Maintenance of 25 kV Potential Transformer (Type-I)	Each	90	833.88	75049.20
22	Yearly Maintenance of 25 kV Potential Transformer (Type-I)	Each	90	1115.47	100392.30
23	Quarterly Maintenance of 25 kV Potential Transformer (Type-II)	Each	80	551.73	44138.40
24	Half Yearly Maintenance of 25 kV Potential Transformer (Type-II)	Each	40	833.88	33355.20
25	Yearly Maintenance of 25 kV Potential Transformer (Type-II)	Each	40	1115.47	44618.80
26	Monthly Maintenance of 42 kV Lightning Arrester	Each	5472	422.49	2311865.28

27	Quarterly Maintenance of 42 kV Lightning Arrester	Each	1368	422.49	577966.32
28	Half Yearly Maintenance of 42 kV Lightning Arrester	Each	684	692.67	473786.28
29	Yearly Maintenance of 42 kV Lightning Arrester	Each	684	692.67	473786.28
30	Quarterly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer	Each	272	422.80	115001.60
31	Half Yearly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer	Each	136	833.60	113369.60
32	Yearly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer	Each	136	2230.94	303407.84
33	Fortnightly battery & battery charger maintenance at SCPs	Each	2992	551.73	1650776.16
34	Yearly Maintenance of Battery AND Battery Charger	Each	68	13373.66	909408.88
35	Half Yearly maintenance of Earthing station	Each	1696	211.41	358551.36
36	Yearly maintenance of Earthing station	Each	1696	211.41	358551.36
37	Yearly Buried Rail Connection	Each	30	22297.42	668922.60
38	Monthly Maintenance of 25 kV SP Interrupter	Each	260	422.80	109928.00
39	Half Yearly Maintenance of 25 kV SP Interrupter	Each	26	833.60	21673.60
40	Yearly Maintenance of 25 kV SP Interrupter	Each	26	1667.21	43347.46
41	Half Yearly Thermal Imaging of Equipment connector	Each	4208	551.73	2321679.84
42	Yearly Maintenance of Earth Screen Conductor	Each	68	2090.00	142120.00
43	Yearly maintenance of Cable Trench Cleaning	Each	68	4461.89	303408.52

44	Reclamation of DCP(5kG,10 kG & 25 kG),CO2(9kG) & foam type fire extinguisher.	Each	136	84.40	11478.40
45	Refilling of DCP(5kG,10 kG & 25 kG),CO2(9kG) & foam type fire extinguisher.	Each	136	687.46	93494.56
Total				Total Schedule 02	24099944.08

Schedule 3 -Panels & Gantry Bus Bar insulator other Maintenance:

S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
1	Monthly panel maintenance in TSS	Each	120	3446.65	413598.00
2	Monthly panel maintenance in SP/SSP	Each	816	1723.32	1406229.12
3	Half yearly Cross gantry or any others Gantry Bus Bar maintenance of TSS	Each	20	19957.75	399155.00
4	Half yearly Cross gantry or any others Gantry Bus Bar maintenance of SP/SSPs	Each	120	13787.91	1654549.20
5	Half yearly Cross gantry or any others Gantry Bus Bar maintenance of PPs	Each	16	6893.96	110303.36
6	Removal and re-erection of PSI Equipment	Each	20	6894.61	137892.20
7	Supply & Erection of Caution Board	Each	100	370.02	37002.00
8	Supply and spreading of ballast/Pebbles/Gravels in Switching Stations/TSS yard	CUM	500	1665.65	832825.00
9	Reinforce concrete for cable trench & cover	Sqm.	250	1603.16	400790.00
10	Supply and repainting of PSI Equipment like Transformer CT ,PT ,LA , BM, CB, AT as per site requirement with water proof grey enamelled paint by approved brand i.e. Asian Berger etc. as per IS 2932 or latest	Sqm.	4000	47.12	188480.00

11	Supply and repainting of PSI assets i.e.. Fencing Panels, Fencing UP right, barbed wire, Tubular pole at TSS/SP/SSP with Aluminum Paint i.e. Asian Berger etc. as per IS 2339 or latest	Sqm.	8000	43.03	344240.00
12	Supply and erection of Earth Pit cover & Box	Each	75	1094.04	82053.00
13	Provision of Shock Treatment Chart	Each	50	1050.20	52510.00
14	Drilling of holes in mast/ rails with contractor own labour and T&P complete.	Each	40	45.46	1818.40
15	Monthly removal of Wild vegetation in TSS/SP/SSPs	Sq. m	62040	12.30	763092.00
16	Supply and erection of earth leads 75 x 8 mm mild steel flat laid in the ground or exposed as per site requirement	Mtr	200	313.93	62786.00
17	Supply and erection of earth leads 50 x 6 mm mild steel flat laid in the ground or exposed as per site requirement	Mtr	500	174.54	87270.00
18	Supply and erection of 8 SWG GI Wire for earthing	Mtr	200	45.69	9138.00
19	Loading, Unloading & Transportation of DFCCIL Supplied material (Applicable for material more than 2 MT)	Each occasion	50	4093.80	204690.00
20	Hiring of 15T crane on hourly basis	Hrs	50	1785.90	89295.00
21	Supply, fixing & commissioning of 300 mm sweep exhaust fan with louver shutter. As per specification.	Each	20	1459.89	29197.80

22	Supplying and Fixing of fire bucket stand made out of MS angle with one coat of primer and two coat of enamel paint of approved shade including platform and associated civil works each stand should have four nos fire buckets of 24 gauge galvanized steel sheet, standard 9 liter capacity and of round bottom shape, painted white inside and red outside and black on the bottom, inscribed with letters "Fire" in black and gold at approved location as per direction of Engineer in charge.	Each	20	3903.96	78079.20
23	Supply of First Aid Box made of GI/AL Sheet, ISI Marked filled with Medicines as per Railway standards with suitable locking arrangement & approved by DFCCIL	Each	40	2525.41	101016.40
24	Supply and fixing of 160W or above LED Floodlight comprising Die cast aluminium housing with toughened glass complete with Electronic driver, Luminaries has the System lumen efficacy of 100 lumen/Watt as per specification.	Each	20	20262.82	405256.40
25	Rubber mat (ISI marked) non stick type suitable for 11 kv AC supply of size 2000x1000x25mm as per specification.	Each	50	896.88	44844.00
26	Supply and erection of earth lead using 75x8 mm GI flat laid in ground/exposed as per the site requirement.	Mtrs	500	854.45	427225.00
27	Supply of Fire Buckets of 10 Ltrs capacity	Each	40	387.90	15516.00
28	N2 Gas Filling including testing of cylinder	Per Cylinder	78	1085.60	84676.80
				Total Schedule 03	8463527.88

Schedule 4 -TSS Manning & House keeping					
S.No	Description of Work	Unit	Total Quantity	Unit Rate incl 18 % GST	Total Amount (Rs.)
1	Regular House Keeping of TSS	Man days	3650	728.96	2660704.00
2	Manning of TSS	Man days	10950	1203.27	13175806.50
	Total			Total Schedule - 04	15836510.50
Schedule 5 -Break down attention					
S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
1	Breakdown attention of PSI equipments at TSS/SP/SSPs	Hrs	180	740.54	133297.20
2	Maintenance of 25 KV dropout fuse AT TSS/SP/SSP	Each	50	1240.80	62040.00
3	Manning of SP/SSP in case of Emergency	Man Days	120	1468.51	176221.20
4	Excavation and casting foundation and plinth by Concrete in all kind of soil including hard soil and rocky soil	Cum	25	9900.53	247513.25
				Total Schedule - 05	619071.65

Schedule 6 Additional PSI maintenance Activity					
S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
1	Dismantling, supply, erection & commissioning of LA, CT, PT, CB & BM in case of break down/bursting of the equipment- As per Appendix-A	As per Appendix -A	As per Requirement		2500000
				Total Schedule - 06	2500000

Schedule 7: Maintenance of Traction Sub Stations /SCPs (Optional)					
S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
1	Oil Filtration for power Transformer: Streamline Oil filtration work & Conservator tank	Litres	L.S	2.56	
2	Oil Filtration for power Transformer :Oil to be drained from main tank and to be stored in separate Containers	Litres	L.S	0.68	
3	Oil Filtration for power Transformer: Refilling of oil from container to Main Tank after filtration.	Litres	L.S	0.68	
4	Bushings Oil leakage attention in Transformer: Streamline Oil filtration work & Conservator tank	Litres	L.S	2.56	
5	Bushings Oil leakage attention in Transformer: Oil to be drained from main tank and to be stored in separate Containers	Litres	L.S	0.68	
6	Bushings Oil leakage attention in Transformer: Refilling of oil from container to Main Tank after filtration.	Litres	L.S	0.68	

7	Bushings Oil leakage attention in Transformer: Leakage attention to OLTC tapping Gear and new Gasket O-ring changing work	Job	L.S	7602.35	
8	Bushings Oil leakage attention in Transformer: Leakage attention of HV Bushings - 3 Nos and bottom Flange and its related works	Job	L.S	16586.92	
9	Bushings Oil leakage attention in Transformer: Leakage attention of LV Bushing CT Box and replacement of new gasket and its related works	Job	L.S	4146.73	
10	Bushings Oil leakage attention in Transformer: Leakage attention of HV inspection covers, Pipe line Gasket attention and replacement and its related works	Job	L.S	7602.35	
11	Bushings Oil leakage attention in Transformer: Rental Charges for Cranes	Day	L.S	7602.35	
12	Bushings Oil leakage attention in Transformer: Transport charges for oil filtration van up & down, Toll	Trip	L.S	15273.80	
13	Bushings Oil leakage attention in Transformer: Transport Charges for empty barrels vehicle up & down, Toll	Trip	L.S	23498.15	
14	Bushings Oil leakage attention in Transformer: Supply of Grade-1 New gasket (6mm and 10mm)	Set	L.S	9675.71	
15	Bushings Oil leakage attention in Transformer: Oil leakage attention and overhauling of TAP Changer Streamline Oil filtration work & Conservator tank	Litres	L.S	2.48	
16	Bushings Oil leakage attention in Transformer: Oil to be drained from main tank and to be stored in separate Containers	Litres	L.S	0.68	

