



Tender No- DFC_ADI_EL_PSI_02_2024-25 For

Name of Work: - Maintenance of 2x25kV Power Supply Installation in New Sanand South-New Makarpura section of DFCCIL Ahmedabad Unit, for a period of 24 (Twenty-Four) months.

SINGLE PACKET OPEN ONLINE E-TENDER

(PARTICIPATION THROUGH E-TENDER ONLY)

Visit:- www.ireps.gov.in/ its link at www.dfccil.com (Help Desk of IREPS : 011-23761525)

TENDER DOCUMENT June -2024

Employer:
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
CGM-AHMEDABAD UNIT
(A GOVERNMENT OF INDIA ENTERPRISE)
UNDER MINISTRY OF RAILWAYS



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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



NOTICE INVITING TENDER E TENDER

Chief General Manager /Ahmedabad 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.	DFC_ADI_EL_PSI_02_2024-25
1	Name of Work	Maintenance of 2x25kV Power Supply Installation in New Sanand South-New Makarpura section of DFCCIL Ahmedabad Unit, for a period of 24 (Twenty-Four) months.
2	Estimated Cost of Work	Rs. 4,93,27,450.42/- (Including GST) (Four Crore Ninety-Three Lakhs Twenty-Seven Thousand Four Hundred Fifty Rupees and Forty-Two Paisa Only.)
3	Completion Period	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. 3,96,600/- (Rupees Three Lakh Ninety-Six Thousand Six Hundred Only). (To be paid online through payment gateway provided at www.ireps.gov.in .)
6	Availability of Bid documents	From 14.06.2024 on www.ireps.gov.in
7	Download bid documents upto	15:00 Hrs. of 11.07.2024 on www.ireps.gov.in
8	Last date & time of online receipt of bid	15:00 Hrs. of 11.07.2024 on www.ireps.gov.in
9	Date and time of Online opening of bid	15.30 Hrs. of 11.07.2024 on www.ireps.gov.in
10	Validity of offer	90 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	NIL
14	Address of Communication	Office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, OCC Building, 'D' Cabin Road, Sabarmati, Ahmedabad-380019, Gujarat. 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 No011-23761525
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. 31 of part III of Preamble & General Instruction to tenders.
- 3. The Offer shall be valid **for 90 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 required as per various Forms to tender document, should be submitted by the tenderers without fail strictly as per formats.

Chief General Manager DFCCIL, Ahmedabad



Part – II

Instructions to bidders for online bidding



Important instructions to Tenderer(s) before submitting their tenders online.

General: - All bidders must note that this being E-tender, bids received only through online on Etendering portal http://www.ireps.gov.in shall be considered as a valid offer. Any bid submitted in paper form will not be received and opened and shall be summarily rejected. E-tendering sitehttps://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.

The bidder must ensure that the tender document submission before the closing time as the tender submission shall stop accepting the offer at prescribed date and time.

- 1. Online Bidding Methodology: Online Bid System
- 2. Broad outline of activities from Bidders perspective:-
- Procure a Digital Signing Certificate (DSC) a.
- 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.
- Bid Submission on ETS: Prepare & arrange all documents/paper for submission of bid online g. and tender fees deposit through E-Payment gateway.
- 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. **Registration:**

The Tender documents can be downloaded from the website: https://www.ireps.gov.in and to be submitted in the e - format. Cost of the Tender Documents and EMD have to be submitted only through online payment modes available on IREPS portal like net banking, debit card, credit



card etc. Manual payments through Demand draft, Banker's cheque, Deposit receipts, FDR etc. are not allowed. Payments against this tender towards tender document cost and earnest money are to be deposited /submitted before the schedule date & time of submission of the tender otherwise the Bid will not be considered. Amendments, if any, to the tender document will be notified in the above website as and when such amendments are notified. It is the responsibility of the bidders who have downloaded the tender documents from the website to keep themselves abreast of such amendments before submitting the tender documents.

Intending bidders are requested to register themselves on IREPS portal through https://www.ireps.gov.in for obtaining User ID and Password by paying Vendor registration fee and processing fee for participating in the above-mentioned tender.

"Vender Manual" containing the detailed guidelines for E-Tendering is available on www.ireps.gov.in

- **5.** DFCCIL has decided to use process of E- Tendering for inviting this tender and thus the physical copy of the tender documents would not be sold/ accepted.
 - i) Amendments, if any, to the tender document will be notified in the above website as and when such amendments are to be notified. It is the responsibility of the Tenderer who has downloaded the tender documents from the website to keep themselves abreast of such amendments and attach all the addendum/addenda/corrigendum/corrigenda (if any) duly signed along with the submission of the tender documents.
 - ii) To participate in the E-bid submission, it is mandatory for the Bidders to get themselves registered with the IREPS (www.ireps.gov.in) and to have User ID and Password.

6. Bank Account Details of DFCCIL

Name	CGM DFCCIL, Ahmedabad
Bank account number	312601010330681
IFSC code	UBIN0546836
Bank Name	Union Bank of India
Bank Branch	Moti Bagh, New Delhi
GST No.	24AACCD4768M1ZB

7. DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATION AS PER BID:-

The bidder shall furnish, as part of his bid document establishing the bidder's eligibility. All these documents should be numbered and should be signed by bidder in each page.

- 7.1 Tender fee & EMD has to be deposited through e-payment only. The tender processing fees as per applicable rate payable through the e-payment gateways to IREPS portal is Non-refundable. Payments against this tender towards tender document cost and earnest money are to be done before the schedule date & time of submission of the tender otherwise the Bid will not be considered.
- 7.2 Each page of the tender papers is to be digitally signed by the tenderers or such person/s on his/their



- behalf that is/are legally authorized to sign for him / them.
- 7.3 Copy of PAN card.
- 7.4 The authenticated copy of registered partnership deed and registration of the firm from registrar of firm in case of partnership firm.
- 7.5 In case of proprietorship firm bidder will submit an affidavit, attested by Notary Public that "I am a sole proprietor of the firm _______ in case of ______ proprietorship firm on Non judicial stamp paper.
- 7.6 Bidder's profile duly filled in, as per tender document.
- 7.7 Power of Attorney for signing the Application. If applicable, the Power of Attorney for Lead Member of JV;
- 7.8 Article of association and memorandum in case of private/public limited company.
- 7.9 Copy of E.P.F. registration.
- 7.10 Copy of ESI Certificate.
- 7.11 Copy of GST registration no.
- 7.12 Certificate for non near relative in DFCCIL.
- 7.13 Memorandum of Understanding (in case of JV) as per Form-9 (Part- XI of BID DOCUMENT.)
- Note: (i) Any discrepancy found in the downloaded tender document submitted by the bidder compared to uploaded tender document, the tender document uploaded by the DFCCIL will be treated as valid and any changes (found in the tender document submitted by the bidder) at any stage, will be treated as fraud done to the DFCCIL, and will be liable to cancellation of agreement done (if any) & appropriate action will be taken against the bidder.
 - (ii) While submitting the Tender Online the Tenderer shall read the terms & conditions and accept the same in order to proceed further to submit their Tender.

8. The following "FOUR KEY INSTRUCTIONS for BIDDERS" must be assiduously adhered to:

- 1. Obtain individual Digital Signing Certificate (DSC or DC) well in advance of your first tender submission deadline on ETS.
- 2. Register your organization on ETS well in advance of your first tender submission deadline on ETS.
- 3. Get your organization's concerned executives trained on ETS using online training module well in advance of your tender submission deadline on ETS.
- 4. Submit your bids well in advance of tender submission deadline on ETS (DFCCIL should not be responsible for any problem arising out of internet connectivity issues).

9. 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.

Signature of tenderer (s) Date:



- (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.

10. Method for submission of bid documents

In this TENDER, the Tenderer has to participate in e-Tendering online. Tender Document fee & EMD in respect of e-tendering should accept through net banking or payment gateway only before the schedule date.

Note: The Bidder has to upload the Scanned copy of all required above said documents during Online Bid submission.

Other instructions

- a) It is recommended that the Tenderer/vendor should visit the portal (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.
- c) Information as required as per various Forms/Annexures to tender document should be submitted by the tenderers without fail strictly as per formats.

11. OPENING AND EVALUATION OF BIDS:

- (i) Opening of Bids will be done through online process.
- (ii) For participating in the tender, the authorized signatory holding Power of Attorney shall be the Digital Signatory. In case the authorized signatory holding Power of Attorney and Digital Signatory are not the same, the bid shall be considered non-responsive.

The DFCCIL Authority shall open bid documents received in electronic form at the scheduled date and time of opening of tender i.e. in the presence of the Bidders who choose to attend.

The DFCCIL Authority will subsequently examine and evaluate the Bids in accordance with the provisions set out in the BID DOCUMENTS.



Section -2 Instructions to Bidders (ITB)

2.0 SUBMISSION OF E-TENDER: -

- **2.1** Tender Document Obtaining Process
- **2.1.1** It is mandatory for all Tenderers to have Class-III Digital Signature Certified from any of the Licensed Certifying Agencies ('CA') to participate in E-Tendering of DFCCIL, (Tenderer can see the list of Licensed CAs from the link www.cca.gov.in), in the name of the person who will submit the Online tender and is authorized to do so.
- **2.1.2** To participate in E-Tender, it is mandatory for Tenderers to get themselves registered with the IREPS (www.ireps.gov.in) and to have User ID and Password.
- **2.1.3** <u>www.ireps.gov.in</u> is the only website for submission of tender. '<u>Vender Manual</u>' containing the detailed guidelines for E-Tendering is available on <u>www.ireps.gov.in</u>.
- **2.1.4** A master copy of the document downloaded from the website mentioned above shall be kept in the office of the tender inviting authority. In case of any discrepancy between the tender document downloaded from the website and the master copy, the latter shall prevail and shall be binding on the tenderer. The offer received shall be deemed to have been submitted on the document as uploaded and appearing in the website mentioned above whose master copy is kept in the office of the tender inviting authority and the agreement shall also be prepared on the basis of master document kept in the office of tender inviting authority.
- 2.2 The tenderers downloading the documents from internet must keep themselves updated through the website from which the tender document is downloaded regarding corrigenda, if any, to the notice inviting tender or the tender document, which shall be uploaded in the same website. The offers received without such corrigenda published through website shall be liable to be rejected.
- **2.3** The cost of tender document (tender fee) as mentioned in the notice inviting tender on website www.ireps.gov.in, should be accepted through net banking on payment gateway. The cost of tender document shall not be clubbed with the earnest money deposit. The tenders unaccompanied with the requisite cost of tender documents in appropriate form shall not be considered or as per instruction given on website www.ireps.gov.in.
 - **2.4** The tenders shall be filled up after careful study of the documents and the site and any clarification required may be obtained from the tender inviting authority.
 - **2.4.1** The detailed instructions of e-tendering can be read through website www.ireps.gov.in
 - **2.4.2** The Addendum/Corrigendum, if any; shall be hosted on the website www.ireps.gov.in
 - **2.4.3** The tender will be accepted only in e-tendering mode and no other mode of submission shall be accepted.



- **2.4.4** The supporting documents for all Eligibility Criteria, JV (If applicable) etc. are essentially required to be uploaded on the website www.ireps.gov.in.
- **2.4.5** Tenderers are required to give Un-Conditional Offers. A Conditional Offer is liable to be rejected. DFCCIL reserves the right to modify, expand, restrict, scrap, reject and re-float tender without assigning any reasons whatsoever.
- 2.5 The Tenderers shall closely peruse all the clauses, instructions, terms and conditions, scope of work, specification etc. as indicated in the Tender Document before quoting the offer.
- **2.6** Bid Document shall be accompanied by all the documents required to be submitted as specified in the Tender Document along with all Addendums and Corrigendum.
- 2.7 All Bids shall be submitted in accordance with the instructions contained in the Tender Document (Bid Document). Non-compliance of any of the instructions contained in the Tender Document is liable in Bid being rejected.
- **2.8** After award of contract to the Successful Contractor, if it is observed that there is any discrepancy or ambiguity about any terms and conditions mentioned in the Tender Document, the interpretation of same given by DFCCIL shall be considered as final and binding.
- **2.9** Contractor may visit the site on any working day to assess the Scope of Work before submitting their offer.
- **2.10** Completed tender documents should be uploaded on or before the date and time of closing of tender specified in the NIT and tender document.
- 2.11 Any tender received without Earnest money and cost of tender documents in the form as specified in the tender documents shall not be considered and shall be summarily rejected.
- **2.12** 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.
- **2.13** Tenderers may note that they are liable to be disqualified at any time during tendering process in case any of the information furnished by them is not found to be true. EMD of such tenderers shall be forfeited. The decision of DFCCIL in this regards shall be final and binding.
- **2.14** Information as required as per various Forms to tender document should be submitted by the tenderers without fail strictly as per formats provided.
- **2.15** The validity of offer shall be 90 days from the date of opening of the tender.



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.	Annexure No. I Part III	Tender form (Annexure No. I)	
2.	Para 33.2 of Part-III	Format for certificate to be submitted / uploaded by tenderer along with the tender documents (Form No. 22)	
3.	Para 10 and 24 of Part- III	Bid Security in accordance with Para 24 and Cost of Tender Document in case of downloaded tenders in accordance with Para10 of Preamble and General Instructions to Tenderers	
4.	Tenderer's credentials in accordance With para 31 of Preamble and General Instructions to Tenderers.		
6.	Para- 49 Part-III	Certificate for provision for medium & small enterprises (MSE) (If applicable)	
7.	Para-21 of Part-III	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.	
8.	Para 32 of part III	Relevant documents as per para 32 of part III of Preamble and General Instructions to Tenderers.	
9.	Page No. 21	Electrical Contractor License	
10.	Page No. 4	Scanned copy of proof of money deposited against Earnest money & Tender Document Cost.	
11.	-	GST Registration Certificate	
12.	2. All the Annexures & Forms properly filled up and relevant documents attached and indicated in Forms, (If applicable).		
13	Rates to be quoted on rate sheet online only		





PART-III

PREAMBLE & GENERAL INSTRUCTION TO TENDERERS



PREAMBLE &GENERAL INSTRUCTIONS TO TENDERERS

1. Introduction

(i) General

Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL), a public sector under taking has been set up under the Indian Companies Act, 1956 for implementation of Dedicated Freight Corridor Project. Government of India is the sole shareholder of the DFCCIL.

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.

(ii) 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 Rewai – 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.

Road under bridges (RUB) have been constructed on the level crossings falling on subjected section of WDFC. These RUBs shall span over the existing railway lines and the proposed DFCC lines. The cover shed over approaches of RUB shall be provided on DFCCIL portion.

2. Scope of Work

On behalf of MD DFCCIL, Office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, OCC Building, 'D' Cabin Road, Sabarmati, Ahmedabad-380019, Gujarat, 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 Sanand South-New Makarpura section of DFCCIL Ahmedabad Unit, for a period of 24 (Twenty-Four) months.".



- Quantities in schedule annexed to Contract- The quantities set out in the accepted schedule of rates with item of work quantified are the estimated quantities of the works and they shall not be taken as the actual and correct quantities of the works to be executed by the Contractor in fulfillment of his obligations under the contract. The actual/final quantity shall be executed as per approved design and drawing which is to be prepared by contractor if required. All the design calculations, if any, shall be done by contractor before execution of work. The contractor shall be responsible for any wastage of material due to mistake in design calculations.
- 4. New item of work If during execution of the work, the contractor is called upon to carry out any new item of work not included in schedule of prices, the contractor shall execute such work at such prices as may be mutually agreed with the purchaser before commencement.
- 5. If required by DFCCIL, the contractor have to execute some portion of work as per/under the tender schedule at new location (at the same rate/ Price) over Gujarat.
- **6.** Deleted.
- 7. Description of Section:-

The section consists Five Station Yards namely New Sanad South, New Timba, New Changa, New Vasad and New Makarpura, One IMD at New Sanand South, One IMSD at New Makarpura between New Sanand South to New Makarpura Section.

- 8. Facilitating Inspection by Employer/Engineer
- **9.** To take appropriate safeguard and actions for safety of track.
- 10. Cost of the work: The estimated cost of the work is shown as per NIT which includes GST Rs. 4,93,27,450.42/- (Including GST).
- 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, decision of DFCCIL in this connection shall be final and binding to contract.
- Part-IV and V of the tender document contains General Conditions of Contract and Special Conditions of Contract specific to this work and shall be applicable in the contract.
- **Location-** Works shall be executed in the jurisdiction of Chief General Manager/ DFCCIL/Ahmedabad Unit. However, DFCCIL reserves right to change the site of work anywhere in adjacent / adjoining area of the work defined in Para 7 above in the jurisdiction and the contractor shall be bound to execute the work without any extra cost.
 - a. This section is WDFC New Electrified BG Double Rail Line from New Sanand South to New Makarpura Section.
 - b. The section consists Five Station Yards namely New Sanad South, New Timba, New



Changa, New Vasad and New Makarpura.

- **Tender Bid-** The Tender Bid shall be submitted through online only on website www.ireps.gov.in as under:-
- **15. Form of Tender-** The Tender documents shall be in single packet system.

ANNEXURE - I

DFCCIL RAILWAY

	DFCCIL RAILWAI
TENDER FORM (First Sheet) Tender No	
Name of Work	
То	
The Chief General Manager,	
DFCCIL, Ahmedabad	
Acting through the Railway	
I/We have read the various conditions to tender attached abide by the said conditions. I/We also agree to keep this offer open for acceded agree to days from the date fixed for closing of the tender and in default therefor forfeiture of my/our "Bid Security". I/We offer to do the work for quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to c respects within months from the date of issue of letter of acceptance.	eptance for a period of eof, I/We will be liable _ DFCCIL, at the rates complete the work in all
2. I/We also hereby agree to abide by the Indian Railways Standard General ConContract, with all correction slips up-to-date and to carry out the work acc Conditions of Contract and Specifications of materials and works as laid do annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR and it's specification with all correction slips up-to-date for the present contract.	cording to the Special own by Railway in the 1), DSR Vol-I & Vol-II
3. A Bid Security of Rs has already been deposited online/ submibond. Full value of the Bid Security shall stand forfeited without prejudice to any in case my/our Tender is accepted and if:	
(a) I/We do not submit the Performance Guarantee within the time specified in t document;	he Tender

Signature of tenderer (s)
Date:

Tender No. DFC_ADI_EL_PSI_02_2024-25



(b) I/We do not execute the contract documents with DFCCIL that such documents are ready; and	nin seven days after receipt of notice issued by the
(c) I/We do not commence the work within fifteen da	ays after receipt of orders to that effect.
4. (a) I/We am/are a Startup firm registered by Policy and Promotion (DIPP) and my registration nu (Copy enclosed) and hence exempted from submission	mber is valid upto
5. We are a Labour Cooperative Society and our Regand hence required to deposit only	
6. Until a formal agreement is prepared and executed, contract between us subject to modifications, as may the letter of acceptance of my/our offer for this work	be mutually agreed to between us and indicated in
Signature of Witnesses:	
(1)	Signature of Tenderer(s)
(2)	Date
	Address of the Tenderer(s)

Signature of tenderer (s)
Date:



TENDER FORM (Second Sheet)

- **1. Instructions to Tenderers and Conditions of Tender**: The following documents form part of Tender / Contract:
 - (a) Tender Forms
 - (b) Special Conditions/Specifications (enclosed)
 - (c) Schedule of approximate quantities (enclosed)

Standard General Conditions of Contract-2022 of Indian Railways and Standard Specifications (Works and Materials) of Indian Railways as amended/corrected upto latest correction slips, copies of which can be seen in the office of DFCCIL Ahmedabad.