17	Bushings Oil leakage attention in Transformer: Refilling of oil from container to Main Tank after filtration.	Litres	L.S	0.68	
18	Oil Leakage attention and overhauling of TAP changer: Leakage attention to OLTC tapping gear and new Gasket O ring changing work	Job	L.S	6220.09	
19	Oil Leakage attention and overhauling of TAP changer: Rental and Transportation charges for oil barrels for storing Transformer oil	Job	L.S	8984.59	
20	Oil Leakage attention and overhauling of TAP changer Transformer oil Transportation charges for oil filtration van up & down	Trip	L.S	4976.08	
21	Calibration of Measuring instruments [Will be paid based on the submission of proof of bill of calibrated instruments in the NABL accredited labs]	LS	L.S	58569.66	
	Total			Total Schedule - 07	500000

Schedule 8: Maintenance & Replacement of OEM Recommended spare including Erection charges @ 10 %

S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
A	220 kV , 2000A Crompton greaves Make Triple Pole SF-6 Circuit Breaker				
1	Service charges for deputing of service engineer for attending the breakdown complaint of 72.5 KV, 145 KV, 245 KV Sf6 Circuit Breakers, Make CGPISL	Each		41300	
2	Supply & Erection of Big Pawl with Bush	Each		9363.30	

3	Supply & Erection of Small Pawl with Bush	Each		8778.43	
4	Supply & Erection of Ratchet Wheel Bearing Assly	Each		49937.60	
5	Supply & Erection of Closing Latch	Each		13905.18	
6	Supply & Erection of Roller Lever Assly	Each		7413.29	
7	Supply & erection of 3 Bond Compound (1 PKT = 10 Gms)	Each		1158.88	
8	Supply & Erection of O Ring P-7	Each		579.44	
9	Supply & Erection of O Ring P-12	Each		579.44	
10	Supply & Erection of O Ring P-18	Each		579.44	
11	Supply of Emery Pad	Each		63.78	
12	Supply & Erection of Etna Seal Set	Each		21568.16	
13	Supply & Erection of O-Ring P-260	Each		5794.39	
14	Supply & Erection of O-Ring G-170	Each		4171.42	
15	Supply & Erection of O-Ring P-32	Each		632.36	
16	Supply & Erection of O-Ring 333.5	Each		5852.74	
17	Torsion spring for big pawl	Each		464.63	
18	Torsion spring for small pawl	Each		464.63	
19	145 Trigger assembly for 245 LEM	Each		11615.63	
20	Spring Charging Motor.	Each		13548.47	
21	Trip Coil	Each		10035.90	
22	Closing Coil	Each		5017.95	
23	Spring Trig Torsion	Each		1162.18	
24	Darina Grease (1Pkt.=500 gms.)	Each		1538.84	

25	Contactors	Each	4414.56	
26	Dilo gas valve	Each	8518.13	
27	Anabond 680/Silastic 1080(1 Tube =100 gms.)	Each	701.27	
28	Gas Pressure Gauge	Each	5687.01	
29	Gas Density Switch	Each	58542.75	
30	Operation counter.	Each	3252.38	
31	Limit Switch	Each	3717.00	
32	Hardware Set + Circlip set	Each	6582.81	
33	Closing Trigger Assly	Each	7434.00	
34	Absorbent	Each	8886.11	
35	Microcarbon Grease (1 Pkt=50Gms)	Each	1212.98	
36	Jointal-Z (1 Pkt =10Gms)	Each	1003.59	
B	132kV, 1600A Crompton greaves Make Triple Pole SF-6 Circuit Breaker			
37	Supply & Erection of Motor 230V AC/DC(TYPE C-22)	Each	17064.28	
38	Supply & Erection of Closing Holding Latch	Each	6215.06	
39	Supply & Erection of Ratchet Wheel Assly, With Black Bolt, Stop Roller, Bearing & Bar Pin	Each	47401.37	
40	Supply & Erection of Closing Trigger With Bearing	Each	8637.31	
41	Supply & Erection of Tripping Trigger With Bearing	Each	8006.30	
42	Supply & Erection of Small Pawl With Bearing	Each	10744.73	
43	Supply & Erection of Large Pawl With Bearing	Each	11060.91	
44	Supply & Erection of Eccentric Shaft Bearing (4906) Front	Each	5983.01	
45	Supply & Erection of Eccentric Shaft Bearing (4904) Rear	Each	3581.12	

46	Supply & Erection of Thrust Bearing 4060 For Black Bolt	Each		1105.96	
47	Supply & Erection of Thrust Washer For Black Bolt (Thin)	Each		612.01	
48	Supply & Erection of Thrust Washer For Black Bolt (Thick)	Each		1791.24	
49	Supply & Erection of Bearing For Closing Spring Rod	Each		3160.45	
50	Supply & Erection of Bush For Closing Spring Rod	Each		1370.57	
51	Supply & Erection of Brass Washer For Black Bolt (Thin)	Each		105.85	
52	Supply & Erection of O Ring P-7	Each		579.44	
53	Supply & Erection of O Ring P-12	Each		579.44	
54	Supply & Erection of O Ring P-18	Each		579.44	
55	Supply & Erection of Torsion Spring (Left)	Each		584.87	
56	Supply & Erection of Torsion Spring (Right)	Each		584.87	
57	Supply & Erection of 3 Bond Compound (1 Pkt =10 gms.)	Each		1158.88	
58	Supply & Erection of Set Of Circlip, Grub Screw, Split Pins etc.	Each		2528.09	
59	Supply & Erection of Space Heater 240VAC/250W	Each		1791.24	
60	Supply & Erection of Gas Pressure Gauge	Each		7163.60	
61	Supply & Erection of Gas Density Switch	Each		73736.67	
62	Supply & Erection of Dilo Gas Valve	Each		10728.44	
63	Supply & Erection of Etna Seal Set	Each		21568.16	
64	Supply & Erection of O-Ring P-105	Each		5213.59	

65	Supply & Erection of O-Ring G-240	Each		5562.34	
66	Supply & Erection of Absorbent	Each		11192.54	
67	Supply & Erection of Microcarbon Grease (1 Pkt.= 50 gms.)	Each		1527.98	
68	Supply & Erection of Anabond 680/Silastic 1080 (1 Tube=100 gms.)	Each		883.41	
69	Supply & Erection of Jional - Z (1 Pkt = 10 gms.)	Each		1264.72	
70	Limit Switch (1 NO + 1 NC)	Each		2911.65	
71	Motor Contractor 110V/220DC (with ADDON Block)	Each		3931.35	
72	Closing Coil 110V/220V	Each		5017.95	
73	Trip Coil (2Nos. = 1 Set) 110/220V DC	Each		9726.15	
74	Berutox Grease (1 Pkt.-100gms)	Each		2174.45	
75	Loctite (01 Pkt - 20ml)	Each		644.28	
76	Catch Spring	Each		133.81	
77	Muslin Cloth	Meter		50.80	
78	Emery Pad	Each		50.80	
C	66kV, 2000A Crompton greaves Make Double Pole SF-6 Circuit Breaker				
79	Supply & Erection of Small Pawl with Bush	Each		6320.91	
80	Supply & Erection of Big Pawl with Bush	Each		6320.91	
81	Supply & Erection of Pawl Stopper Rollers	Each		6637.09	
82	Supply & Erection of Crank Lever with Bush & Bolt	Each		8849.00	
83	Supply & Erection of Trip latch Assembly	Each		9480.00	
84	Supply & Erection of Closing Latch Assembly	Each		13905.18	

85	Supply & Erection of Ratchet Wheel	Each		43890.81	
86	Supply & Erection of Gas Density Switch Cum Pressure Gauge	Each		82513.74	
87	Supply & Erection of Dilo Gas Valve	Each		10728.44	
88	Supply & Erection of Anabond 680/Silastic 1080 (1 Tube=100 gms.)	Each		883.41	
89	Supply & Erection of Trigger Assembly	Each		14629.82	
90	Supply & Erection of O-Ring G-180	Each		8045.65	
91	Supply & Erection of O-Ring P-105	Each		5213.59	
92	Supply & Erection of O Ring 252MM ID X 4.5THK 145SP SSF	Each		8045.65	
93	Supply & Erection of Absorbent	Each		11192.54	
94	Supply of Microcarbon Grease (1 PKT =50 gms.)	Each		1527.98	
95	Supply of Jointal - Z (1 Pkt = 10 gms.)	Each		1264.72	
96	Supply of 3 Bond Compound (1 PKT = 10 gms.)	Each		1158.88	
97	Supply & Erection of Etna Seal Set	Each		20725.46	
98	Limit Switch with Bracket	Each		1405.03	
99	Operation Counter	Each		2843.51	
100	Motor contactor with ADD ON Block	Each		3931.35	
101	DC Contactor with ADD ON Block	Each		3931.35	
102	Space Heater	Each		586.05	
103	Thermostat	Each		552.59	
104	Trip Coil (2Nos=1 Set)	Each		9726.15	
105	Close coil	Each		5017.95	

106	Auxiliary Switch (Stack only)	Each		10841.25	
107	Spring Charging Motor	Each		13548.47	
108	Local & Remote Switch (LR Switch)	Each		2341.71	
109	Trip Close Switch (TNC Switch)	Each		1756.90	
110	DC Supervision Relay, Ashida make	Each		26638.50	
111	Anti pumping Relay	Each		21682.50	
112	O Ring P-7	Each		459.67	
113	O Ring P-12	Each		459.67	
114	O Ring P-18	Each		459.67	
115	Set of Circlips, Split Pins, Dowel Pins	Pkt		2007.18	
116	Darina Grease (1Pkt= 250gm)	Each		769.42	
117	Torsion Spring Right	Each		464.63	
118	Torsion Spring Left	Each		464.63	
119	Supply & Erection of Vacuum Bottle for VCB	Each		366390.00	
120	Supply & Erection of Braking Chamber Insulator (Upper)	Each		77213.30	
121	Supply & Erection of Support Insulator (Lower)	Each		65136.00	
122	Supply & Erection of Insulated operating rod assembly	Each		88747.80	
123	Supply & Erection of Gasket Complete set for the assembly of one pole	Each		14248.50	
124	Supply & Erection of Gasket & O ring for speed regulator	Each		4749.50	
D	Statcon Make SMPS Based 80 A Battery Charger used in TSS & 20A Battery Charger used in A-Type SSPs, SPs & ATS				
125	Service charges for deputing of service engineer for attending the any Defects of 80A & 20 A SMPS Based battery charger	Each		18762	
126	Supply & Erection of Contactor PCB (SEIL-384, W/O-J4D7-5)	Each		6147.8	

127	Supply & Erection of SMR Module Inpurt MCB (25A, 1Pole, 230V AC)	Each		236	
128	Supply & Erection of Display Card (SEIL-165V2)	Each		2395.4	
129	Supply & Erection of Power Supply Card (SEIL-405) 230-12V	Each		1970.6	
130	Supply & Erection of Class C Type Surge Arrestor (PIIM-320DS)	Each		8260	
131	Supply & Erection of AC Under Cut Assembly (Static Switch)	Each		35700.9	
132	Supply & Erection of DSCA Card	Each		60410.1	
133	Supply & Erection of Dropper Diode Card (SEIL-350V3)	Each		6608	
134	Supply & Erection of SMR Module (110V/20A) as per RDSO Spec. No. RDSO/SPN/165/2012 or latest	Each		73224.9	
135	Supply & Erection of Cooling Fan (12V, 4Inch)	Each		1062	
136	Supply & Erection Input Fuse 80A/125A TIA Type-HRC	Each		1770	
E	System & Service Make 100KVA, 50KVA & 25KVA ACO Panels in ALH & TH	Each			
137	Supply & Erection of 150A, 240V AC Power contactor with 2no. + 2NC Aux. contacts (AX115-30) ABB make.	Each		22496.50	
138	160A Triple Pole MCCBs for Incoming & Outgoing Suppling (NKS 160 R) Schneider Make	Each		7382.96	
139	300/260A, 240V AC Power contractor with 2no. + 2NC Aux. contacts (AX260-30) ABB Make.	Each		33686.03	
140	400A Triple Pole MCCB for Incoming & Outgoing Supply (DU-400N)	Each		17647.95	

141	Supply & Erection of 630A Triple Pole MCCB for Incoming & Outgoing Supplying (DN3-630D)	Each		26204.76	
142	Supply & Erection 6A, 2Pole MCB (BB20060C)	Each		546.69	
143	Supply & Rection 32A, 4 Pole MCB (BB40320)	Each		1191.36	
F	Control card spares	Each			
144	Supply & Erection of Transformer-I (9-0-9)	Each		488.52	
145	Supply & Erection of Transformer-I (12-0-12)	Each		610.65	
146	Supply & Erection of Preset PCB Card	Each		1221.30	
147	Supply & Erection of Buzzer PCB Card	Each		977.04	
148	Supply & Erection of Main Mother Board PCB	Each		4885.20	
				Total Schedule - 08	2500000

Schedule 9: Execution of any civil works as per requirement.

S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
1	Any Civil work in CPWD DSR 2021 consider rate 38 % below as per Railway board letter no. HQ0ENGG (WKS)/73/2021 dated 19.01.2023	Ls	LS	As per requirement	1500000
				Total Schedule - 09	1500000

Schedule 10: Supply of Tools and Plants					
S.No	Description of Work	Unit	Total Quantity	Unit Rate@18 % GST	Total Amount (Rs.)
1	Screwdriver 6",8",10"	Set	8	363.87	2910.96
2	Cutting pliers 8"	Nos	8	272.90	2183.20
3	Line tester	Nos	16	69.56	1112.96
4	Nose Pliers 6"	Nos	8	278.25	2226.00
5	"Double open-ended Spanner (6 to 32)"	Set	8	1005.99	8047.92
6	Measuring Tape 5m	Nos	4	178.72	714.88
7	Adjustable wrench 8"	Nos	4	631.42	2525.68
8	Ball pen Hammer 500gm	Nos	8	369.22	2953.76
9	Combination plier, 280mm	Nos	8	278.25	2226.00
10	Allen key 2 to 16mm	Set	8	663.52	5308.16
11	1/2" Socket set containing 19 socket with 6 attachment	Set	4	5056.70	20226.80
12	Crimping tool up to 16mm 2 size	Nos	4	877.56	3510.24
13	Pipe wrench 8", 12"	Set	4	829.41	3317.64
14	Contact less thermo meter	Nos	4	2386.55	9546.20
15	Adjustable spanner 8",12"	Set	8	1177.22	9417.76
16	Ring spanner (6 - 41)	Set	8	1551.79	12414.32
17	DE spanner (6- 41)	Set	8	973.88	7791.04
18	Desoldering iron	Nos	2	1262.84	2525.68
19	Soldering iron 60 W	Nos	2	492.29	984.58
20	Wire stripping pliers, 150mm	Nos	8	80.27	642.16
21	Hydraulic crimping machine up to 300mm2	Nos	2	5672.06	11344.12

22	Manila rope 15, 25mm dia (20 m Each)	Set	4	5211.87	20847.48
23	Nylon rope 15, 25, 40mm dia (20 m Each)	Set	4	4837.30	19349.20
24	Digital spirit level	Nos	4	1262.84	5051.36
25	Digital Vernier calliper	Nos	5	2710.82	13554.10
26	Digital micrometre	Nos	2	2584.53	5169.06
27	Round cable and wire cutter, 900mm	Nos	8	3574.47	28595.76
28	Grease gun	Nos	4	788.74	3154.96
29	Bolt cutter 12", 36"	Nos	4	2188.56	8754.24
30	Steel Tape (3m, 5m, 15m)	Set	4	684.93	2739.72
31	Sledgehammer 1kg, 5kg	Set	4	3986.50	15946.00
32	Flat file/250mm	Nos	4	256.85	1027.40
33	Round file,288m	Nos	4	358.52	1434.08
34	Triangular file,288 mm	Nos	4	321.06	1284.24
35	Half round file,250mm	Nos	4	406.68	1626.72
36	Flat Chisel, 10"	Nos	4	203.34	813.36
37	Pin punch, 10"	Nos	4	181.93	727.72
38	Centre punch	Nos	4	192.64	770.56
39	Inner circlip pliers straight nose,19-60 mm Capacity	Nos	4	342.46	1369.84
40	Inner circlip pliers bent nose, 19-60 mm Capacity	Nos	4	315.71	1262.84
41	Torque Wrench, 60-330 Nm	Nos	2	6581.73	13163.46
42	Digital Earth tester Model No. btc - 96	Nos	2	4740.99	9481.98
43	Handheld electric blower	Nos	2	2546.01	5092.02
44	Portable Electric grinder	Nos	2	3836.67	7673.34
45	Acidity testing kit	Nos	5	3253.41	16267.05
46	Portable electric Hand Drill Machine	Nos	2	6635.24	13270.48

47	Digital multimeter	Nos	4	2001.27	8005.08
48	Oil BVD testing kit	Nos	1	227310.48	227310.48
49	Discharge Rod high rise	Nos	8	24133.01	193064.08
50	Drop out fuse Operating rod	Nos	4	8422.47	33689.88
51	Single Sleeve pulley Fiber 3.5"x0.5	Nos	10	786.60	7866.00
52	Single Sleeve pulley steel 3.5'x0.5	Nos	10	898.97	8989.70
53	"Al Ladder 8 Meter with Hook on Top"	Nos	4	8657.92	34631.68
54	Hot stick suitable for High Rise	Nos	2	10648.49	21296.98
55	Clip on Tong Tester	Nos	5	3157.09	15785.45
56	Supply of 5 kV Insulation Tester	Nos	3	99690.91	299072.73
57	Measuring Tape 15 Meter PVC	Nos	4	363.87	1455.48
58	Measuring Tape 30 Meter PVC	Nos	4	449.48	1797.92
				Total Schedule - 10	1163322.49
Total of Schedule 1 to 10					7,42,75,008.70

Appendix -A			
S.No.	Equipment	UOM	Rate including GST @ 18 %
1	Supply of Lightning Arrester - 42 kV	Each	48008.30
2	Erection of Lightning Arrester - 42 kV	Each	801.69
3	Supply of Lightning Arrester - 120 kV	Each	61000.00
4	Erection of Lightning Arrester - 120 kV	Each	1328.55
5	Supply of Lightning Arrester - 198 kV	Each	81500.00
6	Erection of Lightning Arrester - 198 kV	Each	2316.80
7	Supply of Lightning Arrester - 60 kV	Each	48500.00
8	Erection of Lightning Arrester - 60 kV	Each	801.69
9	Supply of CT - 220 kV 1 Core	Each	358200.00
10	Supply of CT - 220 kV 2 Core	Each	372500.00
11	Erection of CT - 220 kV	Each	7088.43
12	Supply of CT - 132 kV 1 Core	Each	208300.00
13	Supply of CT - 132 kV 2 Core	Each	215500.00
14	Supply of CT - 66 kV 3 Core	Each	151200.00
15	Supply of CT - 25 kV 1000-500/5	Each	65195.00
16	Supply of PT- 25 kV Type -I	Each	47554.00
17	Supply of PT- 25 kV Type -II	Each	46020.00
18	Supply of CT- 72.5 kV	Each	113870.00
19	Supply of Neutral CT- 72.5 kV	Each	121540.00
20	Supply of PT- 220 kV 3 Core	Each	403900.00
21	Erection of PT - 220 kV 3 Core	Each	7884.93