- (d) IRUSSOR-2021 as amended / corrected upto latest correction slips, copies of which can be seen in the office of DFCCIL Ahmedabad.
- (e) All general and detailed instruction/drawings pertaining to this work which will be issued by the Engineer/DFCCIL or his representatives (from time to time).
- 2. The Tenderer(s) shall quote his / their rates as a percentage above or below the Schedule of Rates of Tender and must tender for all the items shown in the Schedule of approximate quantities attached. The quantities shown in the attached Schedule are given as a guide and are approximate only and are subject to variation according to the needs of the DFCCIL. The DFCCIL does not guarantee work under each item of the Schedule. The tenderer(s) shall quote rates / rebates only at specified place in online financial Bid. Any revision of rates / rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be **summarily ignored and will not be considered.**
- **3.** 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.
- **4.** Deleted
- **5.** Tenders not submitted in the proper Forms are liable to be rejected.
- **6.** Documents to be enclosed with the BID -

S. No	Description	Documents
(1)	Offer letter complete.	Form No.1
(2)	Tenderer's credentials in accordance With para 31 of Preamble and General Instructions to	Form No. 2A,2B &2C
(3)	Certificates for authenticity of documents	Form No. 22



(4)	1	Para 24 and Cost of Tender Document accordance with Para10 of Preamble and s in an envelope.
(5)	Written confirmation authorizing the signatory of the tender to commit the tenderer and other documents as per format as applicable, in accordance with para 21 of Preamble and General Instructions to Tenderers.	
(7)	A copy of the tender papers including amendments duly signed and scanned or digitally signed by the tenderer on each and every page in token of his having studied the tender papers carefully shall be attached with the tender.	
(6)	Summary of Prices, Schedule of Prices & Total Prices	Shall be quoted on www.ireps.gov.in system
(7)	LICENSE:	Contractor must have valid Electrical Contractor License issued from appropriate government authority to execute HT & LT works.

<u>Note:</u> In case of Bid Security submitted in the physical form of Bank Guarantee, shall be submitted on/or before the Bidding closing Date and Time and it shall be in enclosed envelope duly mentioning the tender reference and write "<u>Kind attention to Shri Santosh Ankam, Project Manager/Elect./HQ DFCCIL-Ahmedabad".</u>

7. Tender Document

This tender document consists of following five parts along with Instructions to bidders for online bidding:

PART	DESCRIPTION
PART – I	Notice Inviting E-Tender
PART –II	Instructions to bidders for Online bidding
PART –III	Preamble and General Instructions to Tenderers
PART –IV	General Conditions of Contract
PART –V	Special Conditions of Contract
PART – VI	Prices and Payment
PART – VII	Technical Specifications
PART – VIII	Milestones and Time Schedule
PART – IX	SCHEDULE OF PRICES & TOTAL PRICES



PART – X	Offer Sheet
PART – XI	Tender Forms (including Schedule of Prices)

8. Sale and Submission of Tender Document

The tender documents for this work can be downloaded from website www.ireps.gov.in, www.ireps.gov.in, and offer of the same shall be uploaded in the website www.ireps.gov.in. Amendment(s) (if any) will be uploaded on above mentioned websites. For submitting the tender, the Tender documents and amendment(s) can be downloaded from the www.ireps.gov.in by the registered tenderers only.

9. Clause applicable for tender documents downloaded from Internet

Tenderer/s is free to download tender documents at their own cost, for the purpose of perusal as well as for using the same as tender document for submitting their offer. Master copy of the tender document will be available in the <u>Office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, OCC Building, 'D' Cabin Road, Sabarmati, Ahmedabad-380019, Gujarat. After award of the work, an agreement will be drawn up. The agreement shall be prepared based on the master copy available in the Office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, OCC Building, 'D' Cabin Road, Sabarmati, Ahmedabad-380019, Gujarat India and not based on the tender documents submitted by the Tenderer. In case of any discrepancy between the tender documents downloaded from the internet and the master copy, later shall prevail and will be binding on the Tenderers. No claim on this account shall be entertained.</u>

10. Cost of Tender documents downloaded from internet

For submission of 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 mentioned 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.

- 11. 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.
- 12. Tender Document to be downloaded from website www.ireps.gov.in and then, filled (through digital signature) on the same website and not to be submitted in hard copy at all. The offer (after filling the rates) should neither be scanned & uploaded, nor, the hard copy of the same should be submitted.
- 13. Deleted
- **14.** Each page of the tender papers is to be digitally signed by the tenderers or such person/s on his/their behalf that is/are legally authorized to sign for him / them.



15. Care in Submission of Tenders –

- (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 quoted rates by tenderer in tender forms are adequate and all-inclusive in item of Taxes, Duties & Levies etc. in terms of General/Special Conditions of Contract for the completion of works to the entire satisfaction of the Employer.
- (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 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 (ITC) likely to be availed by them is duly considered while quoting rates.
- (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 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.
- **16.** Tenders containing erasures and/or alteration of the tender documents are liable to be rejected.
 - **I.** All communication between the Employer and the tenderer shall be in writing. For the purposes of seeking clarification, the Employer's address is:

Office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, OCC Building, 'D' Cabin Road, Sabarmati, Ahmedabad-380019, Gujarat. Electronic mail address: sankam@dfcc.co.in

- 17. Tenderers are required to give Un-Conditional offers. A Conditional Offer is liable to be rejected. DFCCIL reserves the right to modify, expand, restrict, cancel, reject and re-float tender without assigning any reasons whatsoever.
- 18. 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 EMD of all such tenderers shall stand forfeited.
- **19.** Withdrawal of Tender: No tender can be withdrawn after scheduled date and time of submission and during tender validity period.

20. Opening of Tender:

- **I.** Tender will be opened at the scheduled date and time mentioned in the Notice Inviting E-Tender as per IREPS.
- **II.** After the opening of tender documents of all the tenderers, these bids shall be scrutinized and analysed. 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.
- **III.** The earnest money of non-qualifying tenderers will be returned back within a reasonable period.

21. 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.
- **22.** Following documents shall be submitted by the tenderer:

I. Sole Proprietorship Firm:

a. All documents in terms of Para 31 of the Preamble and General Instruction to Tenderers Part-III.

II. 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 31 of the Preamble and General Instruction to Tenderers Part-III.

III. (c) Partnership Firm:

i. All documents as mentioned in para 52.20 of the Preamble and General Instruction to Tenderers Part-III.

IV. Joint Venture (JV):

All documents as mentioned in para 52 of the Preamble and General Instruction to Tenderers Part-III.

V. 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 31 of the Preamble and General Instruction to Tenderers Part -III.

VI. 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
- iv. to sign the tender 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 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.
- vi. All other documents in terms of Para 31 of the Preamble and General Instruction to Tenderers Part-III.

VII. 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 31 of the Preamble and General Instruction to Tenderers Part-III.
- VIII. 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.
 - IX. 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 Railway's record/office files etc. will be taken for consideration of the tender, if no such mention is available in tender offer submitted.

- **X.** A tender from JV shall be considered only where permissible as per the tender conditions.
- **XI.** 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.

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 Appositile certificate.

23. Validity of Tender: -

Tenderer shall keep his offer open as mentioned in the Tender Notice.

24. Bid Security:

24.1 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.

Note:

- (i) The Bid Security shall be rounded off to the nearest Rs. 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.
- 24.2 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 resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the Railway.
- 24.3 If his tender is accepted, this Bid Security mentioned in sub para (I) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the General Conditions of Contract, Part-I. The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway/DFCCIL shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.
- 24.4 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 Form No. 26 and shall be valid for a period of 90days beyond the bid validity period.
- 24.5 In case, submission of Bid Security in the form of Bank Guarantee, following shall be ensured:
 - 24.5.1 A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender.
 - 24.5.2 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.
 - 24.5.3 Non submission of scanned copy of Bank Guarantee with the bid on etendering portal (IREPS) and/or non submission of original Bank Guarantee within the specified period shall lead to summary rejection of bid.
 - 24.5.4 The Tender Security shall remain valid for a period of 90 days beyond the validity period for the Tender.
 - 24.5.5 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.
 - 24.5.6 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.
 - 24.5.7 The envelope shall be addressed to the officer and address as mentioned in the tender document.



- 24.5.8 If the envelope is not sealed and marked as instructed above, the DFCCIL 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.
- 25. Right of DFCCIL to Deal with Tenders: 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 reject any tender or all tenders without assigning reasons for any such action. In case if tender is accepted in part by DFCCIL administration, Letter of Acceptance shall be issued as counter offer to the Tenderer, which shall be subject to acceptance by the Tenderer.
 - **25.**1 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.
- **26. Clarification of Bids:** To assist in the examination, evaluation & comparison and prequalification of the Tender, the DFCCIL 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 shall not be entertained or considered. The DFCCIL 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 request for clarification, the bid shall be evaluated as per the documents submitted along with the bid.

27. Execution of Contract Agreement:-

The Tenderer whose tender is accepted shall be required to appear in person at the Office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, OCC Building, 'D' Cabin Road, Sabarmati, Ahmedabad-380019, Gujarat, 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 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 only after submission of valid Performance Guarantee by the Contractor. In such cases the DFCCIL 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 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.

28. 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).

29. 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.

30. Rights of DFCCIL to Deal with Tenders

- a. 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.
- b. 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.
- c. 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.

31. Eligibility Criteria:

(A). 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.

Similar works means "Supply, Erection, Testing and commissioning of any SP/SSP/TSS in Indian Railways/ Metro Rail/ DFCCIL/ NHSRCL on 1x25 OR 2x25 KV system."

OR

"Maintenance of any electrical switchgear for voltage 25 KV or above at substations/ switching stations for Railways/ Metro Rail/DFCCIL/NHSRCL.".

(b) (1) In case of tenders for composite works (e.g. works involving more than one distinct



component, such as Civil Engineering works, S&T works, Electrical works, OHE works etc. and in the case of major Electrical Work, 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 each component of tender, or
- ii. Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender, or
- iii. One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender.

Note for (b) (1): Separate completed works of minimum required values shall also be considered for fulfilment of technical eligibility criteria for different components.

- (b) (2) In such cases, what constitutes a component in a composite work shall be clearly pre-defined with estimated tender cost of it, as part of the tender documents without any ambiguity.
- (b) (3) To evaluate the technical eligibility of tenderer, only components of work as stipulated in tender documents for evaluation of technical eligibility, shall be considered. The scope of work covered in other remaining components shall be either executed by tenderer himself if he has work experience as mentioned in para 25 of the Preamble and General Instruction to Tenderers through subcontractor fulfilling the requirements as per Para 25 or jointly i.e., partly himself and remaining through subcontractor, with prior approval of Chief General Manager/General Manager in writing.

However, if required in tender documents by way of Special Conditions, a formal agreement duly notarised, legally enforceable in the court of law, shall be executed by the main contractor with the subcontractor for the component(s) of work proposed to be executed by the subcontractor(s), and shall be submitted along with the offer for considering subletting of that scope of work towards fulfilment of technical eligibility. Such subcontractor must fulfil technical eligibility criteria as follows:

The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract, costing not less than 35% value of work to be sublated, in last 5 years, ending last day of month previous to the one in which tender is invited through a works contract.

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

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 Para 25, with prior approval of GM/Dy.CPM/DFCCIL in writing.

Note for Item (A):



Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organisation, 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.

(B) Financial Eligibility Criteria: (ACS-1 dt. 14.07.2022)

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 Form No. 2B, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

NOTE-1: The following procedure will be adopted as per above details provided to evaluate the financial bid, in case of more than one eligible tenderers with lowest offer, the above details will be required also in connection of para 31(A)

1. One similar work costing not less than the amount equal to 60% of advertised value of tender should be completed.

2. Marks will be awarded as follow for Financial Bid evaluation:

No. of completed work of 60% values	Marks to be awarded
One work completed of 60% values	10 Marks
Two work completed of 60% values	20 Marks
Three work completed of 60% values	30 Marks
N work completed of 60% values	N × 10 Marks

^{*}N in multiples of 01 (One) work completed of 60% values



NOTE-2: The following procedure will be adopted as per above details provided to evaluate the financial bid, in case of more than one eligible tenderers with lowest offer and also marks as per NOTE-1 above, the above details should be submitted essentially in connection of para 31(A).

Turn over (in last three year and current financial year) should be 1.5 times of advertised tender value.

1. The tenderer/s must attached the required documents / certificates for above mentioned verification.

2. Marks will be awarded as follow for Financial Bid valuation:

Turn over (in last three year and current financial	Marks to be awarded
year)	
Upto 1.5 times of advertised tender value.	10 Marks
Upto 3 times of advertised tender value.	20 Marks
Upto 4.5 times of advertised tender value.	30 Marks
N times of advertised tender value.	N × 10 Marks

^{*}N in multiples of 1.5 times of advertised tender value.

(C) Bid Capacity:

The tender/technical bid will be evaluated based on bid capacity formula detailed as Form No. 23.

- (D) No Technical and Financial credentials are required for tenders having advertised value up to Rs 50 lakh.
- (E) 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 31 of the Preamble and General Instruction to Tenderers Part-III including Para 31 (A) to 31 (E) – 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 fulfilment 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 fulfilment 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.
- 5. 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.
- 6. 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 31 (A) Para 31 of the Preamble and General Instruction to Tenderers Part-III, the same shall be considered for the purpose of fulfilment of credentials.
- 7. In case a work is considered similar in nature for fulfilment 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.
- 8. In case of newly formed partnership firm, the credentials of individual partners from previous propriety 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 x 0.2 x 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.
- 9. 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.
- 10. 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.

- 11. 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.
- In case a partner in a partnership firm is replaced due to succession as per succession law, the 12. proportion of credentials of the previous partner will be passed on to the successor.
- 13. 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.
- In a partnership firm "AB" of A&B partners, in case A also works as propriety firm "P" or 14. 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.
- 15. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
- 16. In case company A is merged with company B, then company B would get the credentials of company A also.]

32. **Tenderer Credentials:**

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

Tenderer(s) shall submit following 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.
- Audited Balance Sheet duly certified by the Chartered Accountant regarding contractual (ii) 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.
- A copy of certificate stating that they are not liable to be disqualified and all their (iv) statements/documents submitted along with bid are true and factual. Standard format of the certificate to be submitted by the bidder is enclosed as Form No. 22. 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 upto five years.

Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.

33. System of Verification of Tenderer's Credential:

- 1. For the works tenders, it has been decided to adopt the certificate based (Form self-attested is required. Signature, Stamp on Each Page). The tenderer shall submit along with the tender document, documents in support of his/their claim to fulfill the eligibility criteria as mentioned in the tender document. Each page of the copy of documents/certificates in support of certificates submitted by the tenderer shall be self—attested/ digitally signed by the tenderer or authorized representative of the tendering firm. Self—attestation shall include signature, stamp and date (on each page).
- 2. The tenderers shall submit a 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 Form-22. Non submission of a certificate (Form No. 22) by the bidder shall result in summary rejection of his/their bid. And it shall be mandatorily incumbent upon the Tenderer to identify state and submit the supporting documents duly self-attested by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned.
- 3. 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 right of the DFCCIL

34. Period of Completion



The entire work is required to be completed in all respects within 24 months (Twenty-Four 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.

35. 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.

36. Quantum of work and materials:

The indicative schedule of quantities of various items of works shall be available at www.ireps.gov.in.

37. 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.

38. Schedule of Prices

The Summary of prices and schedule of prices shall be available at www.ireps.gov.in.

39. Performance Guarantee: Refer relevant clause 16. (4) of GCC.

The tenderer shall furnish information for making payment through ECS/ NEFT / RTGS (Tender Form No. 8 placed at Part XI of the tender documents).

40. 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,"

41. Pre-Bid Meeting: - Not Applicable.

42. 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.

43. 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).

44. 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 "words" 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:
 - I. That affects in any substantial way the scope, quality or Performance of the contract.
 - II. That limits in any substantial way, inconsistent with the bidding documents, the DFCCIL"s rights or the successful Bidder's obligations under the contracts; or
 - III. Whose rectification would unfairly affect the competitive position of other Bidders who are presenting substantially responsive bids.
- e) If a bid is not substantially responsive, it shall be rejected by the DFCCIL.
- f) In case of tenders containing any conditions or deviations or reservations about contents of tender document. DFCCIL can summarily reject such tender.
- g) Clarification of Bids: To assist in the examination, evaluation & comparison and prequalification of the Tender, the DFCCIL 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 DFCIL shall not be entertained or considered. The DFCCIL request for clarification and the response of the bidder in this regard shall be in writing.

45. 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.

46. 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.

47. Award of Contract

- 1. DFCCIL shall notify the successful tenderer in writing by a Registered Letter/Courier/Speed Post/Email 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.

48. 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 of visiting the site and collecting relevant data shall be at the bidder's own expenses. It is a condition of the tender that the tenderer is deemed to have visited the site and satisfied himself with all the conditions prevailing including any difficulties for executing the work.
- 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.

49. 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 Centres
 - (ii) Khadi and Village Industries Commission
 - (iii) Khadi and Village Industries Board
 - (iv) 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 of "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 /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/www.ireps.gov.in

50. Employment/Partnership etc. of Retired Railway 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 railways owned and administered by the MD/DFCCIL for the time being, OR
- ii) being partnership firm / joint venture (JV) / registered society / registered trust etc have as one of its partners 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 MD/DFCCIL or any officer, duly authorized by him in this behalf, shall be clearly stated in writing at the time of submitting the tender.

- In case, upon successful award of contract, should a tenderer depute for execution of the (b) 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 railways owned and administered by the MD/DFCCIL 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 possesses the requisite permission from the MD/DFCCIL or any officer, duly authorized by him in this behalf, to get associated with the tenderer.
- Should a tenderer or Contractor being an individual, have member(s) of his family or in the (c) 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 railway, 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 above has not been furnished, contract is liable to be dealt in accordance with provision of clause 62 of Standard General Condition of contract.