22	Supply of PT - 132 kV 3 Core	Each	208300.00
23	Erection of PT - 132 kV	Each	7884.93
24	Supply of CB - 25 kV SP 2000 Amp	Each	495600.00
25	Erection of CB - 25 kV SP	Each	5887.36
26	Supply of DP CB - 72.5 kV 1650 Amp	Each	692778.00
27	Supply of 25 kV DP Isolator with Insulator	Each	162068.49
28	Erection of 25 kV DP Isolator	Each	4929.34
29	Supply of 25 kV SP Isolator with Insulator	Each	96776.00
30	Erection of 25 kV SP Isolator	Each	4929.34
31	Supply and erection of earth electrode	Each	4291.19
32	Supply of all types of galvanised steel structures, small parts steel etc.	Each	151137.56
33	Erection of all types of galvanised steel structures, small parts steel etc.	Each	11559.67
34	Supply of 25kV Support Insulator	Each	9326.69
35	Erection of 25 kV Support Insulator	Each	666.42
36	Supply of 28.62 mm Dia ACSR conductor including all connectors	Each	1075.69
37	Erection of 28.62 mm Dia ACSR conductor including all connectors	Each	20.02
38	Supply of 19/2.5 mm Galvanised Steel Stranded earth wire including termination	Each	276.04
39	Erection of 19/2.5 mm Galvanised Steel Stranded earth wire including termination	Each	13.70
38	Supply of 132/ 220 kV termination with/without adjuster complete with disc insulators	Each	14294.86
39	Erection of 220 kV termination with/without adjuster complete with disc insulators	Each	500.45
40	Erection of 132 kV termination with/without adjuster complete with disc insulators	Each	326.61

41	Supply of 50/39 mm dia aluminium tubular busbar	Meter	630.34
42	Erection of 50/39 mm dia aluminium tubular busbar	Meter	206.46
41	Supply of all type of aluminum busbar terminal assembly, splice and connectors for 50 mm bus bar as per latest spec	Numbers	2552.59
42	Erection of all type of aluminum busbar terminal assembly, splice and connectors for 50 mm bus bar as per latest spec	Numbers	78.00
43	Supply of Battery set for TSS - 400 Ah	Each	724272.64
44	Supply of Battery set for SP/SSP/ATS - 120 Ah	Each	292243.20
45	Supply of Battery set for SSP-B - 40 Ah	Each	163904.00
	25kV, 2000A Double Pole Interrupter/ Circuit Breaker suitable for 2x25kV System for Coupling UP & DN lines (VSE 5/20 DP)/25kV, 2000A Double Pole Vacuum Circuit Breaker suitable for 2x25kV System (VSE 5/20 DP)/27.5kV, 2000A Single Pole Vacuum Interrupter		
46	Tripping Coil	Each	11,667.84
47	Closing COIL	Each	11,667.84
48	Spring Charging Motor With latch	Each	52,262.20
49	Auxiliary Switch (8NC+8NC) with crank	Each	27,711.12
50	Motor Limit Switch (3No+3No) with Crank		13,977.10
	25kV, 1600A Double Pole Isolators without Earthing Blade Assembly (Manual)		
51	Operating Mechanism	set.	1,10,680.99
	27.5kV, 1600A Single Pole Isolators without Earthing Blade Assembly (Manual)		
52	Operating Mechanism	set.	57,763.42
	27.5/240V , 100kVA & 10kVA LT Supply Transformer		
53	HV Insulator	Each	6,187.92
54	LV Insulator	Each	936.33

55	Silica Gel Breather 250 Gram	Each	1,329.86
56	Silica Gel Breather 500 Gram	Each	1,560.55
57	Split Type Arching Horn Set	Each	1,886.23
58	Valve	Each	2,279.76
59	One Set of Gasket	Each	4,749.50
60	Kit-Kat fuse assembly-200 Amp	Each	1,153.45
61	Kit-Kat fuse assembly-300 Amp	Each	1,638.58
62	HRC fuse-630 Amp	Each	1,728.78
63	HRC fuse for 25kv PT-4/5 Amp (HG-F1)	Each	63.36
	Drop Out Fuse assembly (5A) & (1A)		-
64	* Fuse Carrier Tube (BS: 3953-1976) * Jaw (IS:306) * End Fitting (Fuse Carrier) * Swivel with Hook * Horn Link	Set.	7,463.50
65	DO Fuse link of 1A	Each	108.56
66	DO Fuse link of 5A	Each	149.27
67	Return Current Cable- 1.1kV XLPE Al 1C 400 Sqmm	Each	696.63
68	Power Cable- 1.1kV PVC Al 2C x 300 Sqmm	Each	1,038.11
69	Power Cable- 1.1kV PVC Al 2C 70 Sqmm	Each	303.86
70	AC DC Power Cable 2C 4 Sqmm PVC FRLS Cu	Each	161.21
71	AC DC Power Cable 2C 6 Sqmm PVC FRLS Cu	Each	220.32
72	AC DC Power Cable 2C 10 Sqmm PVC FRLS Cu	Each	350.76
73	AC DC Power Cable 2C 16 Sqmm PVC FRLS Cu	Each	488.52
74	AC DC Power Cable 2C 25 Sqmm PVC FRLS Cu	Each	766.00
75	AC DC Power Cable 2C 70 Sqmm PVC FRLS Al	Each	264.06

76	Control & Monitoring Cable- 2C 2.5 Sqmm Cu XLPE FRLSOH	Each	118.87
77	Control & Monitoring Cable- 7C 2.5 Sqmm Cu XLPE FRLSOH	Each	308.26
78	Control & Monitoring Cable- 12C 2.5 Sqmm Cu XLPE FRLSOH	Each	511.48
79	Control & Monitoring Cable- 19C 2.5 Sqmm Cu XLPE FRLSOH	Each	787.01
80	Control & Monitoring Cable- 2C 4 Sqmm Cu XLPE FRLSOH	Each	161.21
81	Control & Monitoring Cable- 7C 4 Sqmm Cu XLPE FRLSOH	Each	535.91
82	25 kV CU cable jointing Kit	Each	88,416.69
83	25 kV CU cable termination Kit	Each	55,854.12
	Battery Charger 5 A		
84	MCB 10A (BB20100C)	Each	610.65
85	Fuse link 10A (HG-F1)	Each	67.85
86	Rotaty switch One pole/ four way	Each	542.80
87	Rotaty switch two pole/ four way	Each	244.26
88	Meter 0-1 Amp	Each	1,017.75
89	Meter 0-10 Amp	Each	1,017.75
90	Diode 16RB 120	Each	135.70
	ACDB for TSS		
91	MCCB 630A TP /DP	Each	49,198.04
92	SPREADERS	Each	5,765.89
93	MCB 6A SP (BB10060C)	Each	382.67
94	630A MOTORIZED CHANGEVER SWITCH WITH ATS CONTROLER	Each	1,18,524.45
95	ATS	Each	24,940.30
96	22.5MM DIA 230V AC LED INDICATING LAMP COLOUR RED	Each	156.06
97	22.5MM DIA 230V AC LED INDICATING LAMP COLOUR GREEN	Each	156.06
98	22.5MM DIA 230V AC LED INDICATING LAMP COLOUR BLUE	Each	257.83

	DCDB for TSS		
99	100A DP 10KA MCCB TMD RELEASE +1C/O AUX CONTACTS (DU100H)	Each	2,222.77
100	(DU100H) 1C/O AUX CONTACTS	Each	896.98
101	100A MANUAL CHANGE OVER SWITCH (CO1-100)	Each	9,167.89
102	100A DP LOAD BREAK SWITCH/ISOLATOR (FN-100)	Each	6,224.56
102	2A FUSE (HG-F1)	Each	78.71
102	20A FUSE BASE	Each	234.76
102	AUX CONTACTOR WITH 2NO+2NC AUX SUPPLY 110V DC (MX0-22E)	Each	2,457.53
102	32A DP MCB (BB20320C)	Each	1,420.78
102	25A DP MCB (BB20250C)	Each	1,420.78
102	16A DP MCB (BB20160C)	Each	1,420.78
102	6A DP MCB (BB20060C)	Each	1,420.78
102	LED TYPE INDICATING LAMP 22.5MM DIA 110V DC COLOUR RED	Each	156.06
102	144SQMM 90 DEG SCALE MC TYPE VOLTMETER, RANGE :0-150V,CLASSACC 1.0	Each	1,092.39
	ACDB for SP/SSP/PP/ATS		
103	63A DP 10KA AC C-CURVE MCB (BB20630C)	Each	1,872.66
104	63A 2POLE 2WAY MOTORIZED CHANGE OVER SWITCH WITH ATS CONTROLLER	Each	49,157.33
105	ATS	Each	24,940.30
106	6A FUSE (HG-F1)	Each	78.71
107	20A FUSE BASE	Each	234.76
108	AUXILIARY CONTACTOR WITH 02NO+02NC CONTACTS COIL VOLTAGE 230V AC (MO0-22E)	Each	1,092.39
109	32A DP 10KA AC C-CURVE MCB (BB20320C)	Each	702.93
110	16A DP 10KA AC C-CURVE MCB (BB20160C)	Each	702.93
111	6A DP 10KA AC C-CURVE MCB (BB20060C)	Each	702.93

112	1 PHASE 2 WIRE DIGITAL MIUTIFUNCTION METER SIZE 96x96 MM CTR SEC RATIO : 5A CLASS : 1 WITH RS485 AUX. SUPPLY: 230V AC	Each	15,917.61
113	22.5MM DIA 230V AC LED INDICATION LAMP COLOUR RED	Each	156.06
114	230V AC 22.5MM DIA ILLUMINATING TYPE PUSHBUTTON WITH 1 NO ELEMENT COLOUR BLACK	Each	312.11
	DCDB for SP/SSP/PP/ATS		
115	32A DP MCB + 1C/O AUX CONTACTS (BB20320C)	Each	1,420.78
116	1C/O AUX CONTACTS (BZA11006)	Each	858.98
117	63A MANUAL CHANGEOVER SWITCH (CO1-63)	Each	6,585.52
118	63A DP LOAD BREAK SWITCH/ISOLATOR (FN-63)	Each	2,684.15
119	2A FUSE (HG-F1)	Each	78.71
120	20A FUSE BASE	Each	234.76
121	AUX CONTACTOR WITH 2NO+2NC AUX SUPPLY 110V DC (MX0-22E)	Each	2,457.53
122	16A DP 110V DC MCB	Each	1,420.78
123	6A DP 110V DC MCB	Each	1,420.78
124	LED TYPE INDICATING LAMP 22.5MM DIA 110V DC COLOUR RED	Each	156.06
125	144SQMM 90 DEG SCALE MC TYPE VOLTMETER, RANGE :0-150V,CLASS ACC 1.0	Each	1,092.39
126	Bimetallic Rigid Terminal Connector to suit 50mm Dia Al Busbar to 30 Dia Cu Stud of Current Transformer (RI- 11070)	Each	3,799.60
127	Bus Splice suitable for 50 mm dia Al Busbar (RI- 11180)	Each	1,736.96
128	Sliding Clamp for 50 mm Al Busbar (RI - 11190)	Each	1,194.16
129	Rigid Connector on Support Insulator Suitable for 50 mm Al Busbar (RI- 11200)	Each	882.05
130	Connector between Double Pole Isolator terminals and 50 mm dia Al busbar (RI- 11090)	Each	1,506.27
131	Expansion Type Terminal Connector to suit 50mm Dia Busbar to terminal Pad of Circuit Breaker / Interrupter (RI- 11060)	Each	3,392.50

132	Expansion Type Terminal Connector to suit 50mm Dia Busbar to 30 Dia Cu Stud of Current Transformer (RI- 11100)	Each	3,392.50
133	Connector between 25kV Potential transformer terminals and 20 mm dia Spider jumper (RI- 11120)	Each	1,492.70
134	Tee Connector for 50mm dia AL Busbars (6500-1)	Each	1,723.39
135	Connector between 50mm Al Busbar and 20 mm Spider jumper for 42kV LA and PT (RI- 11140)	Each	1,601.26
136	TEE Connector to Suit 'Zebra'(28.62φ) ACSR Condr. on both ways (RI- 11040)	Each	1,723.39
137	Rigid Connector to Suit 'Zebra'(28.62φ) ACSR Condr on Support Insulator with fasteners (11050)	Each	848.13
138	Bimetallic Terminal Connector to suit 'Zebra'(28.62φ) ACSR Condr. & Al/Cu Pad of Isolator. (RI - 11030) with Isolator	Each	1,655.54
139	Bimetallic Terminal Connector to suit 'Zebra'(28.62φ) ACSR Condr. & Al/Cu Pad of Circuit Breaker. (RI - 11030) with CB	Each	1,655.54
140	Bimetallic Terminal Connector to suit 'Zebra'(28.62φ) ACSR Condr. & 30 Dia Al/Cu Stud of Current Transformer. (RI - 11010) with CT	Each	2,035.50
141	Bimetallic Terminal Connector to suit 'Zebra'(28.62φ) ACSR Condr. & 30 Dia Al/Cu Stud of Current Transformer. (RI - 11010) with PT	Each	2,035.50
142	Connector for 120kV/198kV Lightning Arrester with Stainless Steel bolts/fasteners (With LA)	Each	3,392.50
143	Connector for 60kV Lightning Arrester with Stainless Steel bolts/fasteners (With LA)	Each	3,392.50
144	Connector for 42kV Lightning Arrester with Stainless Steel bolts/fasteners (With LA)	Each	3,392.50
145	Connector suitable for 36mm AAAC conductor and 50mm dia Al Busbar (Item Code-1)	Each	2,076.21
146	Tee connector suitable for 36mm AAAC conductor (Item Code-2)	Each	1,893.02
147	Connector between Double Pole Isolator terminals and 36mm AAAC conductor (Item Code-3)	Each	1,563.26
148	Connector between Double Pole Isolator terminals and 31.5 mm dia AL 59 Conductor (Item Code-04)	Each	1,465.56
149	Connector suitable for 36mm AAAC conductor and 50sq.mm Cu jumper (Item Code -5)	Each	1,270.15

150	Tee Connector suitable for 36mm AAAC conductor and 50 Sq.mm Cu Jumper for LA 60kV (Item Code -5)	Each	1,270.15
151	Connector between 36mm AAAC and 25kV PT (Item Code-6)	Each	1,563.26
152	Connectors suitable for 36 mm dia. AAAC and 150 Sq.mm Cross feeder (Item Code-7)	Each	977.04
153	Tee Terminal Connector for 31.5mm dia AL59 Conductor and 50mm dia Al Busbar (Item Code-08)	Each	2,002.93
154	Tee Connector for 31.5mm dia AL59 Conductor and 50 sq. mm Cu Jumper (Item Code-09)	Each	1,319.00
155	Tee Connector suitable for 31.5 mm AL59 Conductor (Item Code-10)	Each	1,380.07
156	Tee Connector between 31.5mm dia AL59 Conductor and 20 mm dia Spider jumper for 42kV LA (Item Code-11)	Each	1,343.43
157	Connector suitable for 150 Sq.mm Cross feeder and 120 Sq.mm Jumper (Item Code-12)	Each	1,209.09
158	Connector suitable for 120 Sq.mm Jumper and 125 Sq.mm Catenary Wire (item Code-13)	Each	1,209.09
159	Connector suitable for 120 Sq.mm Jumper and 150 Sq.mm Contact Wire (Item Code-14)	Each	1,209.09
160	Connector suitable for 120 Sq.mm Jumper and 288 Sq.mm feeder Jumper (Item Code-15)	Each	622.86
161	Connectors suitable for 31.5 Sqmm AL59 and 150 Sq.mm Cross feeder (Item Code-16)	Each	891.55
162	P.G. Clamp Suitable for 50 Sq.mm Jumper Wire & 125 Sq.mm Catenary Wire (Item Code-17)	Each	1,209.09
163	P.G. Clamp Suitable for 128 Sq.mm AAAC feeder wire to 288 Sq.mm AAAC feeder wire (Item Code-18)	Each	537.37
164	Tee Connector suitable for 36 mm AAAC Conductor on Main sides and 20 mm dia AAC conductor on Tap-off side (Item Code-19)	Each	1,587.69
165	TEE Connector suitable for 20 mm dia GS wire to 20 mm dia wire (BEC to BEC)	Each	1,050.32
166	Straight Connector suitable for 20 mm dia GS wire to 20 mm dia wire (BEC to BEC)	Each	1,050.32
167	Tin Bronze Cable connector Part No. W1133-8 used for cable feeding arrangement	Each	15,999.03
	MCB Used in CB & Control Relay Panel	Each	
168	2 AMP,02 Pole for all 25 KV VCB & Interrupter	Each	755.31
169	4 AMP, 02 Pole for 55 KV SF-6 CB	Each	755.31

170	2 AMP, 04 Pole for CRP	Each	1,395.13
171	25 AMP, 01 Pole for Battery Charger	Each	157.59
172	16 AMP, 02 Pole for CRP	Each	674.16
173	6 AMP, 02 Pole for CRP	Each	539.95
	LED Indicator Red, Yellow, & Blue 110 V DC	Each	
174	Red	Each	118.45
175	Green	Each	118.45
176	Yellow	Each	118.45
	S.S Nuts & Bolts with Plain & Spring Washer	Each	
177	M10X50	Each	44.48
178	M12X50	Each	63.97
179	M12X60	Each	67.09
180	M12X65	Each	68.65
181	M12X70	Each	72.55
182	M12X75	Each	74.89
183	M12X80	Each	84.26
184	M12X90	Each	84.26
185	M16X35	Each	106.51
186	M16X55	Each	126.01
187	M16X80	Each	175.95
	Hotdip Galvanized Nuts & Bolts with Plain & Spring Washer	Each	
188	M10X60	Each	25.70
189	M12X40	Each	31.47
190	M16X260	Each	111.27
191	M16X300	Each	134.07

192	M16X360	Each	144.93
193	M16X50	Each	38.54
194	M16X460	Each	248.06
195	Bimetallic Strip (1ftX1ftX2mm)	Each	1,560.55
196	Hydrometer	Each	162.84
197	Thermometer	Each	122.13
198	Bus Bar Bending Machine	Each	62,500.71
	Vent plug for batteries		
199	JK SEALED FLOAT GUIDE VENT PLUG (CRYSTAL) M27X3.00mm (Type-Plain)	Each	16.28
200	JK MICROPOROUS VENT PLUG M27X3.00mm (Type- Big Flot)	Each	31.89
201	JK MICROPOROUS VENT PLUG M27X3.00mm (Type- Small Dome)	Each	15.94
	Termination of Cross Feeder (Double Conductor - 2 X 150 Sq mm) Style-09 Drg No. ETI/OHE/G/05145-1		
202	18 mm Single Clevis Assembly (5040)	Each	407.10
203	Feeder Ending Clamp (150Sq mm) (1130)	Each	1,831.95
204	9-Tonne Adjuster (Double Clevis Type) (5020-2)	Each	1,289.15
205	Anchor Double Strap Assembly (5030)	Each	339.25
206	Equalising Plate (5192)	Each	882.05
207	PG Clamp (1050-2)	Each	474.95
	Strung Bus Termination Assembly for SP/SSP(A-Type)/SSP B2-Mod/TSS Drg.No. ETI/PSI/0226		
208	Hardware with adjuster	Set.	9,200.46
209	Hardware without adjuster	Set.	8,549.10
	Earth Wire termination arrangement for SP/SSP/TSS Drg No. ETI/PSI/0225 REV-C		
210	Style - 01	Set.	3,989.58

211	Style - 02	Set.	2,646.15
212	Style - 03	Set.	3,989.58
213	Style - 04	Set.	2,646.15
214	Style - 05	Set.	3,188.95
215	Style - 06	Set.	5,414.43
216	220kV Disc Insulator String	Each	24,426.00
217	132kV Disc Insulator String	Each	12,213.00
218	9-Tonne Insulator	Each	5,902.95