51. JOINT VENTURE (JV) IN WORKS TENDERS

(Participation of Joint Venture firms shall be applicable for tenders of value more than Rs. 10 Crore (Rupees Ten Crore) Each As per Railway Board's letter no. 2002/CE-I/CT/37JV. Pt-VIII dated 14.12.2012)

- Participation of Joint Venture (JV) in Works Tender: This Para shall be applicable for works tenders wherein tender documents provide for the same.
- 52.2 Separate identity/name shall be given to the Joint Venture.
- 52.3 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%.
- 52.4 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.
- 52.5 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.
- 52.6 Bid Security shall be submitted by JV or authorized person of JV either as:
 - Cash through e-payment gateway or as mentioned in tender document, or (i)
 - Bank Guarantee bond either in the name of JV, or in the name of all members of JV as (ii) per MOU irrespective of their share in the JV if the JV has not been constituted legally till the date of submission of tender.
- 52.7 A copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV along with 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.
- 52.8 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.
- 52.9 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.



- **52.10** 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.
- **52.11** 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.
- 52.12 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 along with 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 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:
- **52.13** 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 during the course of execution of the contract or due to non-execution of the contract or part thereof.
- **52.14** 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.
- **52.15** Governing Laws The Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.
- **52.16** 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.
 - 1. 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.
 - 2. Documents to be enclosed by the JV along with the tender:



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 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.
 - a. 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.
 - b. 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.
 - c. 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.
 - d. 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.
 - e. All other documents in terms of Para 31 of the Preamble and General Instruction to Tenderers, Part-III above.
- 3. Credentials & Qualifying Criteria: Technical, financial eligibility and Bid capacity of the JV shall be adjudged based on satisfactory fulfilment of the following criteria:
- **52.17** Technical Eligibility Criteria ('a' or 'b' mentioned hereunder):
 - (a) For Works without composite components

The technical eligibility for the work as per para 31(A) Preamble & General Instruction to tenderer 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 31 (A) Preamble & General Instruction to tenderer 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 31 (A) Preamble & General



Instruction to tenderer 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 31 (A) Preamble & General Instruction to tenderer 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 31(A) Preamble & General Instruction to tenderer 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 52:

- (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.

52.18 Financial Eligibility Criteria

The JV shall satisfy the requirement of "Financial Eligibility" mentioned at para 31(B) above. The "financial capacity" of the lead member of JV shall not be less than 51% of the financial eligibility criteria mentioned at para 31(B) 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.

52.19 Bid Capacity

The JV shall satisfy the requirement of "Bid Capacity" requirement mentioned at para 31(C) above. The arithmetic sum of individual "Bid capacity" of all the members shall be taken as JV's "Bid capacity" to satisfy this requirement.

52.20 Participation of Partnership Firms in works tenders:

- **52.20.1** The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.
- 52.20.2 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.

- **52.20.3** 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.
- 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/Railway 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/Railway 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.

- 52.20.5 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.
- 52.20.6 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.
- 52.20.7 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.
- 52.20.8 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.
- 52.20.9 In case the Letter of Acceptance (LOA) is issued to a partnership firm, the following undertakings 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/Railway 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 / Railway 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/altered/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/Railway, 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/Railway.
- **52.21** 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:
 - a. A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
 - b. 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.
 - c. 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.
 - d. All other documents in terms of Para 31 of the Preamble and General Instruction to Tenderers Part-III.

52.22 Evaluation of eligibility of a partnership firm:

Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfilment of the eligibility criteria laid down in Para 31 of the Preamble and General Instruction to Tenderers Part -III.





PART-IV

STANDARD GENERAL CONDITIONS OF CONTRACT



GENERAL CONDITIONS OF CONTRACT

DEFINITIONS AND INTERPRETATION

- **Definition:** In these General conditions of Contract, the following terms shall have the 1. (1) 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 or of the Successor DFCCIL authorized to deal with any matters which these presents are concerned on his behalf.
 - (b) "DFCCIL" shall mean Dedicated Freight Corridor Corporation of India Ltd, a Govt. of India Enterprise (under Ministry of Railways) and a company incorporated under the provisions of the Companies Act, 1956 having it's registered office at 5th Floor, Supreme Court Metro Station Complex, New Delhi-110001 represented through its Managing Director or CGM/GM (hereinafter referred to as "DFCCIL") which expression shall, unless repugnant to the context, be deemed to include it's successors and assigns.
 - "MD/DFCCIL" shall mean the officer in-charge of the General Superintendence and (c) Control of the DFCCIL (MD) and shall mean and include their successors, of the successor of DFCCIL (hereinafter referred to as "MD/DFCCIL").
 - "CGM" shall mean the officer in-charge of the CGM unit of DFCCIL and shall also (d) include GM(Co) of DFCCIL.
 - "Engineer" shall mean Dy. CPM/DFCCIL or any other superior official of DFCCIL or (e) PMC appointed by DFCCIL.
 - PM/Dy.PM/APM (f) "Engineer's Representative" shall the /JPM/Sr. mean Executive/Executive in direct charge of the work and shall include appointed by the DFCCIL and shall mean and include the Engineer's Representative of the successor DFCCIL.
 - "Contractor" shall mean the person / Firm / Company / JV whether incorporated or (g) not who enters into the contract with the DFCCIL and shall include their executors, administrators, and successors and permitted assigns.
 - "Contract" shall mean and include the Agreement of Work Order, the accepted Schedule (h) of Rates of IR or the Schedule or Rates of CPWD 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 and all other documents included as part of contract.
 - "Works" shall mean the works to be executed in accordance with the contract. (i)
 - (j) "Specifications" shall mean the Specifications for materials and works referred / mentioned in tender documents.



(k) "Schedule of rates of Railway" shall mean the schedule of rates issued under the authority of the Chief Engineer from time to time and shall also include Rates specified in tender document.

Standard Schedule of Rates (SSOR) shall mean the schedule of Rates adopted by the Railway, which includes-

- (i) "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;
- (ii) "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 Railway 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 Plan" 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 defect liability period from the date of completion of the works as certified by the Engineer.
- (q) "Bill of Quantities" shall mean Schedule of Item(s) included in the tender document along with respective quantities and rates, accepted by the Railway.
- (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) "Contractor's authorised engineer" shall mean a graduate engineer having more than 3 years experience in the relevant field of construction work involved in the contract, duly approved by Engineer.



- **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 & marginal headings:-**The headings and marginal headings in these general conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or the contract.

GENERAL OBLIGATION

- 2. (1) Execution Co-relation and intent of contract Documents:-The contract documents shall be signed in triplicate by the DFCCIL and the Contractor. The contract documents are complementary, and what is called for by any one shall be as binding as if called for by all, the intention of the documents is to include all labour and materials, equipment's and transportation necessary for the proper execution of work. Materials or work 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 Railway to another Railway or to a Project Authority/ DFCCIL or vice versa while contract is in subsistence, the contract shall be binding on the Contractor and the Successor Railway/DFCCIL Project in the same manner & take effect all respects as if the Contractor and the Successor Project were parties there to 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 Railway/Successor Project Authority of DFCCIL the contract shall not withstanding any things contained herein contrary there to, be binding on the Contractor and the Successor Railway /Project Authority/ DFCCIL in the same manner and take effect in all respect as if the Contractor and the Successor Railway/ successor Project Authority of DFCCIL had been parties thereto from the date of this contract. The contract shall be Administered/Managed by GGM/GM/Co/ GM nominated by DFCCIL.
- **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 by-laws of any location 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 reasons 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/Railway 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 Railway/DFCCIL or the Engineer or the Engineer's Representative or the Contractor inter-se concerning the works shall be in writing or email on registered e-mail IDs i.e. the email 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/email 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 Railway/DFCCIL shall be occupied by the Contractor without the permission of the Railway/DFCCIL. 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/persons are permitted to use Railway/DFCCIL 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 any manner whatsoever without the special permission in writing of the DFCCIL. Any breach of this condition shall entitle the DFCCIL to rescind the contract under clause 62 of these conditions and also render the contractor liable for payment to the DFCCIL 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 GM/Dy.CPM/DFCCIL 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 costing not less than 35% value of work to be sublette, in last 5 years through a works contract directly given to him by a Govt. Department; or by a 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, 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.

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.

- (iii) 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 GM/Dy.CPM/DFCCIL, 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 GM/Dy.CPM/DFCCIL.



- (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 CGM/GM DFCCIL, 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 CGM/GM DFCCIL 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 Railway/DFCCIL and this shall be deemed as "excepted matter" (matter not arbitrable).
- (k) The permitted subletting of work by the contractor shall not establish any contractual relationship between the sub- contractor and the DFCCIL and shall not relieve the contractor of any responsibility under the contract.
- 8. Assistance by the 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 day to day positions 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 lossor damage arising in consequence of such delay or no supply.

9. Deleted

10. 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.

- 11. Carriage of materials:- No forwarding orders shall be issued by the DFCCIL for the conveyance of contractor's materials, tools and plant by Rail which may be required for use in the works and the contractor shall pay full freight charges at public tariff rates therefore.
 - 12. Representation on Works: The contractor shall, when he is not personally present on the site of the works place and 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 to rescind the contract under clause 62 of these conditions.
- 13. Relics and Treasures:- All gold, silver, oil and other minerals of any description and 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 and the Contractor shall duly preserve the same to the satisfaction of the DFCCIL and shall from time to time deliver the same to such person or persons as the DFCCIL 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, stones, clay, ballast, earth, 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 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 Railway/DFCCIL from and against all actions, suit proceedings losses, costs, damages, charges, claims and demands of every nature and description brought or recovered against the Railways/DFCCIL 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. Security Deposit

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 Railways/DFCCIL as part of security for the due and faithful fulfilment 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 Railway/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 Railway/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 Railway/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 railways/DFCCIL 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 Railway/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 Railway/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.



- Whenever the contract is rescinded, the Performance Guarantee already submitted for the (f) contract shall be encashed.
- The Engineer shall not make a claim under the Performance Guarantee except for amounts to (g) which the President of India/DFCCIL 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/DFCCIL 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, strikes, lockouts or act 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 of 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.

- Extension of Time in Contracts (ACS no. 01 dt. 14.07.2022): Subject to any requirement in the 17A 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:
 - **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 Railway/DFCCIL 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's/DFCCIL employees or by other Contractor employed by the Railway/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 Railway/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 Railways/DFCCIL: In the event of any failure or delay by the Railway/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 Railway/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 Railway/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.

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 Railway/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 Form no. 14) as the Engineer may decide. On such extension the Railway/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 0.005% to 0.30% of contract value of the works for each week or part of the work*.

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 Railway/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 Railway/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 ranted 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.

- 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 railway/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 Railway/DFCCIL or to any person on his behalf in relation to obtaining or execution of this or any other contract with the Railway/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 Railway/DFCCIL and to the payment of any loss or damage resulting from such decision and the Railway/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/ DFCCIL.
 - 18.(2) The contractor shall not lend or borrow from or have or enter into any monitory dealings and 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 or any such offence or compensation payable to the DFCCIL under this clause shall be settled by the Chief General Manager/Ahmedabad of the DFCCIL, in such a manner as he shall consider fit and sufficient and his decision shall be final and 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 up to 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 10 days after the receipt by him of an order in writing to this affect from the Engineer and shall proceed with the same with due expedition and without delay.
- 19.(3) Accepted Programme of work (ACS no. 01 dt. 14.04.2022):- 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/ Chief General Manager. He shall also submit the details of organization (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 endeavour to fulfil 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/Railway 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.

- 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 shall check these at frequent intervals. The contractor shall provide all facilities like labour and instruments and shall co- operate with the Engineer's representative to check all alignment, grades, levels and dimensions. If, at any time, during the progress of the works any error shall 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 order 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 authorized, except under instructions from the Engineer, and the contractor shall be responsible to obtain such instructions in each and every case in writing 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 contractors work depends for 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 therefore 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 for the same, additional instructions by means of drawings or otherwise, necessary for the proper execution of the works or any part thereof. All such drawing 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 GM/Dy.CPM/DFCCIL 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.
- Working during night: The contractor shall not carry out any work between sun-set and sun-rise without the previous permission of the Engineer/DFCCIL. 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 Railway / 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 Railway or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the Railway/ DFCCIL and this although all reasonable and proper precautions may have been taken by the contractor, and in case the Railway / DFCCIL shall be called upon to make good any costs, loss or damages, or to pay an 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 Railway / DFCCIL may incur in reference thereto, shall be charged to the contractor. The Railway / 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, stores houses and Yards:-The contractor shall at his own expense provide himself with sheds, stores houses 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, stores houses and yard 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 plan which the Engineer may object to shall not be brought upon or used in the works, but shall be forthwith removed from the sheds, store houses or yards by the contractor. The contractor shall at his own expenses provide and maintain suitable mortar mills, soaking vats or any other equipment 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 and proper manner and shall employ only such supervisors, workmen and labourers in or about the execution of any of these works as are careful and skilled in the various trades.
- 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 the 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



specified by the Engineer within seven days of being so required and failure on the part of the contractor to comply with such instructions will entitle the Railway/DFCCIL to rescind the contract under clause 62 of these conditions.

- 26A. Deployment of Qualified Engineers at Work Sites by the Contractor:-
- **26A.1** The contractor shall also employ Qualified Graduate Engineer or Qualified Diploma Holder Engineer, based on value of contract, as may be prescribed by the Ministry of Railways through separate instructions from time to time.
- **26A.2** In case the contractor fails to employ the Engineer, as aforesaid in Para 26A.1, he shall be liable to pay penalty at the rates, as may be prescribed by the Ministry of Railways through separate instructions from time to time for the default period for the provisions, as contained in Para 26A.1.
- **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 may be found requisite to be 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 therefore, 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 Railway / 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 rejected by the Railway / DFCCIL necessary expenses incurred by the Railway / 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)** Deleted
 - **31.(3) Deleted**
 - **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.

31.(4)(b) Deleted

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, they are brought upon the site of the said land, be deemed to be the property of the Railway / DFCCIL. 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 Railway / DFCCIL 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 Railway / DFCCIL 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 Railway / DFCCIL: The Contractor shall take all reasonable care of all tools, plant and materials or other property whether or a like description or not belonging to the Railway/DFCCIL 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 subcontractor, 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** / **Railway'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.
 - **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, alterations, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the Contractor by deduction from any sums which may become due to him in terms of contract, or otherwise according to law.
 - **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/Railway property and shall post such look out men as may in the opinion of the Engineer be required to comply with regulations pertaining to the work.
 - 35. Deleted.
 - **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:-

- (a) Provided for in the contract, or
- (b) 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
- (c) Necessary for the safety of the works or any part thereof.
- (d) 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
- (e) Necessary to avoid disruption of traffic and utilities, as also to permit fast repair and restoration of any damaged utilities, or
- (f) 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 suspensions exceeds 14 days, the contractor shall be entitled to such extension of time for completion of the work as the Engineers 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.
- **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 Schedule of Rates of the Contract are intended to provide for works duly and properly completed in accordance with the general and special (if any) conditions of the contract and the specifications and drawings together with such enlargements, 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, centring, 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, watching, lighting, bailing, pumping and draining, all prevention of or compensation for trespass, all barriers and arrangements for the safety of the public or of employees during the execution of works, all sanitary and medical arrangements for labour camps as may be prescribed by the DFCCIL, the setting of all work and of the construction, repair and upkeep of all centre lines, bench marks and level pegs thereon, site clearance, all fees duties, royalties, rent and compensation to owners



for surface damage or taxes and impositions payable to local authorities in respect of land, structures and all material supplied for the work or other duties of 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.

38. Deleted

39.(1) Rates for Extra Item(s) of Works (ACS no. 01 dt. 14.07.2022):

- (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 rates/schedule 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).
- (b) Other Items: For any item of work to be carried out by the Contractor but not included in the accepted rates/schedule 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 rates/schedule 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
- 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 hereunto forementioned, 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 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/Chief General Manager. within 30 days of getting the decision of the Engineer, supported by analysis of the rates claimed. The Chief Engineer's/ Chief General Manager'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 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 effected by means of public sales of such materials and property or in such a way as deemed fit and convenient to the Engineer.
- 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 Form no. 27A), 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 Railway/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 Form No. 27B). 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 requiring 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:-** DFCCIL 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 contract, the accepted variation in quantity of each individual item of the contract would be up to 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 up to 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.
 - (a) 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;
 - (b) 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;
 - (c) 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.
 - (d) Variation to quantities of Minor Value Item:
 - The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original agreement value.
 - d.(i) Quantities operated upto and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the rate awarded for that item in that particular tender;
 - d.(ii) Quantities operated in excess of 100% but 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, 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.
- In case of foundation work, no variation limit shall apply and the work shall be carried out by the Contractor on agreed rates irrespective of any variation.
- (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 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 therefore shall be calculated in accordance with the accepted schedule of rates. Any extra items / 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) Monthly Statement of Claims:** The Contractor shall prepare and furnish to the Engineer once in every month 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 month quarter and no claim for payment for and 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

- **Quantities in schedule annexed to Contract:** The quantities set out in the accepted schedule of rates 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 fulfilment of his obligations under the contract.
- **45.(i) Measurement of works by Railways /DFCCIL**:- The Contractor shall be paid for the works at the rates in the accepted schedule of rates 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 schedule of rates 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 schedule of rates 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 measures. 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.

 Massurement of works by Contractor's Authorized Representative (If any)
- 45.(ii) Measurement of works by Contractor's Authorised Representative (If so allowed or instructed):-
 - (a) The Contractor shall be paid for the works at the rates in the accepted schedule of rates and for extra works at rates determined under Clause 39 of these conditions on the measurements taken by the Contractor's Authorised Engineer in accordance with the rules prescribed for the purpose by the DFCCIL. The quantities for items the unit of which in the accepted schedule of rates 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 schedule of rates 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 check may be conducted in his absence, and such test checks shall not withstanding 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 Railway'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 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 impose a penalty of 10% of the claimed gross bill value.
 - (ii) On any next occasion of noticing any exaggerated / false measurement, DFCCIL shall impose penalty of 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, measurement 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 "One-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 6% (Six) 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 up to Re. 1/- will be reckoned as Re. 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 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, Railway/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. 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 Railway 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 Railway, such balance of advances and accrued interest thereon shall immediately



become due and payable by the Contractor to the Railway. 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.

46 Price Variation Clause (PVC): (Price Variation Clause (PVC) shall be applicable as per GCC APRIL-2022, with up-to-date correction slip)

- **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 Railway/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. (l)(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).
- **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 Railway 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)
$$T = [0.4136x(C_Q - C_B) / C_B] \times 85$$

(ix) $R = [0.94x(R_T - R_O) / R_O + 0.06x(Z_T - Z_O) / Z_O] \times 85$



 $(x) N = [(P_T - P_O) / P_O] x 85$ $(xi) I = [(I_T - I_O) / I_O] x 85$

(xii) $G = [(M_Q - M_B) / M_B] \times 85$

(xiii) $Er = [(L_Q - L_B) / L_B] \times 85$

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 Ouantities 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 Wsfl or/and Wsfl or/and Wsfl 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



- Lo 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
- Fo 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, 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.
- S_B 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.
- So 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.
- C_B Index No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the base period
- Co 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

- 47.0 **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 works 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 contractor and that there is no due from the contractor to Railways/DFCCIL against the contract concerned.