Offer sheet			
Offer to be filled by tenderer(s) in below table			
<i>Description of Work:- Maintenance of 2x25kV Power Supply Installation in New Rewari-Madar section of DFCCIL including the Phulera UP & DN link lines, Kishangarh Balawas, Kathuwas connection to Indian Railways for a period of 24 (Twenty Four) months under CGM Jaipur Unit.</i>			
Column 1	Column 2	Column 3	
S.N.	Description of Work	Estimated Rate	
1.	Schedule 1 Maintenance of Traction Sub Stations:	17092632.10	
2.	Schedule 2 SP/SSPs/ATS/PP Maintenance :	24099944.08	
3.	Schedule 3 -Panels & Gantry Bus Bar insulator other Maintenance:	8463527.88	
4.	Schedule 4 -TSS Manning & House keeping	15836510.50	
5.	Schedule 5 -Break down attention	619071.65	
6.	Schedule 6 Additional PSI maintenance Activity	2500000.00	
7.	Schedule 7: Maintenance of Traction Sub Stations /SCPs (Optional)	500000.00	
8.	Schedule 8: Maintenance & Replacement of OEM Recommended spare including Erection chares @ 10 %	2500000.00	
9.	Schedule 9: Execution of any civil work as per requirement.	1500000.00	
10.	Schedule 10: Supply of Tools and Plants	1163322.49	
	Total Amount including GST	7,42,75,008.70	
<p>Note : 1. Offered rate shall be quoted under this table in % below, above & at par (except Schedule-04) in figures as well as in words. Please quote the rate either above or at Par for Schedule - 04. Failing this offer will be summarily rejected.</p>			

Explanatory Notes for BOQ:

- (i) The rates shall also be inclusive of all GST and / or any other taxes, license fee and royalty charges etc. if any.
- (ii) **Contractor should bear the fact in mind while quoting the rates that GST will be paid to Contractor by DFCCIL as per prevailing rate for further deposition of GST to State Govt. and/or Central Govt.** as applicable. Documentary evidence of deposition of GST will be produced by contractor.
- (iii) The above quantity is approximate:-The DFCCIL reserves the right to increase / decrease the same.
- (iv) The contractor should adhere to **Anti Profiteering Provisions** as per section 171 of the CGST Act. Where due to change in the rates of GST / Change in law, the contractor gets any credits / benefits, the same shall be passed on to DFCCIL by way of reduction in prices.

TENDERER'S CREDENTIALS

S. No	Description
1.	For technical experience/competence, give details of similar completed works during the last Seven financial years in the Performa given in Form-2A
2.	Bid Capacity- Details Of Existing Commitment And Balance Work Form-2B
3.	Give constitution of your firm. Attach certified copies of legal documents in support thereof. Form-2C

TECHNICAL ELIGIBILITY CRITERIA DETAILS

Details of the similar works completed (as per Para 10 of Preamble and General Instruction to Tenders)

Similar Contract No.		
Contract Identification		
Award date		
Completion date		
Role in Contract	Prime Contractor	Member in JV
Total Contract Amount (Rs.)		
If member in a JV, Specify participation in total contract amount	[insert a percentage amount]	Total contract amount in Rs.
Total work done (Final Bill/Last Bill paid in case final bill under preparation)		
Amount of work executed having similar nature of work i.e “Any Electrical Work”		
Employer’s Name: Address: Telephone/Fax number E-Mail:		
Description of the similarity in accordance with Criteria as per Para 10 of Preamble and General Instruction to Tenders		

Note:-The Bidder shall attach certified work completions certificates / certified copy of final bill/last bill paid issued by clients for Any Electrical Work. In case main contract is not exclusively for Any Electrical Work, the client’s certificate indicating the amount of executed work for Any Electrical Work shall be attached by the bidder.

In case above documents clearly showing the amount of work done for similar nature of work i.e. “Any Electrical Work” are not submitted by the bidder at the time of submission of his bid, his bid will be treated as invalid and shall not be considered for evaluation.

Signature of the
Tenderer with Seal

Statement of Works in Progress for Bid Capacity

BID CAPACITY- DETAILS OF EXISTING COMMITMENT AND BALANCE WORK

Each Bidder or each member of JV must fill in this form separately.

Name of Tenderer/JV partner:

S.N	Name and place of work	Organization for whom work is being carried out	Date of award of contract. Contract Agreement No. & Date	Original Cost of Work/Revised Cost (Up to latest corrigendum)	Date of Completion (Original / Extended)	Payment Received till date of opening of present tender	Balance amount of the work to be executed	B' value of work to be done in 'N' years

Note:-

Where

A= (Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender), taking into account the completed as well as works in progress)=Rs.....

N = (Number of years prescribed for completion of work for which bids has been invited).
.....Years

B = (Existing commitments and balance amount of ongoing works with the tenderer as per the above format for statement of all works in progress and also the works which are awarded to tenderer but yet not started up to the date of inviting of tender)=Rs.....

Calculated Bid Capacity of the Tenderer / JV Partner $[AxNx2- 0.33xNx B]$ =Rs.....

2. This statement should be submitted duly verified by Chartered Accountants.

APPLICANT'S PARTY INFORMATION FORM

Applicant name: <i>[insert full name]</i>
Applicant's Party name: <i>[insert full name of Applicant's Party]</i>
Applicant's Party country of registration: <i>[indicate country of registration]</i>
Applicant Party's year of constitution: <i>[indicate year of constitution]</i>
Applicant Party's legal address in country of constitution: <i>[insert street/ number/ town or city/ country]</i>
Applicant Party's authorized representative information Name: <i>[insert full name]</i> Address: <i>[insert street/ number/ town or city/ country]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers, including country and city codes]</i> E-mail address: <i>[indicate e-mail address]</i>
1. Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above. <input type="checkbox"/> In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status. 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Signature of the
Tenderer with Seal

**ECS / NEFT / RTGS
MANDATE FORM**

Date:-
To,
Dy.CPM/Finance
DFCCIL/Jaipur
Sub: ECS / NEFT / RTGS payments

We refer to the ECS / NEFT / RTGS set up by DFCCIL for remittance of our payments using RBI's NEFT / RTGS scheme, our payments may be made through the above scheme to our under noted account.

Name of Bank	
Name of City	
Bank Code No	
Name of Bank Branch	
Branch Code No	
Address of Bank Branch	
Telephone Number of Bank Branch	
Fax No of Bank Branch	
Name of customer / Tenderer as per account	
Account Number of Tenderer appearing on cheque book	
Type of Account (S. B. / Current / Cash credit)	
IFSC code for NEFT	
IFSC code for RTGS	
9-Digit-code number of the bank and branch appearing on the MICR cheque issued by the bank.	
Details of Cancelled Cheque leaf	
Telephone no of tenderer	
Cell Phone Number of the tenderer to whom details with regard to the status of bill submitted to Accounts Office i.e. Co6 & Co7 & Cheque Purchase Orders particulars can be intimated through SMS	
Tenderer's E - mail ID	

Confirmed by Bank signature of tenderer with stamp and address
Enclose a copy of crossed cheque

**SAMPLE
STANDING INDEMNITY BOND FOR “ON ACCOUNT” PAYMENTS**

(On paper of requisite stamp value)

We, M/s _____ hereby undertake that we hold at our stores Depot/s at _____ for and on behalf of the Managing Director/ DFCCIL acting in the premises through the Chief General Manager/Co / DFCCIL/ Jaipur or his successor (hereinafter referred to as “The Employer”) all materials for which “On Account” payments have been made to us against the Contract for (

_____) on the section DFCCIL also referred to as Group/s _____ vide letter of Acceptance of Tender _____ dated _____ and material handed over to us by the employer for the purpose of execution of the said contract, until such time the materials are duly erected or otherwise handed over to him.

We shall be entirely responsible for the safe custody and protection of the said materials against all risk till they are duly delivered as erected equipment to the employer or as he may direct otherwise and shall indemnify the employer against any loss /damage or deterioration whatsoever in respect of the said material while in our possession and against disposal of surplus materials. The said materials shall at all times be open to inspection by any officer authorized by the CGM, DFCCIL/ Jaipur in charge of Dedicated Freight Corridor Corporation of India Limited (Whose address will be intimated in due course).

Should any loss, damage or deterioration of materials occur or surplus material disposed off and refund becomes due, the Employer shall be entitled to recover from us the 85% of supply portion of the Contract (as applicable) and also compensation for such loss or damage if any long with the amount to be refunded without prejudice to any other remedies available to him by deduction from any sum due or any sum which at any time hereafter becomes due to us under the said or any other Contract.

Dated this day _____ day of _____ 200 For and on behalf of
M/s _____ (Contractor) Signature of witness
Name of witness in Block letter. Address.

PRE CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement (herein after called the Integrity Pact) is made on-----
-----day of the month of-----, 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 BIDDER
is willing to Offer/has offered for stores or works.

WHEREAS the BIDDER 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 Contract 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

- 1.0 The CLIENT undertakes that no official of the CLIENT, connected directly or
indirectly with the Contract, 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 BIDDER either for
themselves or for any person, organization or third party related to the Contract, in
exchange for an advantage in the bidding process, bid evaluation, contracting or
implementation process related to the Contract.
- 1.1 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 BIDDER
in comparison to other BIDDERS.

- 1.2 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 breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER 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 Contract process. In such a case while an enquiry is being conducted by the CLIENT the proceedings under the Contract would not be stalled.

Commitments of BIDDERS

3. The BIDDER 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 Contract or in furtherance to secure it and in particular commit itself to the following:-
 - 3.1 The BIDDER 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 Contract.
 - 3.2 The BIDDER 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 Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.
 - 3.3 *BIDDER shall disclose the name and address of agents and representatives and Indian BIDDER shall disclose their foreign principals or associates.
 - 3.4 * BIDDER 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 BIDDER further confirms and declares to the CLIENT that the BIDDER 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 Contract to the BIDDER 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 BIDDER either while presenting the bid or during pre-contract negotiations or before signing the Contract 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 Contract and the details of services agreed upon for such payments.
- 3.7 The BIDDER will not collude with other parties interested in the Contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the Contract.
- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The BIDDER 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 BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the, BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, 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 BIDDER 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 BIDDER shall not lend to or borrow any money from or enter into any monetary dealing so transactions, directly or indirectly, with any employee of the CLIENT.

4. Previous Transaction

- 4.1 The BIDDER 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 envisaged 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 BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

5. Earnest Money (Security Deposit)

- 5.1 While submitting commercial bid, the BIDDER shall deposit an amount _____ (to be specified in RFP) as Earnest Money/Security Deposit, with the CLIENT through any of the following instruments:-
- Bank draft or a pay order in favour 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 BIDDER a clause would also be incorporated in the article pertaining to performance Guarantee in the Contract 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 BIDDER 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 BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER shall entitle the CLIENT to take all or any one of the following actions, wherever required:-

(i) 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.

(ii) The earnest money deposit (in pre-contract stage) and/or security Deposit/performance Bond (after the Contract is signed) shall stand forfeited fully and the CLIENT shall not be required to assign any reason therefore.

(iii) To immediately cancel the Contract, if already signed, without giving any compensation to the [A].

(iv) 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 BIDDER from the country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to BIDDER from the CLIENT in connection with any other Contract, 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 BIDDER. The BIDDER 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 BIDDER.

(vii) To debar the BIDDER 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 BIDDER to any middleman or agent or broker with a view a view to securing Contract the contract.

(ix) In cases where irrevocable letters of credit have been received in respect of any Contract signed by the client with the BIDDER, 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 BIDDER 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 BIDDER shall be final and conclusive on the [A]. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.
7. Fall Clause
- 7.1 The BIDDER 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 subsystems were supplied by BIDDER 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 BIDDER to the CLIENT, if the Contract 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 BIDOER. The BIDDER 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 BIDDER and the BIDDER 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 up to 5 years or the complete execution of the Contract to the satisfaction of both the CLIENT and the BIDDER including warranty period, whichever is later. In case BIDDER is unsuccessful, this integrity pact shall expire after six months from the date of the signing of the Contract.
 - 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 here by sign this integrity pact at.....On.....

CLIENT
Name of the Officer
Designation
Deptt./Ministry/PSU

BIDDER

Witness
1. _____
2. _____

Witness
1.-----
2._____

ANTI-PROFITEERING DECLARATION TO WHOMSOEVER IT MAY CONCERN

I.....,age.....,years, Son/Daughter of
....., resident of..... Do solemnly affirm
and state as under:

- 1) That I am the _____ <Designation of the authorized signatory> of
.....And I am duly authorized to furnish this undertaking/declaration on behalf of
..... (Name of the company).
- 2) That (Name of the company) has been awarded the
work (Name of Work) vide Letter of Award number
..... Dated by M/s Dedicated Freight Corridor Corporation of India
Limited.
- 3) That the Company is fully aware of the anti-profiteering provision under the Goods & Services
Tax ("GST")Law(s),
- 4) That the Company Has passed the benefit of input tax credit available
on the.....(good/services) having HSN.....
supplied to M/s Dedicated Freight Corridor Corporation of India Limited which it is getting on account
of reduced tax liability and input tax credit because of enactment of GST Laws after introduction
of Goods and Service Tax w.e.f. 1st July, 2017. The details and amounts being passed on to
DFCCIL are provided in AnnexureOf this document
and are as per applicable GST Laws. These are true and correct to the best of my knowledge,
information and belief.
- 5) Further, it is to confirm also that in case (name of the organization) will receive
any further benefit in future after 1st July, 2017 by way of availment of input tax
creditswhichwerenotallowedtobeavailedbefore1stJuly,2017orreductionintaxrates
or in any other manner which results in reduction of cost of the goods/services supplied to M/s
Dedicated Freight Corridor Corporation of India Limited, then Company will pass that benefit
to M/s Dedicated Freight Corridor Corporation of India Limited also.
- 6) That I declare that the foregoing is true and correct and the same is a legal obligation and failure
to fulfil it could result in penalties under the law.
- 7) I confirm that I am aware of the implication of the above undertaking and our liability on account
of incorrect/misleading declaration under the GST Laws.

Signature of the Authorized signatory/ person

Name and Designation of the Auth. Sign/person of the person

Name of the Organization and Seal

Executed on a non-judicial stamp paper of Rs.100/- duly notarized by notary public

**DRAFT MEMORANDUM OF UNDERSTANDING (MOU) For
JOINT VENTURE PARTICIPATION
BETWEEN**

M/s Having its registered office at (Hereinafter referred to as) acting as the Lead Partner of the first part,

and

M/shaving its registered office at (Hereinafter referred to as `.....') in the capacity of a Joint Partner of the other part.

and

M/shaving its registered office at (Hereinafter Referred to as `.....') in the capacity of a Joint Partner of the other part.

The expressions of And Shall wherever the context admits, mean and include their respective legal representatives, successors-in-interest and assigns and shall collectively be referred to as “the Parties” and individually as “the Party”

WHEREAS:

Dedicated Freight Corridor Corporation of India Limited (DFCCIL) [hereinafter referred to as “Client”] has invited bids for “[Insert name of work].....”

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. The following documents shall be deemed to form and be read and construed as an integral part of this MOU.
 - (i) Notice for Bid, and
 - (ii) Bidding document
 - (iii) Any Addendum/Corrigendum issued by Dedicated Freight Corridor Corporation of India Limited
 - (iv) The bid submitted on our behalf jointly by the Lead Partner.
2. The `Parties' have studied the documents and have agreed to participate in submitting a `bid' jointly.
3. M/sshall be the lead member of the JV for all intents and purpose and shall represent the Joint Venture in its dealing with the Client. For the purpose of submission of bid proposals, the parties agree to nominate As the leader duly authorized to sign and submit all documents and subsequent clarifications, if any, to the Client. However M/s shall not submit any such proposals, clarifications or commitments before securing the written clearance of the other partner which shall be expeditiously given by M/s.....to M/s.....
4. The `Parties' have resolved that the distribution of responsibilities and their proportionate share in the Joint Venture is as under:
 - (a) Lead Partner;
 - (i)
 - (ii)
 - (iii)

(b) Joint Venture Partner

(i)

(ii)

(iii)

[Similar details to be given for each partner]

5. JOINT AND SEVERAL RESPONSIBILITIES

The Parties undertake that they shall be jointly and severally liable to the Client in the discharge of all the obligations and liabilities as per the contract with the Client and for the performance of contract awarded to their JV.

6. ASSIGNMENT AND THIRD PARTIES

The parties shall co-operate throughout the entire period of this MOU on the basis of exclusivity and neither of the Parties shall make arrangement or enter into agreement either directly or indirectly with any other party or group of parties on matters relating to the Project except with prior written consent of the other party.

7. EXECUTIVE AUTHORITY

The said Joint Venture through its authorized representative shall receive instructions, payments from the Client. The management structure for the project shall be prepared by mutual consultations to enable completion of project to quality requirements within permitted cost and time.

8. BID SECURITIES

Till the award of the work, JV firm/Lead Partner of JV firm shall furnish Bid Security to the Client on behalf of the joint venture which shall be legally binding on all the members of the Joint Venture.

9. BID SUBMISSION

Each Party shall bear its own cost and expenses for preparation and submission of the bid and all costs until conclusion of a contract with the Client for the Project. Common expenses shall be shared by all the parties in the ratio of their actual participation.

10. INDEMNITY

Each party hereto agrees to indemnify the other party against its respective parts in case of breach/default of the respective party of the contract works of any liabilities sustained by the Joint Venture.

11. For the execution of the respective portions of works, the parties shall make their own arrangements to bring the required finance, plants and equipment, materials, manpower and other resources.

12. DOCUMENTS & CONFIDENTIALITY

Each Party shall maintain in confidence and not use for any purpose related to the Project all commercial and technical information received or generated in the course of preparation and submission of the bid.

13. ARBITRATION

Any dispute, controversy or claim arising out of or relating to this agreement shall be settled in the first instance amicably between the parties. If an amicable settlement cannot be reached

as above, it will be settled by arbitration in accordance with the Indian Arbitration and Conciliation Act 1996 or any amendments thereof. The venue of the arbitration shall be Delhi.

14. VALIDITY

This Agreement shall remain in force till the occurrence of the earliest to occur of the following, unless by mutual consent, the Parties agree in writing to extend the validity for a further period.

- a. The bid submitted by the Joint Venture is declared unsuccessful, or
- b. Cancellation/ shelving of the Project by the client for any reasons prior to award of work
- c. Execution of detailed JV agreement by the parties, setting out detailed terms after award of work by the Client.

15. This MOU is drawn in Number of copies with equal legal strength and status. One copy is held by M/s and the other by M/s..... &M/s And a copy submitted with the proposal.

16. This MOU shall be construed under the laws of India.

17. NOTICES

Notices shall be given in writing by fax confirmed by registered mail or commercial courier to the following fax numbers and addresses:

Lead Partner	Other Partner(s)
.....
(Name & Address)	(Name & Address)

IN WITNESS WHEREOF THE PARTIES, have executed this MOU the day, month and year first before written.

M/s.....	M/s.....
.....
(Seal)	(Seal)

Witness

- 1..... (Name & Address)
- 2..... (Name & Address)

Notes: (1) In case of existing joint venture, the certified copy of JV Agreement may be furnished.

DRAFT FORMAT OF JOINT VENTURE AGREEMENT

To be executed on non-judicial stamp paper of appropriate value in accordance with relevant Stamp Act and to be registered with appropriate authority under Registration Act.

The JV agreement shall be structured generally as per contents list given below:

A. CONDITIONS AND TERMS OF JV AGREEMENT

1. Definitions and Interpretation
2. Joint Venture – Include Equity of members, transferability of shareholding of equity of a partner leaving during the subsistence of the contract.
3. Proposal Submission
4. Performance – To indicate scope of responsibility of each member
5. Language and Law
6. Exclusively
7. Executive Authority
8. Documents
9. Personnel
10. Assignment and Third Parties
11. Severability
12. Member in Default
13. Duration of the Agreement
14. Liability and sharing of risks
15. Insurance
16. Sharing of Promotion and Project Costs, Profits, Losses and Remuneration
17. Financial Administration and Accounting
18. Guarantees and Bonds
19. Arbitration
20. Notices
21. Sole Agreement and Variation

B. SCHEDULES

1. Project and Agreement Particulars
2. Financial Administration Services
3. Allocation of the obligations
4. Financial Policy and Remuneration

PRO-FORMA LETTER OF PARTICIPATION FROM EACH PARTNER OF JOINT VENTURE (JV)

(To be executed on non-judicial stamp paper of appropriate value in accordance with relevant Stamp Act and to be registered with appropriate authority under Registration Act.)