The Engineer may also issue such a certificate indicating date of completion with respect to any part of the work (before the completion of the whole of work), which has been both completed to the satisfaction of the Engineer and occupied or used by the 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 Railway 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 Form No. 24, the parties shall execute the Final Supplementary Agreement as per Form No. 24
- **49.0 Approval only by maintenance Certificate:-** No certificate other than maintenance certificate 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 or of the accuracy of any claim or demand made by the Contractor or of additional varied work having been ordered by the Engineer nor shall any other certificate conclude or prejudice any of the powers of the Engineer.
- **50.(1) Maintenance Certificate**:- The Contract shall not be considered as completed until a Maintenance Certificate shall have been signed by the Engineer stating that the works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the Engineer upon the expiration of the period of maintenance or as soon thereafter as any works ordered during such period pursuant to sub clause (2) 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.
- **50.(2)** Cessation of Railway's / DFCCIL Liability: The DFCCIL shall not be liable to the Contractor for any matter arising out of or in connection with the contract of the execution of the works unless the contractor shall have 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 fulfilment 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 Railway 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 Railway 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 any excess amount paid to him if as a result of such examination any over-payment to him is discovered to have made in respect of any works done or alleged to have been done by him under the contract.

51A. 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 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.
- 52.0 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 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 limited 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/limited company, as the case may be whether in his individual capacity or otherwise.

52A. 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 a 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 Bills, 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/Railways" 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.
- 53.0 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 a 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

54.0 Wages to Labour: -The Contractor shall be responsible to ensure compliance with the provision of the Minimum Wages Act, 1948 (hereinafter referred to as the "said Act") and the Rules made there under in respect of any employees directly or through petty contractors or subcontractors 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 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 paid by it as aforesaid within seven days after the same shall have been demanded, the Railway/DFCCIL shall be entitled to recover the same form any moneys due or accruing to the Contractor under this or any other Contract with the DFCCIL.

54A. Apprentices Act: - The contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act, 1961 and the Rules and Orders issued there under from time to time in respect of apprentices directly or through petty contractors or subcontractors 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.

55.1 Provisions of payments of Wages Act: - The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 and the rules made there under in respect of all employees employed by him either directly or through petty contractors or sub-contractors employed by him in the works. If In compliance with the terms of the contract, the Contractor directly or through petty contractors of 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 never the less be deemed to comprise persons employed by the contractor and any moneys which may be ordered to be paid by the Engineer shall be deemed to be moneys payable by the Engineer on behalf of the Contractor and the Engineer may on failure of the contractor to repay such money to the Railways/DFCCIL deduct the same from moneys due to contractor in the terms of contract. The DFCCIL shall be entitled to deduct from any moneys due to the contractor (whether under this contract or any other contract) all moneys paid or payable by the DFCCIL by the 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.

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



- **55A.(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.
- **55A.(2)** The Contractor shall obtain a valid licence under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid licence until the completion of the work. Any failure to fulfil the requirement shall attract the penal provision of the Act.
- **55A.** (3)The Contractor shall pay to the labour employed by him directly or through subcontractors 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 subcontractors in connection with the said work, as if the labour had been immediately employed by him.
- **55A.(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.
- 55A.(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 fulfil 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 by deducting it from the security deposit and/ or from any sum due by the DFCCIL to the contractor whether under the contract or otherwise. 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 DFCCIL regarding the amount actually recoverable from the contractor as stated above shall be final and binding on the Contractor.
- 55B. 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 Indian Railways Standard General Conditions of Contract. In order to ensure the same, an application has been developed and hosted on website "www.shramikkalyan.indianrailways.gov.in". Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The registration / updation 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.
- (ii) While processing payment of any "On Account Bill" or "Final Bill" or release of "Advances" or "Performance Guarantee / Security deposit", contractor shall submit a certificate to the Engineer or Engineer"s representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway"s Shramikkalyan portal at "www.shramikkalyan.indianrailways.gov.in" 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.
- **56.0 Reporting of Accidents of Labour : -** 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 made every arrangements to render all possible assistance.
- **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, DFCCIL is obliged to pay compensation to a workman directly or through petty contractor or subcontractor employed by the Contractor in executing the work, 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, DFCCIL shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by DFCCIL to the Contractor whether under these conditions or otherwise, DFCCIL 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 DFCCIL full security for all costs for



which DFCCIL might become liable in consequence of contesting such claim.

- 57A. 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 there under 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 there under, by or on behalf of any persons employed by him or otherwise.
- **58.0 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.
- **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 crèche (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, by-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 prevent any riotous or unlawful behaviour by or amongst his workmen and other employed directly or through the petty contractors or subcontractors on the works and for the preservation of peace and protection of the inhabitants and 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 Railway Medical Authority and permit inspection of all sanitary arrangements at all times by the Engineer, the Engineer's Representative of 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 therefore 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. 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 health 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 and the cost therefore recovered from the contractor.

59. (6) Deleted

- **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 DFCCIL 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 Railway/DFCCIL 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 Performance Guarantee (PG)and Security Deposits (SD) of that contract.
- **60.(1)** Non-employment of labours below the age of 15:- The Contractor shall not employ children below the age of 15 as labourers directly or through petty contractors or subcontractors 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 (Performa at Form No.15) 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 the 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 has been granted a certificate of fitness or a fresh certificate of fitness, as the case may be.

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 of determine the contract:-** The DFCCIL shall be entitled to determine and terminate the contract at any time should, in the DFCCIL/Railway's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the DFCCIL of such determination and the reasons therefore shall be conclusive evidence thereof.
- **61. (2)** Payment on determination of contract on: Should the contract be determined under sub clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the Railways/DFCCIL shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The DFCCIL/Railway'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 Clause 1.3.9 of PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS.
- (x) Fails to submit the documents pertaining to identity of JV and PAN.
- (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 the conditions
- (xiii) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the work or any part thereof as required under clause 28 of the 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 clause 1.3.32 of PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS or provision of above Clause 59(9).
- (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 Form No.16) in writing to that effect and if the contractor does not within seven days after the delivery to him 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 hour's notice (Proforma at Form No. 17) 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 hour's notice, a final termination notice (Proforma at Form No. 18) should be issued.

Note: Engineer at his discretion may resort to the part termination of contract with notices, only in cases where progress of work is more than or equal to 80% of the original scope of work.

- **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 subclause (1) of the clause, being adopted.
 - (a) the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under the contract unless and until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the



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

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

- (c) In the contract rescinded in part or parts,
 - (i) The full Performance Guarantee for the contract shall be recovered. No additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract. The contract value of part terminated contract stands reduced to the balance value of work under the contract.
 - (ii) The Security Deposit of part terminated contract shall be dealt as per clause 16(2) of GCC.
 - (iii) The defaulting Contractor shall not be issued any completion certificate for the contract.
 - (iv) The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.
 - (v) Further the authorized representative of failed Contractor will not be accepted as authorized representative in new contract.
- (d) The Engineer or the Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- (e) The Engineer shall as soon as may be practicable after removal of the Contractor fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) had at the time of rescission of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract and what was the value of any unused, or partially used materials, any constructional plant and any temporary works upon the site. The legitimate amount due to the Contractor after making necessary deductions and certified by the Engineer should be released expeditiously.

SETTLEMENT OF DISPUTES – INDIAN RAILWAY ARBITRATION AND CONCILIATION RULES



63.0 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 "General Manager/Chief General 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. Director/MD DFCCIL 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 shall be referred by the contractor to contract. the Director/Director/Chief General Manage/DFCCIL shall within 120 days after receipt of the contractor's representation make and notify decisions on all matters referred to by the contractor in writing provided that matter for which provision has been made in clauses 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 General Conditions of contract or in any special clause of the conditions of the contract shall be deemed as "excepted matters" (matters not arbitrable) and decisions of the DFCCIL authority, thereon shall be final and binding on the contractor; provided further that "excepted matters" shall stand specifically excluded from the purview of the 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 Railway 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 MD DFCCIL office. The complete panel, which shall not be less than five members, shall be sent by Director/MD DFCCIL 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 Director/MD DFCCIL 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.



- The appointment of DAB shall be effectuated by way of a tri-partite agreement among the Railway, Contractor and the respective DAB members. The terms of the remuneration of each member shall be as fixed by Ministry of 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 Director/MD DFCCIL 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 Railway 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.
- Before start of DAB proceedings, each DAB member shall give the following certificate to the Railway 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."
- 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.
- 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 Railway and the Contactor shall not be altered by reasons of issue being or under reference to DAB.
- The DAB shall conduct the proceedings at any convenient venue which shall be decided by 63.2.13 DAB in consultations with parties.
- It is a term of this contract that the Parties shall not approach any Court of Law for settlement 63.2.14 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 (Form No. 25) 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.
 - (b) The claimant shall submit his claim stating the facts supporting the claims along with all the relevant documents and the relief or remedy sought against each claim within a period of 30 days from the date of appointment of the Arbitral Tribunal.
 - (c) The DFCCIL shall submit its defence statement and counter claim(s), if any, within a period of 60 days of receipt of copy of claims from Tribunal thereafter, unless otherwise extension has been granted by Tribunal.
 - (d) **Place of Arbitration**: The place of arbitration would be within the geographical limits of the DFCCIL unit where the cause of action arose or the Headquarter of the 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 defence 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 Railways/DFCCIL that



the final bill is ready for payment, he/they will be deemed to have waived his/their claim(s) and the Railways/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)(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 nominated by the MD/DFCCIL. The sole arbitrator shall be appointed within 60 days from the day when a written and valid demand for arbitrator is received by MD/DFCCIL.
- **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 officials, as the arbitrators. For this purpose, the DFCCIL will send a panel of more than 3 names of DFCCIL officers which may also include the name(s) of Officer(s) empanelled to work as Arbitrator to the contractor within 60 days from the day when a written and valid demand for arbitration is received by the MD/DFCCIL.

Contractor will be asked to suggest to MD/DFCCIL at least 2 names out of the panel for appointment as contractor's nominee within 30 days from the date of dispatch of the request by Railway /DFCCIL. The MD/DFCCIL shall appoint at least one out of them as the contractor's nominee and will, also simultaneously appoint the balance number of arbitrators either from the panel or from outside the panel, duly indicating the "presiding arbitrator" from amongst the 3 arbitrators so appointed. MD/DFCCIL shall complete this exercise of appointing the Arbitral Tribunal within 30 days from the receipt of the names of contractor's nominees. While nominating the arbitrators it will be necessary to ensure that one of them is from the Accounts department. An officer of selection grade of accounts department shall be considered of equal status to the officers in SA grade of other department of DFCCIL for the purpose of appointment of arbitrator.

- **64.** (3)(a)(iii) If one or more of the arbitrators appointed as above refuses to act as arbitrator, withdraws from his office as arbitrator, or vacates his/their office/offices or is/are unable or unwilling to perform his functions as arbitrator for any reason whatsoever or dies or in the opinion of the MD/DFCCIL fails to act without undue delay, the MD/DFCCIL shall appoint new arbitrator/arbitrators to act in his/their place in the same manner in which the earlier arbitrator/arbitrators had been appointed. Such re-constituted Tribunal may, at its discretion, proceed with the reference from the stage at which it was left by the previous arbitrator(s).
- **64. (3) (b) (i)** the arbitral award shall state item wise, the sum and reasons upon which it is based. The analysis and reasons shall be detailed enough so that the award could be inferred there from.
- **64.**(3)(b)(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)(b)(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 Railway 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 Form No. 25 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 Railway Board from time to time irrespective of the fact whether the arbitrator(s) is/are appointed by the Railway 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 Railway 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 Railway, then 75% of the award amount shall be deducted by the Railway from the Contractor's bills, Performance Guarantee/ Security Deposit or any other dues of Contractor with the Government of India.





PART - V

SPECIAL CONDITIONS OF CONTRACT



PART-V Part A SPECIAL CONDITIONS OF CONTRACT (TECHNICAL)

1.0 SCOPE OF WORK -

The section consists Five Station Yards namely New Sanad South, New Timba, New Changa, New Vasad and New Makarpura, One IMD at New Sanand South, One IMSD at New Makarpura between New Sanand South to New Makarpura Section.."

2.0 Preamble:

The contract is aimed to carry out preventive maintenance activities for Power Supply Installations (PSI) on Iqbalgarh- New Sanand North section as per schedule laid down in this tender document. The maintenance activities involve checking of PSI installation by visual examinations, tightness of fasteners, testing & recording required parameters with the help of instruments/Kits, rectification of any defects, correction in parameter, adjustment work, replacement of defective parts, provision of deficient parts, and reporting major defect/ abnormalities in time to avoid any failure/breakdown.

The maintenance work shall be carried out as per laid down schedules in this tender, however the successful tenderer may be asked to comply special maintenance instructions as per latest technical developments. The contractor shall make himself conversant with maintenance guidelines of OEMs of equipments, maintenance instructions of RDSO and prevailing practices in various Railways. The contractor is supposed to adopt best maintenance practices so as to insure 100% reliability and availability of Power Supply Installations.

Best endeavors shall be made to avoid any outage/ breakdown of any PSI Equipments.

3.0 <u>Brief details of 2x 25KV PSI & Traction System in New Sanand South section to New Makarpura Section -</u>

3.1 Power Supply Installations:

- (i) 03 nos. 220KV /2x25KV TSSs at Sanand (01 no. traction transformer), Heranj (02 nos. traction transformer) and Bhayali (01 no. traction transformer) with transformers in Scott connection each of 60(ONAN)/84(ONAF)/100 (OFAF) MVA of 220KV/55kV, Auto Transformers (8/12.3 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.
- (ii) 02 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.
- (iii) 03 nos. SSP and 01 number ATS each having 2 nos. auto transformers of capacity 8/12.3MVA ONAN along with associated circuit breaker, switchgear control & relay panel etc.
- (iv) 08 nos. SSP type B and B2 modified without auto transformers along with associated circuit breaker, switchgear control & relay panel etc. and 02 nos. of Paralleling post in the section.

The subject tender is for maintenance/ breakdown attention of all the equipments situated at



above TSS and SCPs.

3.2 Over Head Equipments:

- (i) On main line High Rise OHE with 125 Sqmm catenary and 150 Sqmm contact wire with 1200Kg tension in each wire, contact height 7.54 m, 5 Pulley ATD, Modified DFCCIL type Cantilever, Composite Insulators, steel/copper anticreep.
- (ii) On loop lines High Rise OHE with 65 Sqmm catenary and 107 Sqmm contact wire with 1000Kg tension in each wire, contact height 7.54 m, 3 Pulley ATD, IR type Cantilever, Composite Insulators, steel/copper anticreep.
- (iii) 25 KV along track feeder (AAC)
- (iv) Aerial Earth conductor (AEC- ACSR- 288 Sqmm)
- (v) Buried Earth Conductor (BEC, Galvanized Steel conductor -182 Sqmm)
- (vi) Bonding & Earthing as per approved E&B plan.
- (vii) OHE Structures viz. Mast, Portals, Super Mast, Cross Arm, AT Structure, TTC, Gantry Structure, SPS etc.
- (viii) OHE Mast on Bridge Piers along with spare rag bolts.
- (ix) PTFE type short Neutral section with associates caution boards
- (x) IOLs, UIOLs, Section Insulators (Galland make and IR type)
- (xi) Various caution boards viz. Number plates, Unwired turn out boards, Neutral section Boards, Power block Limit boards, Electric Engine stop board, restricted clearance board, 25 KV danger boards, Sigma Boards for foggy weather etc.

3.3 Auxiliary Power Supply system for ALH/TH and Stations:

- (i) 02 Nos. Auxiliary Transformer (25 KV/240 V) for each crossing / Junction stations (50KVA for crossing Station and 100KVA for Junction Stations.) with twin 2C x 150 sqmm aluminum conductor, XLPE insulated cables upto ACO panel in S&T Power Supply room, including ACO panels.
- (ii) 02 Nos. Auxiliary Transformer (25 KV/ 240 V) for each ALH/TH (25KVA) with single 2C x 150 sqmm aluminum conductor, XLPE insulated cables upto ACO panel in ALH/TH, including ACO panels.

3.4 SCADA:

SCADA system has been provided to control power supply system through remote control from OCC. TPC organization has been set at OCC to grant power blocks and carry out operations of various equipment.

4. (A) <u>Maintenance Infrastructure of DFCCIL:</u>

- (i) 02 no. IMDs (Integrated Maintenance Depot) at New Sanand South and New Makarpura, 02 nos. IMSD (Integrated maintenance sub depot) at New Changa, New Timab and New Vasad DFCCIL will keep required tools & plants and materials at these IMDs/ IMSDs.
- (ii) 08 wheelers Tower Wagons with drivers at New New Sanad South or New Chanag or New Makarpua.



4 (B) Maintenance Strategy under this contract:

- (i) The subject tender is for maintenance & breakdown attention for Power supply equipments situated at TSS and SCPs only. OHE, Auxiliary TRF for ALH/TH/stations, 33 KV cables, SCADA etc. are not in the scope of this tender.
- (ii) The Truck/ Emergency Van / mini truck with driver will be provided by DFCCIL for Movement of PSI maintenance gangs from nominated IMD/IMSDs to work place and back in normal as well as emergent situation. However, contractor shall arrange his own transportation for his staff from their residences to IMDs/IMSDs and back.
- (iii) The tools & plants/ instruments/ testing kits maintained by the DFCCIL at IMDs/ IMSDs will be issued to contractor on loan as per requirement of work. The contractor shall keep these T&Ps in his custody and return to DFCIIL daily after work completion. He shall handle the items in reasonable in good manner to avoid any damage or loss. DFCCIL will recover the cost of lost/damage items due to negligence of contractor staff.

It may be noted that few instruments / testing kits like CB Analyzer, Meggers, CB operation Timers, Relay testing kits, Cable fault locator, thermo vision camera, Tan- Delta & capacitance testing kit etc are very delicate and high value equipments. This shall be handled with utmost care to prevent any failure/ damage. Further these equipments shall be used for necessary measurement and testing by highly skilled staff having good experience in this regard. Contractor shall be fully responsible for any damage caused to above equipments and DFCCIL may recover cost of repair/ replacement if equipment fails due to negligence of contractor staff.

- (iv) 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 /Ahmedabad available at IMD/IMSD to contractor staff. The details of location where material has been used shall be given in daily progress report jointly signed by DFCCIL site representative and contractor staff.
- (v) The released material received from site shall be handed over to DFCCIL incharge at IMD/IMSD. The details of locations from where material released, shall be given in daily progress report.
- (vi) The daily loading/ unloading of T&P items, instruments/ testing kits, PSI fittings, PSI material in the truck, emergency Van , camper as required for carrying out maintenance / breakdown attention form IMD/IMSD to work site and back, shall be in the contractors scope. The maintenance teams shall be assigned this work for which no additional rates will be payable.
- (vii) The contractor shall submit planning of carrying out PSI maintenance schedules IMD/IMSD wise with requirement of power cum traffic blocks, Permit to Work, Grid Shutdown, T&P and spares/ materials as soon as the contract is awarded. The planning shall be comprehensive to complete schedule maintenance of all the PSI assets in first year of contract. No asset/ maintenance activity shall be left out.
- (viii)Permit to Work/ Power cum Traffic block for various PSI maintenance activities shall be arranged by DFCCIL normally in daytime or sometimes in night time as per slot available in the section. No additional payment will be made for night working. Normally maintenance blocks/ PTW are provided during corridor block as per decision of DFCCIL time to time. The block timing keep on changing as per weather condition, traffic pattern etc. The contractor shall insure that his staff reaches at work place well in time.



- (ix) The power cum traffic block will be taken by authorized staff of DFCCIL. The contractor staff shall ensure all safety measures i.e. use of safety equipments (Helmet, PPE Kit, Safety shoes, safety belts etc), provision of discharge rod on OHE, Bus- bars and feeder wire. In case works is to be done under traffic block, fixing of banner flag, detonators etc shall be done by contractor as per guidance of DFCCIL. The contractor shall complete the work within allowed block/PTW timings and help returning power cum traffic block/PTW in time.
- (x) In case of any breakdown, contractor staff will be asked to report IMDs/IMSDs within short period of time i.e. within 20 minutes in day time and 25 minutes in night time of giving call to supervisor of contractor. Further the contractor shall make best efforts with enthusiasm to restore the breakdown in minimum possible time.
- (xi) The contractor shall keep required numbers of staff in each IMD section. In case any shortage is noticed, DFCCIL may impose penalty in this regard.
- (xii) The contractor staff shall carry out each maintenance activity carefully ensuring quality of maintenance. Any defect noticed shall be rectified on same day or next day so that no breakdown takes place. The activities and testing as prescribed in monthly, quarterly, half yearly and yearly schedule shall be compulsorily completed. Any omission in this regard will be viewed seriously and if any negligence is found on the part of contractor same shall be subjected to penalty.
- (xiii) Each maintenance team/ staff shall submit daily progress report giving details of Power cum Traffic Block/ PTW availed, Name of staff, Maintenance work done with parameter recorded, testing done, material provided / released and defects noticed / rectified. The report shall be prepared in 02 copies and 01 copy shall be kept by DFCCIL and contractor. Copy of the DPR format is enclosed with this tender documents. Contractor shall enclose details of maintenance carried out for each equipment in maintenance sheet as per format of maintenance schedule given in Annexure -Z of this tender document. Contractor shall print maintenance sheet as per requirement at his own cost. The details of maintenance done and value recorded shall be mentioned in this maintenance sheet. The DPR duly enclosed with maintenance sheets shall be submitted in two copies to IMD/IMSD in charge by 17:00 hrs of the day of maintenance.
- (xiv) The each activity of PSI maintenance shall be completed in time bound manner. Contractor shall ensure that each type of maintenance schedule is completed in specified period.
- (xv) The contractor shall complete each schedule in reasonable time. Additional time may be taken in case of any defect noticed however in no case allowed block / PTW should be bursted.
- (xvi) Various schedules i.e. fortnightly, monthly, quarterly, half yearly and yearly shall be carried out at specified time i.e. at the time of completion of schedule time after previous maintenance schedule. For ex. Monthly schedule of any equipment shall be carried out at the time of completion of 30 days from previous maintenance date. Preponed or delayed maintenance will be viewed adversely.
- (xvii) Special Checks & Preventive maintenance of the 2x25 kV A.C. PSI Equipment under Power Block/ PTW should be carried out strictly under the supervision of competent representatives of DFCCIL and with their time to time instructions only, in accordance with the Standard Maintenance Instructions issued by the DFCCIL.
- (xviii) Explanatory notes are given below for each item of maintenance which shall be followed. The activities to be done and parameters to be recorded have been given. Contractor staff shall record parameter and submit with daily progress report.



- (xix) 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.
- (xx) 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.
- (xxi) 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
- (xxii) All works shall be carried out strictly in accordance to the DFCCIL drawings, specifications and guidelines if any. However, any modified arrangement if in vogue in DFCCIL or suggested by CGM/Ahmedabad, the work shall be executed accordingly without any alteration in accepted rates.
- (xxiii) Explanatory note for various items of works in the Schedule of item, quantities and prices are given below. The Checking and maintenance of all equipments of PSI as the case may be shall be carried out in line with maintenance manual and as per Latest SMIs of RDSO/DFCCIL if any, during contract period OR as per the Procedure in vogue in TrD organization. No additional payment will be made for any additional man power deployment in attending to latest maintenance instructions if any. In-case of disputes between above standards if any, the decision of CGM/GM-Co. Ahmedabad is the final and contractor is bound to act accordingly.
- (xxiv) The special condition & Technical specifications for schedule items are enclosed and Tenderer shall go through them thoroughly before submitting offer.
- (xxv) Power cum Traffic block/PTW/ Shutdown 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.
- (xxvi) The maintenance activity shall be carried out with the help of required team strength of supervisory, high skilled, semi-skilled and unskilled staff. The team strength shall be adequate to undertake the various maintenance and rectification work. Large teams may be used for optimum use of available blocks/ PTW.
- (xxvii) The contractor shall give the names and qualifications of each staff to be employed by him for maintenance and breakdown attention. The proposed staff will be examine for their suitability by a committee of Dy.PM/Elect and Executive/Elect and can be deployed on being found suitable by the committee.
- (xxviii) The Joint Progress Report/Maintenance sheets shall be signed by Engineer in-charge of DFCCIL and Contractor's qualified Supervisor/Engineer for each maintenance activity. The Joint Progress Report/Maintenance sheet shall be submitted by contractor in triplicate to DFCCIL. The payment will be released based on these Progress Report/Maintenance sheets.
- (xxix) 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.
- (xxx) In the rainy season, there would be need to pump out rainy water accumulated in oil sumps, cable trenches and nearby area at TSS and SCPs. Contractor shall promptly send staff for this work as and when required. Water pumps will be given by DFCCIL.



(xxxi) Contractor shall keep the TSS neat and clean all the times during currency of contract. He shall arrange to broom and mop the floors of TSS building all rooms. He shall clean the toilets on daily basis for which all items will be supplied by DFCCIL. The oil sumps shall be cleaned after rainy season after pumping out water.

5.0 TIME SCHEDULE

5.1. TIME OF START AND COMPLETION

- 1. The subject maintenance contract is for period of 24 (Twenty Four) months.
- 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. The probable date of start of services will be within 15 days from the date of issue of LOA.
- **3.** If the Contractor fails to start the awarded work within 15 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 Engineering Organization

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

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)
- (i) The contractor shall maintain the minimum manpower at the PSI depots /TSS as under apart from Break down Gangs in Schedule-05:

Category of staff				Total
	IMD/			
	Sanand	IMSD/	IMD/ New	
	South	Changa	Makarpura	
Supervisor	1	1	1	03



Asst. Supervisor	1	1	1	03
Highly	4	4	4	12
Skilled/Skilled				
Unskilled/Helper	5	5	5	15
Total	11	11	11	33

Note (i) 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. (ii) Above staff does not include staff deployed for TSS/SCP manning, battery maintenance and housekeeping.

(ii) Required gang size:

The contractor shall maintain minimum gang size and further should proportionately increase the size of the gang (i.e. Technicians and Helpers) during major maintenance activity/ Jumbo long blocks/Break down/ night working/ special engineering works to cater the requirements. The contractor shall work out manpower requirement to comply with various schedules of all the equipments and access workmen requirement.

(iii) Suitable reliever:

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

6.2. Qualification of the contractor's Personnel for 2x25kV HIGH RISE 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 (SSE/JE 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.
- (iv) Semi-Skilled: Should have passed Matriculation and have minimum 3 years' experience in relevant field.
- (v) 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.
 - (a) Relaxation for experience/qualification for suitable candidate will in purview of Dy. CPM/Elect or GM/Elect.
 - (b) The Service Provider shall provide the list of shortlisted eligible/ suitable candidates to DFCCIL. Screening of candidate will be carried out by DFCCIL for suitability of maintenance works and only suitable candidates will be allowed for deployment.

(c) Safety Training to the contractor's personnel:

The contractor is supposed to engage various type of staff capable of carrying out maintenance activities independently. Generally no technical/ on the job training will be given by DFCCIL. However, General acquaintance and Safety 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. However necessary catalog/ manuals will be provided by DFCCIL.

(d) Scrutiny of the contractor's personnel:

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

6.3. 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 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.

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.

6.4 Medical fitness certificates:

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.

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.

6.5 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".

6.6 <u>Competency Certificate operation of 25 kV Isolators (SP/DP) with or without Earthing</u> Heel:

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

6.7 <u>Commencement of PSI equipment Maintenance Contract at field:</u>

The contractor shall commence HIGH RISE PSI equipment maintenance work at field within 15 days from date of issue of LOA of subject HIGH RISE OHE and accordingly the completion period of contract (Twenty Four Months) will be reckoned.

6.8 <u>Subletting of Contract:</u> 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 PSI Maintenance work.



The personnel who are found to be qualified and suitable in the scrutiny by representative of CGM/Ahmedabad 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 60 years as on date of commencement of work.

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

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

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

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

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

6.11 Safety during OHE/PSI 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 provide safety gadgets like safety belts, shockproof safety shoes, PPE Kit, helmets etc. to all his site staff. Further contractor shall provide uniform with rain coat/umbrella, winter cloths, jackets, hand gloves to his staff so that they can work in all the weathers. The contractor shall provide two red banner flags, two sets of hand flags and detonators (01 box) to each gang at his own cost. The contractor shall provide First Aid Box filled with all required medicine to each gang.
- (b) The required items for cleaning viz. soaps, kerosene, jute, dungri cloths, duster etc shall be provided by contractor for personal use of his staff.
- (c) Contractor shall provide small office setup at one place in the section with necessary furniture, computer, stationary items as required to deal with technical and general correspondences/



- office work in this contract.
- (d) Communication facilities (cell phones) shall have for all the technicians and supervisors by 24x7 hrs.
- (e) 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.
- (f) If any unusual occurrence/Breakdown taken place the contractor's staff should reach the breakdown vehicle within 20 minutes in day time and 25 minutes at night time after receipt of the information from purchaser's representative and to report the purchaser's representative. The time of receipt of information should be recorded before railway representative and the call book memo should be jointly signed by the gang supervisor and DFCCIL's representative before leaving to the breakdown site. In all such cases contractor should ensure full strength staff before leaving for the break down site.
- (g) Contractor shall provide for transportation of his staff by road/train for foot patrolling /AT fuse replacement/foreign body removal/battery maintenance/any other activities specified by DFCCIL's representative.
- (h) Contractor shall be in position for arranging immediately attention of the defects noticed during various inspections for normal / emergency power block.
- (i) The arrangement for the stay of the contractor's staff shall be made by the contractor at his own cost.
- (j) Safety precautions to be followed as per safety plan/ maintenance manual.
- (k) 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.

6.12 Progress Monitoring of Maintenance Schedule:

Progress of PSI maintenance shall cover all the equipments at TSS & SCPs uniformly. Contractor shall ensure all the schedules at each TSS & SCPs and their shall not be any delay in maintenance.

6.13 Tools and plants management:

- (a) The required Tools & plants/Instruments for each IMD/IMSD, will be issued by DFCCIL which should be owned and maintained by the contractor in good working order.
- (b)In case any additional tools and plants, zigs as required other than the tools for maintenance of the HIGH RISE OHE/PSI shall be arranged by the contractor at his own cost.



DFCCIL may not give all the minor T&P items i.e. hand tools (spanners, screw driver, pipe wrench, hexa frame, plum bob etc.), measuring tapes, sprit level, special zigs, hooks, other minor items. Contractor shall have adequate stock of such items and shall be provided to his work teams as and when required. These T&P items shall be property of contractor and retained by him after completion of contract.

Contractor may be asked to fabricate any special zig at IMD for which material will be given by DFCCIL.

Suitable marking / painting shall be done on all the T&P items for easy identification.

- (c)Periodical load testing/calibration of tools, tackles, plants shall be carried out to ensure healthiness and safety of equipment duly maintaining testing record equipment wise. Contractor has to ensure to taking over the load bearing T&P items after jointly testing the equipments with Supervisor. Similarly meters/instruments shall be taken over in good working order. There after these T&P items, meters/instruments 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.

The RECONCILIATION OF MATERIALS SUPPLIED BY THE DFCCIL: All the material supplied by the DFCICL 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/Ahmedabad 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) HIGH RISE OHE/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 HIGH RISE OHE/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 HIGH RISE OHE 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 HIGH RISE OHE& 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/ADI 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 licenses /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 Tower Wagon:** For carrying out maintenance and other works on Section Insulators, crossover/Turn-outs, Overlaps, attending spark locations, staggers, etc. **Tower Wagon will be**



spared by DFCCIL to the extent of requirement.

6.18 POWER BLOCKS AND PERMITS-TO-WORK:

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

- i. Availability of power block/PTW 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/PTW 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 of Contractor and shall get 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 of Contractor 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.

6.19 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, subsectors and elementary section numbers. He shall have copies of sectioning diagrams/Schematic diagrams of TSS, SCPs and any other drawing in his possession. DFCCIL will provide soft copies of relevant drawings. Contractor shall be responsible to make colored printouts and distribute to all Supervisors/ other staff as required.



- 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.

6.20 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 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.

6.21 **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 depotwise/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.

6.22 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 / Un- skilled staff to deducted from contractor's monthly bill.

- (B) Recovery Due To Poor Maintenance / Fail To Utilize Power Block / Poor Progress for every Hour of Power Block Utilized /Bursting of Power Block: If breakdown occurs due to poor maintenance, fail to utilize power block, poor progress for every hour of power block utilized, bursting of power block and proved in joint findings a penalty of Rs.20,000/- on flat rate basis per occasion. For power block burst less than or more than hour, penalty shall be imposed on pro-rata basis. The deficiency is not checked the equipment as per standard proforma enclosed with tender book OR not carried out the 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.
- (I) Recovery due to delay in attending breakdown/failure: The contractor shall ensure to report at respective IMD/IMSD within 20 min in day and 25 min in night of summoning time by respective DFCCIL staff/ Exe/Sr. Exe/JPM. If the contractor fails to report within above time period, a penalty of Rs 1000/- per hour of delay will be recovered per incidence.

A. Details of Equipments at TSS is under:

S.	Equipment Name		TSS		
N.		Sanand	Heranje	Bhayali	Total
1	Scott Transformer 60/84/100 MVA	1	2	1	4
2	220kV TP SF-6 Circuit Breaker	2	2	2	6
3	220 KV DP SF6 Circuit breaker	2	2	2	6
4	220kV Current Transformer (Protection)	3	6	3	12
5	220kV Current Transformer (Metering)	12	12	12	36
6	220kV Potential Transformer (Metering)	12	12	12	36
7	198 kV Lightning Arrester	9	12	9	30
8	220kV TP Motorised Isolator	2	2	2	6
0	with or without Earth Heel	2	3	2	7
9	220 KV DP isolator With or without Earthing heel)	4	4	4	12
10	55 KV (25 KV) Current transformers excl Auto TRF	4	8	4	16
10	uansionners exci Auto TRI	8	8	8	24
	PFC Bay (Excl. Neutral CT)	8	8	8	24



	25 kV Current Transformer (Auto TRF)	8	8	8	24
11	25 kV Neutral Current Transformer for cap bank	2	2	2	6
10	55/72.2 kV DP SF-6 Circuit Breaker SCOTT	2	4	2	8
12	Feeder	4	4	4	12
	For PFC Bay	2	2	2	6
13	55 KV /72.2 KV Vacuum CB/ Int (BX)	2	2	2	6
	55 /72.5 kV DP Motorised Isolator SCOTT	2	4	2	8
14	Feeder	8	8	8	24
	BX	4	4	4	12
	PFC Bay	6	6	6	18
	60 kV Lightning Arrester SCOTT	4	8	4	16
15	42 kV Lightning Arrester	8	8	8	24
	PFC Bay 60 KV	4	4	4	12
16	55kV/27.5 kV, 12.3 MVA Auto Transformer	4	4	4	12
17	25 kV Potential Transformer (Protection)	4	4	4	12
18	25kV/240V, 100kVA LT Auxiliary	2	2	2	6
20	55kV/0.65 kV, 3 MVA Transformer (Cap Bank)	2	2	2	6
21	2500 KVAR CAPACITOR BANK INCLUDING SERIES REACTOR	2	2	2	6
22	110 V 400 AH battery bank	1	1	1	3
23	Battery charger maintenance of TSS	2	2	2	6
24	Buried Rail Connection	8	8	8	24
25	Series reactor (PQCR)	2	2	2	6
26	Cap Bank	2	2	2	6

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

S.N.	Equipment Name	2 SPs	11 SSPs and 1 ATS	Total
1	8 MVA Auto Transformer	8	8	16
2	25 kV DP Interrupter	16	60	76



3	25 kV SP Interrupter	0	5	5
4	25 kV DP Isolator (Manual)	32	112	144
5	25 kV SP Isolator (Manual)	0	10	10
6	42 kV Lightning Arrester	16	101	117
7	25kV/240V, 10kVA LT Auxiliary Transformer	4	24	28
8	25 kV Potential Transformer	8	28	36
9	25 kV CT for Auto Transformer	24	20	44

: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 CGM/GM-Co/ADI, 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 equipements 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 CGM/GM/Co./ADI 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/ PTW 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.
j))	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.



PART – VI PRICES AND PAYMENT



PRICES AND PAYMENT

1.1 SCOPE:

This chapter deals with prices to be paid to the contractor for completion of various items of work. The contractor shall be paid for completed works in accordance with accepted schedule of prices and rates, as stipulated in the tender document.

1.2 SCHEDULE OF PRICES:

(a) UNIT PRICES FOR MATERIALS:

The unit prices of materials as given in Schedule of quantities shall be inclusive of all charges including transport, loading/unloading handling all insurance premium, banker's charges, all Taxes, Duties and levies (including Octroi etc.) applicable on works contracts etc.

1.3 FOR ERECTION:

The unit prices given in Schedule of quantities shall include cost of erection, testing, commissioning and cover all cost of administration of the contract, insurance premium, bankers' charges for guarantees, cost of storage, loading, unloading and handling of materials, and for any road transport which the Contractor may use for carriage of materials between his depot and depot/s and site of work etc. Unit prices quoted shall be FIRM.

1.4 QUANTITIES:

The approximate estimated quantities of various items of works are included in Schedule of quantities and rates. However, quantities can be increased/decreased as stipulated in Special C o n d i t i o n s of Contract.

1.5 NEW ITEMS OF WORK:

If during the execution of the work, the Contractor is called upon to carry out any new item of work not included in **Schedules**, the Contractor shall execute such works at such prices as may be mutually agreed in writing with the Purchaser.

1.6 DEDUCTION OF TAXES FROM CONTRACTOR'S BILLS:

Wherever the law makes it statutory for the purchaser to deduct any amount towards Sales Tax/Income tax on works contract, the same will be deducted and deposited with the concerned authority.

The tenderer for carrying out any construction work in Rajasthan and Haryana must get themselves registered from the Registering Office the Building and other Construction Workers Act, and rules made thereto by the Rajasthan & Haryana Government and submit certificate of Registration issued from the Registering Officer of the Rajasthan and Haryana Government (Labor Department). For enactment of this Act, the tenderer shall be required to pay cess @1% of cost of construction work to be deducted from each bill. Cost of material shall be outside the purview of cess, when supplied under a separate schedule item.



SUBMISSION OF BILLS:

On award of contract, a procedure order for submission of bills for payment shall be jointly drawn by finance and the purchaser. The contractor will be required to submit the bills as per the joint procedure order.

1.7 PAYMENT:

Payment shall be made on monthly basis for successful execution of work against the schedule items detailed in ("Schedule of Prices and Total Prices") at the accepted rate. Further, on- account payment will be permitted after submission of bill, certification of work by site in-charge, filling of Measurement Book, Attendance registers with acceptable to the DFCCIL.

1.8 Deleted.

1.9 RELEASE OF PERFORMANCE GUARANTEE:

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

1.10 RELEASE OF SECURITY DEPOSIT:

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

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

1.11 Forfeiture of Security Deposit:

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

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

1.12 RATES FOR ITEMS OF WORKS:

(i) The rates, entered in the accepted Schedule of Rates of the Contract are intended to provide for works duly and properly completed in accordance with the General and Special (if any) Conditions of the Contract and the Specifications and drawings together with such enlargements, extensions, diminutions, reductions, alterations 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 Railway, the erection, maintenance and removal of all temporary works and buildings, all watching, lighting, bailing, pumping and draining, all prevention of or compensation for trespass, all



barriers and arrangements for the safety of the public or of employees during the execution of works, all sanitary and medical arrangements for labour camps as may be prescribed by the Railway/DFCCIL, the setting of all work and of the construction, repair and upkeep of all centre lines, bench marks and level pegs thereon, site clearance, all fees duties, royalties, rent and compensation to owners for surface damage or taxes and impositions payable to local authorities in respect of land, structures and all material supplied for the work or other duties of or expenses for which the Contractor may become liable or may be put to under any provision of law for the purpose of or in connection with the execution of the contract and all such other incidental charges or contingencies as may have been specially provided for in the Specifications.

- (ii) However, if rates of existing GST or cess on GST for Works Contract is increased or any new tax cess on Works Contract is imposed by Statute after the date of opening of tender but within the original date of completion/date of completion extended under relevant GCC clause and the Contractor thereupon properly pays such taxes/cess, the Contractor shall be reimbursed the amount so paid.
- (iii) 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.
- **1.13 PRICE VARIATION CLAUSE** in Works Contracts is dealt with in accordance with provisions of GCC 2022 with latest amendments & correction slips.
- 1.14 Maintenance of Works: The Contractor shall at all times during the progress and continuance of the works and also for the period of maintenance specified in the Tender Form after the date of issue of the certificate of completion by the Engineer or any other earlier date subsequent to the completion of the works that may be fixed by the Engineer, be responsible for and effectively maintain and uphold in good substantial, sound and perfect condition all and every part of the works and shall make good from time to time and at all times as often as the Engineer shall require, any damage or defect that may during the above period arise in or be discovered or be in any way connected with the works, provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil riot, and the Contractor shall be liable for and shall pay and make good to the Railway/DFCCIL or other persons legally entitled thereto whenever required by the Engineer so to do, all losses, damages, costs and expenses they or any of them may incur or be put or be liable to by reasons or in consequence of the operations of the Contractor or of his failure in any respect.
- 1.15 Certificate of Completion of Works: As soon as in the opinion of the Engineer, the work has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Engineer shall issue a certificate of completion duly indicating the date of completion in respect of the work and the period of maintenance of the work shall commence from the date of completion mentioned in such certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to Railways/DFCCIL against the contract concerned.



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

- 1.16 Contractor not Absolved by Completion Certificate: The Certificate of Completion in respect of the works referred to in Sub-Clause (1) of this Clause shall not absolve the Contractor from his liability to make good any defects imperfections, shrinkages or faults which may appear during the period of maintenance specified in the tender arising in the opinion of the Engineer from materials or workmanship not in accordance with the drawings or specifications or instruction of the Engineer, which defects, imperfections, shrinkages or faults shall upon the direction in writing of the Engineer be amended and made good by the Contractor at his own cost; and in case of default on the part of Contractor, the Engineer may employ labour and materials or appoint another Contractor to amend and make good such defects, imperfections, shrinkages and faults and all expenses consequent thereon and incidental thereto shall be borne by the Contractor and shall be recoverable from any moneys due to him under the contract.
- 1.17 Final Supplementary Agreement: After the work is completed and taken over by the Railway/DFCCIL as per terms and conditions of the contract agreement or otherwise concluded by the parties with mutual consent and full and final payment is made by the Railway/DFCCIL to the Contractor for work done, and there is unequivocal no claim on either side under the contract, the parties shall execute the final supplementary agreement
- **1.18 Approval only by Maintenance Certificate:** No certificate other than maintenance certificate referred to in relevant Clause of GCC of the Conditions shall be deemed to constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the contract or any part thereof.
- 1.19 Maintenance Certificate: The Contract shall not be considered as completed until a Maintenance Certificate shall have been signed by the Engineer stating that the works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the Engineer upon the expiration of the period of maintenance or as soon thereafter as any works ordered during such period. The Competent Authority to issue above Maintenance Certificate shall normally be the authority who is competent to sign the contract. If this Competent Authority is of the rank lower than JA Grade, then a JA Grade Officer (concerned with the work) should issue the certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to Railways/DFCCIL against the contract concerned.
- **1.20** Cessation of Railway's/DFCCIL's Liability: The Railway/DFCCIL shall not be liable to the Contractor for any matter arising out of or in connection with the contract for execution of the works unless the Contractor has made a claim in writing in respect thereof before the issue of the Maintenance Certificate under this clause.
- **1.21 Unfulfilled Obligations:** Notwithstanding the issue of the Maintenance Certificate the Contractor and the Railway/DFCCIL shall remain liable for the fulfillment of any



obligation incurred under the provision of the contract prior to the issue of the Maintenance Certificate which remains unperformed at the time such certificate is issued and for the purposes of determining the nature and extent of any such obligations, the contract shall be deemed to remain in force between the parties thereto.

- **1.22 Final Payment:** On the Engineer's certificate of completion in respect of the works, adjustment shall be made and the balance of account based on the Engineer or the Engineer's representative's certified measurements or Engineer's certified "contractor's authorized engineer's measurements" of the total quantity of work executed by the Contractor upto the date of completion and on the accepted schedule of rates and for extra works on rates determined shall be paid to the Contractor subject always to any deduction which may be made under these presents and further subject to the Contractor having signed delivered to the Engineer enclosing either a full account in detail of all claims he may have on the Railway/DFCCIL in respect of the works or having delivered No Claim Certificate. and the Engineer having after the receipt of such account given a certificate in writing that the whole of the works to be done under the provisions of the Contracts have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, that all properties, works and things, removed, disturbed or injured in consequence of the works have been properly replaced and made good and all expenses and demands incurred by or made upon the Railway/DFCCIL for or in the respect of damage or loss by from or in consequence of the works, have been satisfied agreeably and in conformity with the contract.
- 1.23 Post Payment Audit: It is an agreed term of contract that the Railway reserves to itself the right to carry out a post-payment audit and/ or technical examination of the works and the final bill including all supporting vouchers, abstracts etc. and to make a claim on the Contractor for the refund of any excess amount paid to him till the release of security deposit or settlement of claims, whichever is later, if as a result of such examination any over-payment to him is discovered to have been made in respect of any works done or alleged to have been done by him under the contract.

1.24 PRODUCTION OF VOUCHERS ETC BY THE CONTRACTOR:

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



be open to his inspection.

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

1.25 LABOUR:

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

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

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

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

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

1.24.3 Provisions of Payments of Wages Act: The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 and the rules made there under in respect of all employees employed by him either directly or through petty Contractors or sub-contractors in the works. If in compliance with the terms of the contract, the Contractor directly or through petty Contractors or sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer, such labour shall nevertheless be deemed to comprise persons employed by the Contractor and any moneys which may be ordered to be paid by the Engineer shall be deemed to be moneys payable by the Engineer on behalf of the Contractor and the Engineer may on failure of the Contractor to repay such money to the Railways deduct the same from any moneys due to the Contractor in terms of the contract. The Railway shall be entitled to recover the same from Contractor's bills/Security Deposit or any



other dues of Contractor with the Government of India all moneys paid or payable by the Railway by way of compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this Clause shall be final and binding upon the Contractor.

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

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

1.27 Provisions of Employees Provident Fund and Miscellaneous Provisions Act, 1952:

The Contractor shall comply with the provisions of Para 30 & 36-B of the Employees Provident Fund Scheme, 1952; Para 3 & 4 of Employees' Pension Scheme, 1995; and Para 7 & 8 of Employees Deposit Linked Insurance Scheme,



1976; as modified from time to time through enactment of "Employees Provident Fund & Miscellaneous Provisions Act, 1952", wherever applicable and shall also indemnify the Railway from and against any claims under the aforesaid Act and the Rules.

- 1.25.1 Contractor is to abide by the provisions of Payment of Wages act & Minimum Wages act in terms Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/ updation of Portal shall be done as under:
 - (a) Contractor shall apply for one time registration of his company/firm etc. in the **Shramikkalyan portal** with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration in the portal within 7 days of receipt of such request.
 - (b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
 - (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LOA) / Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
 - (d) After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
 - (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
 - (f) While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or 'Performance Guarantee / Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till Month, Year."
- 1.26 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":
- 1.27 The tenderers, for carrying out any construction work, shall get themselves



- registered with the Registering Officer under Section-7 of the Building and Other Construction Workers Act, 1996 and rules made thereto by the concerned State Govt., and submit certificate of Registration issued from the Registering Officer of the concerned State Govt. (Labour Dept.). The Cess shall be deducted from contractor's bills as per provisions of the Act.
- **Reporting of Accidents:** The Contractor shall be responsible for the safety of all employees directly or through petty Contractors or sub-contractor employed by him on the works and shall report serious accidents to any of them however and wherever occurring on the works to the Engineer or the Engineers Representative and shall make every arrangements to render all possible assistance.
- 1.29 Provision of Workmen's Compensation Act: In every case in which by virtue of the provisions of Section 12 Sub-Section (1) of the Workmen's Compensation Act 1923, Railway is obliged to pay compensation to a workman directly or through petty Contractor or sub-contractor employed by the Contractor in executing the work, Railway will recover from the Contractor the amount of the compensation so paid, and, without prejudice to the rights of Railway under Section 12 Subsection (2) of the said Act, Railway shall be at liberty to recover such amount or any part thereof from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India. Railway shall not be bound to contest any claim made against it under Section 12 Sub-Section (1) of the said Act except on the written request of the Contractor and upon his giving to Railway full security for all costs for which Railway might become liable in consequence of contesting such claim.
- 1.30 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 subcontractors employed by him under this contract and shall indemnify the Railway from and against any claims under the Mines Act, or the rules and regulations framed thereunder, by or on behalf of any persons employed by him or otherwise.

1.31 DETERMINATION OF CONTRACT:

- 1.31.1 Right of Railway/DFCCIL to Determine the Contract: The Railway/DFCCIL shall be entitled to determine and terminate the contract at any time, should in the Railway's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the Railway of such determination and the reasons therefore shall be conclusive evidence thereof.
- 1.31.2 Payment on Determination of Contract: Should the contract be determined under sub clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the Railways/DFCCIL shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The Railway's/DFCCIL's decision on the necessity and propriety of such expenditure shall be final and conclusive.



1.31.3 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.

<u>1.31.4</u> **Determination of Contract owing to Default of Contractor:** If the Contractor should:

- (i) Becomes bankrupt or insolvent, or
- (ii) Make an arrangement for assignment in favour of his creditors, or agree to carry out the contract under a Committee of Inspection of his creditors, or
- (iii) Being a Company or Corporation, go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or
- (iv) Have an execution levied on his goods or property on the works, or
- (v) Assign the contract or any part thereof otherwise than as provided in Clause 7 of these Conditions, or
- (vi) Abandon the contract, or
- (vii) Persistently disregard the instructions of the Engineer, or contravene any provision of the contract, or
- (viii) Fail to adhere to the agreed program of work by a margin of 10% of the stipulated period, or
- (ix) Fail to execute the contract documents.
- (x) Fails to submit the documents pertaining to identity of JV and PAN. Form available in the Regulations for Tenders and Contracts.
- (xi) Fail to remove materials from the site or to pull down and replace work after receiving from the Engineer notice to the effect that the said materials or works have been condemned or rejected.
- (xii) Fail to take steps to employ competent or additional staff and labour as required.
- (xiii) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required.
- (xiv) Promise, offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of the Railway/DFCCIL or to any person on his or on their behalf in relation to the execution of this or any other contract with this Railway.
- (xv)(A) At any time after the tender relating to the contract, has been signed and submitted by the Contractor, being a partnership firm admit as one of its partners or employee under it or being an incorporated company elect or nominate or allow to act as one of its directors or employee under it in any capacity whatsoever any retired Engineer of the Gazetted rank or any other retired Gazetted officer working before his retirement, whether in the executive or administrative capacity, or

whether holding any pensionable post or not, in the Railways/DFCCIL for the time being owned and administered by the President of India before the expiry of one year from the date of retirement from the said service of such Engineer or Officer unless such Engineer or Officer has obtained permission from the President of India or any officer duly authorized by him in this behalf to become a partner or a director or to take employment under the contract as the case may be, or



(xv)(B) Fail to give at the time of submitting the said tender:

- (a) The correct information as to the date of retirement of such retired Engineer or retired officer from the said service, or as to whether any such retired Engineer or retired officer was under the employment of the Contractor at the time of submitting the said tender, or
- **(b)** The correct information as to such Engineers or officers obtaining permission to take employment under the Contractor, or
- (c) Being a partnership firm, the correct information as to, whether any of its partners was such a retired Engineer or a retired officer, or
- (d) Being in incorporated company, correct information as to whether any of its directors was such a retired Engineer or a retired officer, or
- (e) Being such a retired Engineer or retired officer suppress and not disclose at the time of submitting the said tender the fact of his being such a retired Engineer or a retired officer or make at the time of submitting the said tender a wrong statement in relation to his obtaining permission to take the contract or if the Contractor be a partnership firm or an incorporated company to be a partner or director of such firm or company as the case may be or to seek employment under the Contractor.
- **(f)** Submits copy of fake documents / certificates in support of credentials, submitted by the tenderer

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

Note: Engineer at his discretion may resort to the part termination of contract with notices, only in cases where progress of work is more than or equal to 80% of the original scope of work.

1.29.5 Right of Railway/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 railways under the contract shall be encashed/ forfeited and the Performance Guarantee already submitted for the contract shall be encashed. The balance work



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

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

- (c) In the contract rescinded in part or parts,
- (i) The full Performance Guarantee for the contract shall be recovered. No additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract. The contract value of part terminated contract stands reduced to the balance value of work under the contract.
- (ii) The Security Deposit of part terminated contract shall be dealt as per relevant clause of GCC.
- (iii) The defaulting Contractor shall not be issued any completion certificate for the contract.
- (iv) The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.
- (v) Further the authorized representative of failed Contractor will not be accepted as authorized representative in new contract.
- (d) The Engineer or the Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- (e) The Engineer shall as soon as may be practicable after removal of the Contractor fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) had at the time of rescission of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract and what was the value of any unused, or partially used materials, any constructional plant and any temporary works upon the site. The legitimate amount due to the Contractor after making necessary deductions and certified by the Engineer should be released expeditiously.





PART-VII

TECHNICAL SPECIFICATION



SCOPE OF WORK & Annexure (Technical Specifications)

Scope of Work:

The scope of work covers "Maintenance of 2 x 25kV Power Supply Installations in Iqbalgarh-New Sanand North section & New Makarpura Yard of DFCCIL including IR connecting lines, for a period of 24 (Twenty- Four) months under CGM/DFCCIL Ahmedabad Unit Maintenance of 2x25kV Power Supply Installation in New Sanand South-New Makarpura section of DFCCIL Ahmedabad Unit, for a period of 24 (Twenty-Four) months".

TECHNICAL SPECIFICATIONS SCOPE OF WORK & EXPLANATORY NOTES

Explanatory Notes: Explanatory notes for the various schedule items are depicted for guidance purpose only. Contractor has to abide by any change in scope of maintenance activity as per guidelines/Special maintenance instructions issued by DFCCIL/RDSO/ Railway Board from time to time and to be carried out as per the instructions of DFCCIL In-charge of Electrical department. 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 - 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. 08 - 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. 09 - 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. 10 - 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. 11 - 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. 12 - 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. 13- Quarterly 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. 14 - 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. 15 - 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. 16 - 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. 17 - 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,



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 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. 19 - 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. 20 - 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. 21 - 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. 22 - 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. 23 - 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. 24 - 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. 25 - 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. 26 - 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. 27 - 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. 28 - 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. 29 - 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. 30 - 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. 31- 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,



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-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. 33 - 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. 34- 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. 35- 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. 36 - 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. 37 - 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. 38 - 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. 39 - 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. 40 - 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. 41 - 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. 42 - 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. 43 - 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. 44 - 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. 45 - 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. 46 - 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. 47 - 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. 48 - 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. 49 - 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. 50 -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. 51- 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. 52 - 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. 53 - 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. 54 - 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. 55 - 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. 56- Quarterly maintenance of 2500 KVAR CAPACITOR BANK INCLUDINGSERIES 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. 57 - Half yearly maintenance of 2500 KVAR CAPACITOR BANK INCLUDINGSERIES 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. 56 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. 58 - Yearly maintenance of 2500 KVAR CAPACITOR BANK INCLUDING SERIESREACTOR

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. 56 & 57 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 ambient 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. 59 - 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. 60 - 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. 61 - 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. 62 - 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. 63 - Half Yearly maintenance of Earthing station

The job shall cover checking & Fortnightly Maintenance of 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. 64 - 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. 65 - Half Yearly 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. 66 - 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. 67 - 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. 68 - Reclamation of DCP (5kG, 10~kG&25~kG), CO2 (9kG) & form type fire extinguisher.

The job shall cover Servicing & maintenance of,

- 1) Dry-chemical powder (DCP) type: 5, 10 Kg & 25 Kgs.
- 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. 69 - Refilling of DCP (5kG, 10 kG & 25 kG), CO2 (9kG) & form 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.

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 - 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. 8 - 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. 9 - 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. 10 - 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. 11 - 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. 12 - 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. 13 - 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. 14- 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. 15 - 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. 16 -Quarterly Maintenance of 25 kV Potential Transformer

The job shall cover checking & Quarterly Maintenance of 25 kV Potential 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. 17 -Half Yearly Maintenance of 25 kV Potential Transformer

The job shall cover checking & Half Yearly Maintenance of 25 kV Potential 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. 18 - Yearly Maintenance of 25 kV Potential Transformer.

The job shall cover checking & Yearly Maintenance of 25 kV Potential 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. 19 -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. 20 -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. 21 - 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. 22 - 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. 23 - 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. 24 - 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. 25 - 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. 26 - 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. 27 - 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. 28- 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. 29 - 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. 30 - 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. 31 - 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. 32 - 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 $> 20^{\circ}$ C- To be attended within 24 Hrs.

 $10 \,^{\circ}$ C < variation < $20 \,^{\circ}$ C - To be attended within 10 Days.

 $5 \,^{\circ}$ C < variation < $10 \,^{\circ}$ C - To be attended within a Month.

Variation < 05 ° C - Normal.

Item no. 33 - 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. 34 - 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. 35 -Reclamation of DCP (5kG, 10kG & 25kG), CO2 (9kG) & form type fire extinguisher.

The job shall cover Servicing & maintenance of,

- 1) Dry-chemical powder (DCP) type: 5, 10 Kg & 25 Kgs.
- 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. 36-Refilling of DCP (5KG, 10 KG & 25 KG), CO2 (9kG) & form type fire extinguisher. The job shall cover refilling of,

- 1) Dry-chemical powder (DCP) type: 5, 10 Kg & 25 Kgs.
- 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 man power 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 man power 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 man power deputed shall leave the work spot with the permission of engineer in charge. All released materials to be handed over to DFCCIL

<u>Item no. 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</u>

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 enamelled 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, barbered 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 - 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. 16 - 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 structures and metallic frame work/terminals of various outdoor equipments as required

Item no. 17 - 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 substation control rooms. The requirement of fencing panel earthing to the nearest fencing upright shall also be included and paid for under this item.



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. Daily cleaning i.e. brooming, mopping of all rooms in TSS Building.
- 3. Cleaning of toilets/ bathrooms.
- 4. Cleaning of roads, foundation area, oil drains, oil sump, water drains, TSS entry area etc.
 - 5. The vegetation grown along the fencing outside TSS shall be cleared upto 1.0 meter so that they do not touch to the fencing.
 - 6. Cleaning of vegetation in yard and surrounding area.
 - 7. Watering and care taking of trees/ plants grown in the TSS areas.
 - 8. Safe guarding of TSS premises from any unwanted movements of stranger or animals.
 - 9. Time to time checking for ensuring no reptiles are found in equipment box or any other location which create unwanted faults or short circuits.
 - 10. Any other work that does not require excavation or access to the switchyard that can be undertaken without disturbing the operation of the substation.
 - 11. He should not operate any equipment in any condition.
 - 12. He should not climb in any structure on live condition.

Item no. 2 - Manning of TSS (Optional as per requirement).

The job shall cover the Manning of TSS by contractor staff as mentioned below,

- (i) The staff to be deputed should be able to take and write messages from Railway authorities in English/Hindi 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.
- (v) The staff to be deputed for manning of TSS, highly skilled person should have passed minimum Diploma in Electrical or higher technical qualification with 01 year experience OR ITI/ equivalent technical qualification (Electrician/Wireman/other similar trade) with 5 years' experience. The staff 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 Dy.CPM/EL/ADI will only are allowed to work. Following are the minor works:-
 - (a) Replacement of defective LED, indication lamps of relay panel, ACDB & DCDB panel.
 - **(b)** Battery maintenance distilled water topping work.
 - (c) Replacement of HRC fuse and rotary switch of ACDB, DCDB and control and relay panel.



(d) Provision of naphthalene balls at control and other equipment supplied by DFCCIL.

A. Duties of operator (manning) staff -

- (i) He should go through the instructions/messages written in handing over charge/Taking over charge register before taking over charge of duty.
- (ii) He should check the condition of all indication lamps and status of equipment.
- (iii)He should obtained the HT meter readings if any such as KWH, KVAH, KVARH, MD, PF etc from the supply authority meters at 00-00 Hrs daily, record in energy register and convey to on duty TPC.
- (iv)He should check the counter reading of Equipment and relays at 00-00Hrs/ other specified time daily.
- (v) 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 contractor.
- (vi)He should record the time of CB tripping, 132KV supply failures and the feed extensions in concerned register.
- (vii) He should check the Trickle/Boost current, Voltage of Battery charger.
- (viii) He should neatly clean the battery cell surfaces daily.
- (ix)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.
- (x) 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.
- (xi)He should check the of safety equipment such as Fire extinguisher, Fire buckets with sand etc.
- (xii) He should check the functioning of telephones provided.
- (xiii) He should operate the equipments as per instructions of TPC on duty.
- (xiv) He should check the safe custody of T & P items and other stores kept at TSS.
- (xv) He should clean the control panel and equipment provided at control room.
- (xvi) He should carry out minor repairs under guidance of in-charges of TSS.
- (xvii) He should switch on & off of Yard lights, pump at TSS.
- (xviii) He should check & maintain general electrical lighting of TSS premises.
- (xix) He should follow any instructions given by TPC & In-charges of TSS.
- (xx) He should look after any other duty assigned by In-charges of TSS.
- (xxi) He should register all incoming and outgoing calls on register.
- (xxii) Do not allow un-authorized staff into the sub-station.
- (xxiii) Do not allow co-staff to operate the control panel/equipment without his knowledge.
- (xxiv) Ensure communication facilities are in working order. If any defect noticed, report to CTPC/TSS in-charges.
- (xxv) Check all safety items/equipment, such as discharge rod, hand gloves, Helmets, safety belts for sound condition.
- (xxvi) Ensure firefighting equipment for a periodical checking and refilling.
- (xxvii) Operate the equipment only on instructions of the TPC under clear message duly exchanging PN number.
- (xxviii) 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.
- (xxix) 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 125 V.
- (xxx) 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.
- (xxxi) 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.
- (xxxii) In case of 25KV supply voltage falling below 19 kV/increasing above 27.5 kV inform immediately to on duty TPC for appropriate action.
- (xxxiii) All local operations are done under the instructions of TPC daily, and duly keeping the switches in local condition.
- (xxxiv) During duty hours operator shall bear tight fitting clothes and shoes.
- (xxxv) During hourly yard checking he shall keep himself alert, 2.0 meter safe distance away from electrical live parts and bear helmet.
- (xxxvi) He shall not attempt to climb a structure, until permission granted by TPC/Incharge and proper earthing and equipped with all safety gears.
- (xxxvii) He shall not carry boom, ladder in standing position in the yard to access the equipment.
- (xxxviii) 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.
- (xxxix) He shall not carry umbrella in yard in any season.
- (xl) 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.
- (xli) One man day in this part of schedule is for 08 hours. Contractor has to arrange for transport of the personnel for manning at TSS.

Item no. 3 - Manning of SCPs (Optional as per requirement).

The explanatory note & scope of work will be same as of item no. 02 above except the deployed staff should have qualification of ITI / equivalent technical qualification (Electrician/Wireman/other similar trade) with 02 year experience. The staff 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 Dy.CPM/EL/ADI will only be allowed to work.

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 (total 04 staff) 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 04 staff in one Gang.

The breakdown team shall report at nominated IMD/IMSD within 20 minutes in day and 25 minutes in night. In case contractor fails to provide breakdown attention team, he may be penalised by DFCCIL as deemed fit.

The staff deployed for breakdown attention should have good knowledge of PSI system so as to troubleshoot expeditiously in order to minimise down time.



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 Iqbalgarh-New Sanad North 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 (Optional as per requirement).

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.

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.

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 Annexure-B 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].

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: Testing of Transformer oil.

The price includes carrying out various test of transformer oil sample as per IS: 1866. The test to be carried out are as under: -

1	Physical Condition & Appearance of Oil (Colour & Order)
2	Density at Room Temperature
3	Electric Breakdown Voltage
4	Moisture Content by Karl Fisher Method
5	Neutralization Value
6	Specific Resistance at room temperature & 90 degree C
7	Dissipation Factor (tan 0) at room temp. & 90 degree C
8	Interfacial tension test at + room temp
9	Flash Point
10	Sediment & Perceptible Sludge
11	Dissolved Gas Analysis
12	Furan Analysis

The price shall include collection of sample from concerned transformer from various TSS, SCPs, ESS. The transformers included for these test are Scott, Auto, and Capacitor bank TRF, ESS Transformer etc. The price shall include transportation of sample to Govt. accredited laboratory. The laboratory shall be of good repute duly approved by NABL. The contractor shall submit necessary documents and get the laboratory approval from DFCCIL. The bottles



for sample collection as per IS shall be arranged by contractor. The price shall include submission of test report to DFCCIL in triplicate.

The test shall be carried out once in the contract period as per direction of DFCCIL. Generally, the sample shall not be collected in rainy season.

Schedule 9: Supply of Tools and Plants

Supply of tools and Plants in Schedule-09 as per DFCCIL requirement. The contractor will be paid the cost of the tools and plants as pro rata basis. The Item No 52 to 58, 64 and 66 make and specifications will be as per RDSO approved. Other items make and model shall be approved from Dy.CPM/Elect., GM/Elect. from reputed make or IR approved make list.



DAILY PROGRESS REPORT FORMAT (PSI)

1. Name of PSI Location:-

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Demand	Grant	
Section of Power Block on OHE / PTW section at PSI location	Duration	Duration

3.	Contractor	Staff	utilized		

Name of Supervisor: - Skilled: Semi Unskilled skilled:

- 4. Name of DFCCIL supervisor/ staff:
- 5. Details of work carried out in power block: (Enclose maintenance sheet of each equipment for which maintenance schedule carried out)
- 6. General Report on PSI equipment of the section. Preventive action suggested
- 7. Details of work carried out under Non-power block

Station: Contractor

Date: Name & Designation

> Verified by (Sr Executive/Executive)



Annexure-Z

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.

1. MAINTENANCE SCHEDULES OF 220 KV/55 KV SCOTT TRANSFORMERS (60 /84/100 MVA)

Sl. N	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	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: 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
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	



	10 4/10/C		
8.	Dehydrating breather	 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 marshaling box	Check for proper functioning. In case not working, the connection should be checked and rectified.	
10.	Sound	Check abnormal humming, observe and arrest the humming sound.	Find out the reason
11.	All external connection Check visually that all connections are normal without any discoloration due to local heating. In case of any sign of heating, clean and tighten the bolts and nuts.		
12	NIFPS	Visually Check for any abnormality. In the Nitrogen Injection Fire Protection System (NIFPS).	
13.	Miscellaneous, if any.		

	Half yearly						
SN	Item I	nspection And Work to be Carried Out	Remarks				
1.	Carry out following work in addition to monthly schedule						
2.	a	Cest for BDV and acidity. Compare and take ction.					
3.	Insulation resistance of Winding and polarization. Index (PI) with 2.5kV or 5kV megger for HV-L HV-E LV-E	Insulation resistance values should be compared with the last recorded value. Compare PI values with values at the time of	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.				



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	4.	PRD/explosion vent	Check & investigate for operation of PRD/explosion vent for any damage and presence of oil. Check connection and operation of PRD/explosion vent. Replace the damaged PRD with new PRD, if required.					
	5.	Miscellaneous, if any						

Yearly

N	Ref:-TI/MI/0038 (Rev. II) dt. 10.05.2006 & ACTM V	OL II, part-1, par	ra- 20205,			
	20246 & Camtech Maint manual (2010)					
	In addition to monthly & Half yearly sch.					
1.	Infrared temperature scanning for tank, bushing, tap					
1,	changer, radiators and connectors					
2.	Tan Delta and capacitance test of condenser bushing (<					
	0.007)	Refer Annex. B				
3.	Tan Delta and capacitance test of Transformer windings (Refer Annex.				
	In case of doubtful IR reading results, as compared to	C				
4.	pervious results) Chaele gooket joints for any lookege and tighten the nut &					
4.	Check gasket joints for any leakage and tighten the nut & bolts if loose					
5.	Checking of arcing horn (rod gap setting) /					
	Testing of bushing Oil sample. Testing for if bushing not					
6.	hermetically sealed					
7.	BDV of transformer oil	> 50 KV				
		Refer Annex.				
8.	Testing of transformer oil sample for DGA	D				
9.	Testing of transformer oil sample as per Is 1866-2000 /	Refer Annex.				
	1866-2000	E				
10	Working of tap changer switches					
11	Checking of IR of tap changer motor with 500V megger					
12	Checking of control circuit, Relay, gauges, Alarm & their circuits					
13	Check of vermin proofing and water leakage inside of					
	control boxes and terminal box					
14	Check Oil Temperature Indicator for proper working and					
	setting					
15	OTI Alarm setting	80 °C				
16	OTI trip setting	85 °C				
17	Check Winding Temperature Indicator for proper working					
	and setting					
18	WTI Alarm setting	90 °C				
19	WTI Trip setting	95 °C				
20	Check oil gauge for proper working	12.2				
21	Measure the earth resistance and record					
22	Check operation of Buchholz relay, Continuity test for					
44	contacts with test lock screw set at 5 0					



23	IR of Buchholz Relay	> 20 M Ohms	
24	Check Voltage Ratio of transformer on various taps.		
	Primary Voltage		
	Secondary Voltage		
	Voltage ratio		
25	Winding Resistance test on principal tap, compare it with factory test value deviation permitted by +/-5%		

2. Maintenance schedules for 220/132 KV Triple Pole /66 kV DP SF-6 Circuit Breaker:(As per DFCC Maintenance Manual)

Monthly schedules

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	Surface of Porcelain pole insulator unit		Shall be free from dust, dirt, flash, chipping etc
2.	Counter reading	Check operation of counter and record counter reading of Circuit Breaker: - Before maintenance - After maintenance	Record
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	dust and hinges. Arrest the reason and attend it. Examine the interior, if any part of the interior	sealant
5.	Heater, thermostat &lamp	Check function of heater, thermostat &lamp. If any defect, attend it.	Working & setting of Thermostat is 25 - 30 ⁰ 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 Operation	Check the operation of breaker on local and remote switch. Breaker should have open & close on selected position. During operation observe whether the mechanism functions smoothly without any rubbing or obstruction. Check shock absorber functions properly when CB is tripped.	,
8.	Local and Remote switch	Check the function of local and remote switches.	



9.	Position of Indicator	Check the proper alignment of breaker operation indicator with its position.	
10.	Shock observer	Check the oil leakage from shock absorber. Repair or replace, if necessary.	
11.	Limit switch & auxiliary contact	Check & clean the function of auxiliary limit switch, auxiliary contact and connection for tightness.	
12.	Condenser tripping device, if provided	Check the function of CTD for proper operation. If defective, attend the same.	
13.	Anti pumping device for CB	Check the function of APD for proper operation. If defective, attend the same.	
14.	Interlocking	Check the proper interlocking with isolator.	
15	<u> </u>	Examine the commutator of the motor and clean with muslin cloth. Examine carbon brushes and replace if necessary/ Check gear oil level in the mechanism and replenish it, if required. Note down spring charging time.	
16.	Foundation	Check condition of foundation bolts and tightness of foundation bolts.	
17	Breather	Check breather and breather holes for clogging. Replace/treat silica gel if required.	
18.	Miscellaneous, if an	y	

Half yearly

SN	Item	Inspection And Work to be	Remarks
		Carried Out	
1.	Carry out following work:	in addition to monthly schedule	
2.	All the moving part of the		Lubricate as per annexure 'III'
	Mechanism	Check, clean & lubricate the gear,	
		bearing cum shaft rollers and latches	
3.	Insulation Resistance of pole unit (when breaker in	Check & record IR value of pole unit	IR More than 1500 M ohm
	open position)	i. Top-Bottom	
		ii. Top-Earth	
		iii. Bottom-Earth	
		Check with 2.5/5.0 KV megger.	
4.	Insulation Resistance of	Check & record continuity & IR	IR More than 1500 M ohm
	pole unit (when breaker in	value of	
	open position)	pole unit as per OEM:	
		iii. Top-Bottom- for continuity	
		iv. Top & Bottom-Earth	
		Check with multi meter & 2.5/5.0 KV megger.	
5.	Insulation Resistance	Measure & record the Insulation	IR More than 2 M ohm
	between control circuit to	Resistance between control circuit to	
	ground	ground by 500V megger	



	इ भट काराडार		
6.	Closing/Trip coil	Check & record closing coil parameter:	i. Voltage 110VDC+/-10% ii. Resistance 320hm or
		i. Voltage	As per OEM
		ii. Resistance	iii.IR value more than
		iii. IR values	2M ohm
		Check with measuring instrument	
		(megger & multi meter)	
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	Check overheated & rusted nuts,	
	connector	bolts, washers and bi-metallic	
		strips. Replace, if required.	
9.	Shock observer	Check for oil leakage, if leakages attendit.	
10.	Charging time of closing spring	Check and record charging time of closing Spring	15 sec. or as per OEM manual.
11		Examine the commutator of the motor	
	gear box for spring	and clean with musline cloth.	
	charging	Examine carbon brushes and replace	
		if necessary/ Check gear-oil level in	
		the mechanism and replenish it, if required.	
12.	Miscellaneous, if any.	poquirou.	

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

Yearly Maintenance schedule:

	Item	Inspection And Work to be	Remarks			
Sl. No.		Carried Out				
	Carry out following work in addition to monthly and half yearly schedule					
1	Trip and closing plunger	Check and clean free movement of plungers.				
2	Anti-pumping device	Check free movement of anti- pumping relay plunger and clean contacts by CTC/Cloth				
3	Shock observer	Check for oil leakage, if leakages attend it. Check for breakages /cracks and replace if required.				
4	Measure & record					
	a. Closing time	Less than 130ms				
	b. Opening time	Less than 32ms				
5	Check & record contact resistance of fixed & moving contact with contact resistance meter in close position of CB	Should be $<$ 50 $\mu\Omega$ (or refer OEM manual)				
6	Checking of gas pressure trip and alarm circuits					



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	a. Gas Pressure Normal	7kg/cm ²	
	b. Gas Pressure Alarm	6.5kg/cm ²	
	b. Gas pressure Lock out	6kg/cm ²	
7	Measurement of insulation reading of spring charging motor and control cable with 500V megger	>2 M Ohm	
8	Checking of motor bearing for free movement and lubricate the same	There should be no abnormal noise. Measure current of motor.	
9	Checking of Earthing of equipment and its tightness	To be ensured	
10	Painting of equipment	Use paint of approved specification and make as per OEM.	
11	Check wipe and travel/stroke of moving contact and record value.	Compare with OEM value and take suitable action if exceed limits.	
12	Any other maintenance suggested by the OEM maintenance manual	As per maintenance manual.	

3. Maintenance schedules for 220 KV /132KV/66 KV/ 25KV Current Transformer

(As per DFCC Maintenance Manual) Type- Single phase, oil filled natural air cooled

Monthly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Surface of	Check damages, flash mark, chipping of insulators. Replace, if	
	porcelain pole insulator unit	required. Clean with dry cotton cloth for dirtiness.	
2.	Terminal	Check overheated/rusted terminal connectors. Replace, if any	
∠.	connectors	sign of overheating/rusted	
3.		Check tightness of terminal bolts, nuts & washers. Replace, if	
		any sign of rusting/oxidation. Check LT box gasket for correct	
	Nuts &washers	fitment, cut etc, replace if required.	
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	

Half yearly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out follow	ring 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. 2000MΩ min.1 or220'13 2kV(use2.5kVmegger)	
		ii. 200 M Ω min. for 25 kV (use 2.5 kV megger)	



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(ii)	HV-LV	i. 2000 MΩ min. for 220/132 kV (use 2.5 kV megger)	
		ii. 200 M Ω min. for 25 kV (use 2.5 kV megger)	
(iii)	LV-Earth	i. 2 MΩ min.for 220/132KV(use 500 V megger)	
		ii. 2 M Ω min. for 25 kV (use 500 V megger)	
4.	Check for polarity	Shall be as per OEM manual	
5.	CT top cover and Sealing	Check for sealing of CT against leakage of nitrogen gas.	
6.	Miscellaneous, if any.		

Yearly:

SN	Item	Inspection And Work To Be Carried Out	Remarks
1.	Carry out following wo	ork in addition to half yearly schedule	
2.	Arcing horn gap, if provided	Check & measure arcing horn gap as required.	
3.	Oil testing, if possible	Test the oil with BDV tester	BDV more than 40KV
4.	Painting	Paint to be done, if color of tank if faded/rusted. Paint with epoxy and Polyurethane paints as per OEM's	
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.	
7.	Nitrogen Sealing	Check for proper sealing of Nitrogen. In case diaphragm found damaged attend the same.	

4. <u>Maintenance schedules for 220 KV /132KV/66 KV/ 25KV Potential Transformer</u> (As per DFCC Maintenance Manual) Type- Single phase, oil filled natural air cooled

Quarterly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.		Check oil leakage, chip or insulator broken and any sign of overheating. If observed, attend it.	
2.		Check any overheating of terminals. Replace, if found overheated.	
3.		Check & replace terminal bolts, nuts & washers, if any sign of rusting/oxidation is found.	
4.		Check the oil level in PT & top up with new oil up to mark, if required & measure BDV of oil.	BDV of new oil shall be > 50 KV
5.		Check fuse and neutral link for proper rating and tightness. Replace the fuse, if necessary	
6.	Earthing connections	Check & tight the earth connections, if found loose.	
7.	Miscellaneous, if ar	ny.	



SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out follow:	ing work in addition to quarterly schedule	
2.	Earth link	Check & tight earth link in secondary box.	
3.	Measure Insulati	on Resistance between:	
(i)	HV-Earth	2000M ohm min.for220/132kV(use2.5 KVmegger) 200 M ohm min. for 25 KV (use 2.5 kV megger)	
(ii)	HV-LV	2000 M ohm min. for 220/132 kV (use 2.5 kV megger) 200 M ohm min. for 25 kV (use 2.5 kV megger)	
(iii)	LV-Earth	2 M ohm min.for 220/132KV(use 500 V megger) 2 M ohm min. for 25 KV (use 500 V megger)	
4.	LT Fuse and connections	Check condition of fuse and connections in LT terminal box. Check for tightness, rusting, heating etc. Check for gasket condition and replace if required.	
5.	Check for polarity	Shall be as per OEM manual	
6.	Carry out PT ratio test.	Check ratio by injecting low voltage on primary side and compare results with factory inspection report/OEM manual	
7.		Check arching horn for flash mark and measure the gap of arching horns.	
8.		Check for sealing of PT cover /diaphragm for any leakage of nitrogen gas.	
10.	Miscellaneous, if	fany.	

Yearly:

SN	Item	Inspection And Work To Be Carried Out	Remarks	
1.	Carry out followi	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.		Paint to be done, if color of tank if faded/rusted. Paint with epoxy and polyurethane paints or as per OEM		
6.	Nitrogen Sealing	Check for proper sealing of Nitrogen. In case diaphragm found damaged attend the same and refill nitrogen		



5. Maintenance schedules for 198 (For 220 KV) ,120 KV (132 KV) and 42 KV (25 KV) Lightning arrester

(As per DFCC Maintenance Manual)

Monthly:

SN	Item	Inspection and work to be carried out	Remarks
1.	Visual inspection of lightning Arrestor	Check sign of overheating. If observed, find out the reason and attend it.	
	Surface of porcelain pole insulator unit	Check damages, flash mark, chipping of Insulators. Replace, if required. Clean with dry cotton cloth for dirtiness.	
	Lightning counter, if provided	Check & record the number of discharges of lightening counter.	
	Record leakage current of LA	Check and record.(Normal upto 1.2 mA, warning >1.2 mA -1.6 mA, replace LA if > 1.6 mA)	
_	Earthing Terminal & earthing strip	Check & tight earthing terminal strip, tighten if loose.	
	Guarding ring, if Provided	Check guarding ring, connections, tighten, if loose	
4.	Miscellaneous, if any.		

Half yearly:

SN	Item	Inspection and work to be carried out	Remarks	
1.	Carry out following work in addition to monthly schedule			
2.	Measure Third harmonic resistive component of leakage current.		OK if found less than 500 μA and replace if found more than 500 μA.	
3.	Checking of Surge counter connections and its operation.	Check operation as per OEM guidelines if considered necessary (In case on no increase for significant time).	Connection shall be tight without any sparking mark/heating. Counter shall operate on	
4.	Check condition of earth pit and measure earth resistance value. Also check the condition of duplicate earthing strips for properness	Should be free from any joint and shortest possible. Should be properly clamped and painted with double coat of grass green colour. Record value of Earth resistance. Should be < 8 ohm.	Treat the earth by Charcoal and salt if value found more than 8 ohm.	
5.	Measure HV to earth IR value by 2.5 / 5 KV megger	Check and record IR value by megger and record (should be > 1 G ohm for 42 KV and > 10 G ohm for above voltage.	Record the IR value.	



6. <u>Maintenance schedules for 220 /132 KV Triple Pole Motorised</u> <u>Isolators with/without earthing heel</u> (As per DFCC Maintenance Manual)

Monthly:

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	Insulators	Clean all support insulators by dry cloth. Remove bird discharges other foreign deposits/items etc suitable by wet cloth/detergent etc. 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. Check for half round movement of blades before entering in fixed contact.	
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.	AC /D C Motor and control box	Check the working of AC /DC Motor. Blow dust and clean control box. Tight connections and look for any flash, overheating. Clean auxiliary contacts, limit switch, contactors by CTC.	
7.	Miscellaneous	s, if any.	

Half yearly:

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 apply petroleum jelly.	
5.	Articulated joints, sliding and bearing Surface	Check & clean all articulated joints, sliding and bearing surface with kerosene oil and lubricate with conducting grease.	
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 connector, fasteners etc if required	



9.	Earthing of operating Handle	Check earthing of operating handle with copper flexible wire.	
10	_	Check load current of DC/AC motor and compare with full load current and previous year readings. Record open and close operation time and compare with OEM manual/previous readings.	
11.	Control Box for isolator operation	Check all connections and tighten as required. Check door gasket and replace if found cut.	
10.	Miscellaneous, it	Cany.	

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

Yearly:

SN	Item	Inspection And Work to be Carried Out R	emarks
1.		ring work in addition to monthly and half yearly sch	edule
2.	Connectors/C ontacts	Feel the temperature at the terminal connectors, if warm gently tighten the nuts.	
3.	Moving and fixed contacts and their operation.	Clean blade tips and fixed contacts fingers and apply petroleum jelly at contacts making surface Clean blade tips and fixed contacts fingers.	
		 Check the interlocking arrangements of earth blade and main blade Check the locking arrangements to the operating handles of main blades and earth blade. Check the adjustable STOP set screws for proper condition and correct positioning. Check all split pins, locknuts, check nuts, and other Hardware for proper condition. Operate the 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 pole. 	
4.	Mechanism	Check all split pins, locknuts, check nuts, and other Hardware for proper condition. 10 Lubricate all moving parts and all articulated joints with grease/oil for smooth and trouble-free operation.	
5.	IR value of insulators	Check and record IR Values of pedestal insulators with 5 KV /2.5 KV KV Megger.	
6	Miscellaneous,	if any.	

7. <u>Maintenance schedules for for 55 KV DP CB SF 6 type and 25 KV DP Vacuum type Circuit Breakers</u>

(As per DFCC Maintenance Manual)



Monthly schedules

Sl. No.	Item	Inspection And Work to be Carried Out	Remarks
1.	Surface of porcelain pole insulator unit	Clean with dry cotton cloth to remove dust /dirt. Use wet cloth to remove bird discharges/other deposits. Check for damages, flash mark, chipping of insulator and attend. Replace, if required.	
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
5.	Heater, thermostat& lamp	Check function of heater, thermostat &lamp.	
6.	Local/Remote Operation	Check the operation of breaker on local and remote switch. Breaker should have open & close on selected position. During operation observe whether the mechanism functions smoothly without any rubbing or obstruction. Check shock absorber functions properly when CB is tripped.	
7.	Local and Remote switch	Check the function of local and remote switches.	
8.	Position of indicator	Check alignment and missing indicator	
9.	Control circuit	Record operating voltage, check control circuit wiring and all connections should have proper lugs and ferule number in terminal box.	
10.	Tripping mechanism	Check& correct operation of tripping Mechanism.	
11.	Shaft of pole assembly	Check visibility of red band on shaft of the pole assembly.	
12.	Auxiliary circuits	Check the connections & function of auxiliary control circuit.	



13. Shock observer Check the oil leakage from shock absorbed Repair or replace, if necessary. Limit switch & auxiliary contact Check & clean the function of auxiliary limit switch, auxiliary contact and connection for tightness. Check loose/overheating connections. Tight, if found loose. Check & tight the earth connections & Chec	
limit switch & auxiliary contact and connection for tightness. 15. Connections Check loose/overheating connections. Tight, if found loose. Check & tight the earth connections &	
Tight, if found loose. Farth connections & Check & tight the earth connections &	
Earth connections & Check & tight the earth connections &	
foundation bolts foundation bolts.	
17. Condenser tripping device for CB, if provided. Check the function of CTD for proper operation. If defective, attend the same.	
Anti-pumping device for CB Check the function of APD for proper operation. If defective, attend the same.	
19. Interlocking Check the proper interlocking with isolato	r.
Functioning of motor and gear box for spring charging 20 Examine the commutator of the motor and clean with muslin cloth. Examine carbon brushes and replace if necessary/ Check gear oil level in the mechanism and replenish it, if required. Note down spring charging time.	
21. Foundation Check condition of foundation bolts and tightness of foundation bolts.	
22 Breather Check breather and breather holes for clogging. Replace/treat silica gel if required.	
23. Miscellaneous, if any.	

Half yearly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following	work in addition to monthly schedule	
2.			Lubricate as per annexure 'VI'
3.		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.			Change bottle or
	indication		contact
		worn off.	manufacturer/OEM
6.	Insulation	Check & record IR value of pole unit as per	More than 5000
	Resistance of pole	OEM:	M ohm
	unit (when breaker	i. Top-Bottom	
		ii. Top-Earth	
		iii. Bottom-Earth	
		Check with 2.5/5.0 KV megger.	



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8. In	Resistance of pole nit (when breaker n open position)	unit as per OEM: i. Top-Bottom- for continuity ii. Top & Bottom-Earth Check with multimeter & 2.5/5 KV megger. Check & record IR value of: i. Motor ii. Closing coil iii. Tripping coil	i. Motor- more than 2M ohm ii. Closing coil-
CC W	oil iv. AC&DC viring	iv. AC wiring & DC wiring check with 500 V megger	More than 2 M ohm iii. Tripping coil- More than 2 M ohm iv. AC wiring &DC wiring more than 2 M ohm
9. T		Check sealing of Top cover for Any moisture trapping.	
10. M	Mechanism Box	Check penetration of rain water, rust and Door	Lubricate as per OEM guidelines.
		Open the cover, check & clean mechanism box for condensation rain water, gasket of door, dust and hinges. Arrest the reason and attend it. Examine the interior, if any part of the interior is badly rusted indicating entry of moisture, find out the cause, plug the holes and repaint the rusted parts. Check all pins, and check nuts are in places. Check tie-rod nuts for tightness.	Clean & apply weather sealant material as per OEM manual. Start heater if required.
		Check overheated & rusted nuts, bolts, washers and bi-metallic strips. Replace, if required.	
12. S	hock observer	Check for oil leakage, if leakages attend it.	
cl	Charging time of losing spring	Check and record charging time of closing spring	
fo	Functioning of notor and gear box or spring charging	Examine the commutator of the motor and clean with musline cloth. Examine carbon brushes and replace if necessary/ Check gear-oil level in the mechanism and replenish it, if required.	
		Measure & record the wipe & travel measurement 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.



Yearly maintenance schedule:

Sl. No	Item	Inspection And Work to be Carried Out	Remarks
	Carry out following work in	addition to monthly and half yearly scheo	dule
1	Trip and closing plunger	Check and clean free movement of plungers.	
2	Anti pumping device	Check free movement of anti pumping relay plunger and clean contacts by CTC/Cloth	
3	Shock observer	Check for oil leakage, if leakages attend it. Check for breakages /cracks and replace if required.	
4	Measure & record	·	
	a. Closing time	Less than 100ms	Refer OEM manual for
	b. Opening time	Less than 40 ms	timings
5	Check & record contact resistance of fixed & moving contact with contact resistance meter in close position of CB	Should be < 50 µA (or refer OEM manual)	
6	Checking of gas pressure trip and alarm circuits		
	a. Gas Pressure Normal	7kg/cm ²	
	b. Gas Pressure Alarm	6.5kg/cm ²	
	c. Gas pressure Lock out	6kg/cm ²	
7	Measurement of insulation resistance of control and power cables of CB cable with 500V megger	>2 M Ohm	
8	Checking of motor bearing for free movement and lubricate the same	There should be no abnormal noise. Measure load current of motor.	
9	Checking of Earthing of equipment and its tightness	To be ensured.	
10	Painting of equipment	Use paint of approved specification and make as per OEM.	
11	Any other maintenance suggested by the OEM maintenance manual	As per maintenance manual.	



8. <u>Maintenance schedules for 25 KV double Pole Motorised Isolators with/without earthing heel</u>

(As per DFCC Maintenance Manual)

Monthly:

S.N.	Item	Inspection And Work to be Carried Out	Remarks
	Door gasket and hinges	Check weather proof gasket and hinges for good condition. Replace/repair, if damaged.	
1.	Insulators	Clean all support insulators by dry cloth. Remove bird discharges other foreign deposits/items etc suitable by wet cloth/detergent etc. Check visually the conditions of the support insulator. If observe any abnormality, attend it.	
2.	Mechanism& earthing	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. Check & clean mechanism, ensure proper operation, tightness of earthing connection and lubricate the moving parts.	
3.	Clearance of blades in open condition	Check, measure & record the distance between male and female contacts in fully open position.	
4	Adjustment of fixed and moving contacts	Check operation of isolator for correct adjustment of blade and smooth hand operation. Check for half round movement of blades before entering in fixed contact.	
5	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.	
6	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.	
7	Interlock	Check working of interlock without obstruction.	
8	Earthing connections	Check & tight earthing of the frame with its fittings. Check tightness and condition of lead of earthing heel, if provided.	
9	Wiring connection	Check & tight wiring connections for loose, overheating or any defect.	
10	Wiring connection	Check & tight wiring connections for loose, overheating or any defect.	



 The same and set			
11	Heater	Check working condition of heater, if defective, attend it.	
12	Motor and control box	Check the working of AC /DC Motor. Blow dust and clean control box. Tight connections and look for any flash, overheating. Clean auxiliary contacts, limit switch, contactors by CTC.	
13	Miscellaneous, if	any.	

Half yearly

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out followin	g 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 apply petroleum jelly.	
5.	Articulated joints, sliding and bearing Surface	Check & clean all articulated joints, sliding and bearing surface with kerosene oil and lubricate with conducting grease.	
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 connector, fasteners etc if required	
9.	Earthing of operating Handle	Check earthing of operating handle with copper flexible wire.	
10	Check for DC/AC motor	Check load current of DC/AC motor and compare with full load current and previous year readings. Record open and close operation time and compare with OEM manual/previous readings.	
11.	Control Box for isolator operation	Check all connections and tighten as required. Check door gasket and replace if found cut.	
10.	Miscellaneous, if a	nny.	

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

Yearly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following	g work in addition to monthly and half yearly schedule	
,	Connectors/Cont	Feel the temperature at the terminal connectors, if warm	
۷.	acts	gently tighten the nuts.	



3.	Moving and fixed contacts and their operation.	Clean blade tips and fixed contacts fingers and apply petroleum jelly at contacts making surface Clean blade tips and fixed contacts fingers.	
		 Check the interlocking arrangements of earth blade and main blade 	
		 Check the locking arrangements to the operating handles of main blades and earth blade. 	
		Check the adjustable STOP set screws for proper condition and correct positioning.	
		Check all split pins, locknuts, check nuts, and other Hardware for proper condition.	
		 Operate the isolator slowly and check for simultaneous operation of blades on the poles and correct alignment of blade tips in the fixed contact jaws of 	
4.	Mechanism	Check all split pins, locknuts, check nuts, and other	
т.	Wicchamsin	Hardware for proper condition.	
		10 Lubricate all moving parts and all articulated joints	
		with grease/oil for smooth and trouble-free operation.	
5.	IR value of	Check and record IR Values of pedestal insulators with	
	insulators	2.5 KV KV