No....

Dated

From:

.....
.....

To,
Chief General Manager.,
Dedicated Freight Corridor Corporation of India Limited,
C-16, Khushi Vihar, Patrakar Colony, Mansarovar,
Jaipur-302020Gentlemen,

Re: ...“*[Insert name of work]*.....”

Ref: Your notice for Invitation for Bid (IFB) No.....
Dated

1. We wish to confirm that our company/firm has formed a Joint Venture with (i)..... & ii)..... For the purposes associated with IFB referred to above.

(Members who are not the lead partner of the JV should add the following paragraph).*

2. ‘The JV is led by ... whom we hereby authorise to act on our behalf for the purposes of submission of Bid for and authorise to incur liabilities and receive instructions for and on behalf of any and all the partners or constituents of the Joint Venture.’

OR

*(Member(s) being the lead member of the group should add the following paragraph)**

2. ‘In this group we act as leader and, for the purposes of applying for Bid, represent the Joint Venture:
3. In the event of our JV being awarded the contract, we agree to be jointly with i) & ii) (names of other members of our JV) and severally liable to the Dedicated Freight Corridor Corporation of India Limited, its successors and assigns for all obligations, duties and responsibilities arising from or imposed by the contract subsequently entered into between Dedicated Freight Corridor Corporation of India Limited and our JV.
4. ***I/We, further agree that entire execution of the contract shall be carried out exclusively through the lead partner.**

Yours faithfully,

(Signature)

(Name of Signatory).....

(Capacity of Signatory).....

Company Seal * Delete as applicable

Note: In case of existing joint venture, the certified copy of JV Agreement may be furnished.

**FORMAT FOR POWER OF ATTORNEY FOR AUTHORISED SIGNATORY OF
JOINT VENTURE (JV) PARTNERS**

POWER OF ATTORNEY*

(To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant stamp Act. The stamp paper to be in the name of the company who is issuing the power of Attorney)

Know all men by these presents, we ... do hereby constitute, appoint and authorise Mr/Ms who is presently employed with us and holding the position ofas our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for the work of..... Including signing and submission of all documents and providing information / responses to Dedicated Freight Corridor Corporation of India Limited, representing us in all matters, dealing with Dedicated Freight Corridor Corporation of India Limited in all matters in connection with our bid for the said project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Dated this the day of 2022.

(Signature of authorised Signatory)

Signature of Lead Partner

Signature of JV Partner(s)

.....
(Signature and Name in Block letters of Signatory)
Seal of Company

Witness

Witness 1:

Name:

Address:

Occupation:

Witness 2:

Name:

Address:

Occupation:

*Notes: i) To be executed by all the partners jointly, in case of a Joint Venture.

**FORMAT FOR POWER OF ATTORNEY TO LEAD
PARTNER OF JOINT VENTURE (JV)**

(To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant stamp Act. The stamp paper to be in the name of the company who is issuing the power of Attorney)

POWER OF ATTORNEY*

Whereas Dedicated Freight Corridor Corporation of India Limited has invited Bids for the Work of providing cover shed over approaches on RUB's under jurisdiction CGM/Jaipur unit of Western Dedicated Freight Corridor.

Whereas, the members of the Joint Venture comprising of M/s. ..., M/s. ..., M/s....., and M/s. are interested in submission of bid for the work of ...*[Insert name of work]*... in accordance with the terms and conditions contained in the bidding documents.

Whereas, it is necessary for the members of the Joint Venture to designate one of them as the Lead Partner, with all necessary power and authority to do, for and on behalf of the Joint Venture, all acts, deeds and things as may be necessary in connection with the Joint Venture's bid for the project, as may be necessary in connection the Joint Venture's bid for the project.

NOW THIS POWER OF ATTORNEY WITNESSETH THAT:

We, M/s., hereby designate M/s., being one of the partners of the Joint Venture, as the lead partner of the Joint Venture, to do on behalf of the Joint Venture, all or any of the acts, deeds or things necessary or incidental to the Joint Venture's bid for the contract, including submission of bid, participating in conferences, responding to queries, submission of information/ documents and generally to represent the Joint Venture in all its dealings with the Railway / DFCCIL or any other Government Agency or any person, in connection with the Bid/contract for the said work until culmination of the process of bidding till the contract agreement if successful, is entered into with the Dedicated Freight Corridor Corporation of India Limited and thereafter till the expiry of the contract agreement.

**To be executed by all the members of the JV except the lead member.*

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.

We hereby agree to ratify all acts, deeds and things lawfully done by lead member, our said attorney, pursuant to this power of attorney and that all acts deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us/ Joint Venture.

Dated this the Day of 2022

.....
(Signature)

..... (Name in Block letters of Executants)
Seal of Company

Witness 1	
Name:	
Address:	
Occupation:	
Witness 2	
Name:	
Address:	
Occupation:	

**BARE MINIMUM TOOLS & PLANTS TO BE ARRANGED BY CONTRACTOR
FOR PSI MAINTENANCE FOR EACH GANG (7 sets)**

List of PSI Tools			
SN	Tool/Equipment Name	Unit	Qty. per Location
1.	Cell tester	Nos.	01 No.
2.	Hydrometer	Nos.	01 No.
3.	Thermometer	Nos.	01 No.
4.	Clamp Meter	Nos.	01 Nos.
5.	Discharge Rod	Nos.	02 Nos.
6.	Operating Rod	Nos.	02 Nos.
7.	Crimping tool of various sizes	Nos.	01 Nos. of Each size
8.	Digital Multi Meters	Nos.	02 Nos.
9.	Allen Key	Set	01 Set
10.	Soldering stations	Nos.	02 Nos.
11.	AC/DC True RMS clamp meter	Nos.	01 No.
12.	Digital earth tester	Nos.	01 No.
13.	Digital Megger 2500 V /5000V	Nos.	01 No.
14.	Standard set of tools consist of below items: i. Tool bag of regular make- 01 No. ii. Combination plier 8" of Taparia/Deeners/Stanley make- 01 No. iii. Cutting plier 6" of Taparia/Deeners/Stanley make- 01 No. iv. Long nose plier 6" of Taparia/Deeners/Stanley make- 01 No. v. Double ended spanner set (6X7mm to 30X32mm)- of Taparia/Deeners/Stanley make- 01 No. of each size vi. Ring Spanner set (6X7mm to 30X32mm) of Taparia/Deeners/Stanley make- 01 No. of each size vii. Ball pin hammer 500g of Taparia/Deeners/Stanley make- 01 No. viii. PVC rammer 1.5 Pound of Taparia/Deeners/Stanley make- 01 No. ix. Measuring tape 05m, 15m & 30m of regular make- 01 No. of each length x. Adjustable Spanner 08" and 12" of Taparia/Deeners/Stanley make- 01 No each size xi. Spiril Level 12" of regular make- 01 No. xii. Hacksaw frame 12" of regular make- 01 No. xiii. Hacksaw blade of regular make- 10 Blades xiv. plumb bob regular make- 01 No. xv. D shackles 0.5", 0.75" and 1" of regular make- 01 No. each size	Nos.	01 Set.

DFCC-JP-EL-REJN-KSGN-T-30

	<p>xvi. Utility Knife of Taparia/Deeners/Stanley make- 01 No.</p> <p>xvii. Flat and Half round files of 12" size of Taparia/Deeners/Stanley make- 01 No. of each size</p> <p>xviii. Crow bar regular make- 01 No.</p> <p>xix. Pick Axe regular make- 01 No.</p>		
15.	<p>Set of screw drivers and pliers</p> <p>i. Screw driver set ("+" and "-" type) consist of 12", 16", 18" size of each size</p> <p>ii. Pliers set consist of 8" and 12" insulated cutting pliers of regular make- 01 No. of each size</p>	Nos.	01 No.

Annexure-2
CONSUMABLE ITEMS TO BE MADE AVAILABLE BY CONTRACTOR

S. No.	Description	Qty
1.	Dungry cloth blue	900
2.	Oil Kerosene	200
3.	Photo copies 4A	4
4.	Toilet soap	300
5.	Cmp. paper 3ply 25.5X30.5cm	4
6.	Brush Paint 100 mm	1
7.	Cotton waste	100
8.	Tape insulation black	50
9.	Cell for hand torch	50
10.	Hacksaw blade 12.5	100
11.	Brush hair 25 m	10
12.	Brush hair 50 mm.	30
13.	Emery cloth paper	25
14.	Emery cloth paper 1	25
15.	Broom coco	20
16.	Duster cloth white khadi	240
17.	Petroleum jelly	20
18.	Naphthalene ball	5
19.	Wire GI 16/SWG	100
20.	Solder soft	5
21.	63 mm brush	20
22.	File covers thin	50
23.	File with eyelets 24x34'5cm	50
24.	Ink violet for rubber stamp	10
25.	Office paste in 75CC bottle	20
26.	Pad un inked for rubber stamp	5
27.	Pins paper straight 26 mm	25
28.	Paper carbon blue	500
29.	File covers thick yellow	100
30.	Soap bar	300

PART-VIII

DRAWINGS

DRAWINGS

The indicative drawing for the **Maintenance of 2x25 kV High Rise Over Head Equipment on New Rewari - Madar section of DFCCIL including the Phulera UP & DN link lines, Kishangarh Balawas, Kathuwas connection to Indian Railways for a period of 24 (Twenty Four) months under CGM Jaipur Unit** can be seen in the office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Ltd., C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur-302020 at any time during the office hours.

Final drawings shall be provided to the successful tenderer at the time of signing of contract for execution of work.

END OF DOCUMENT
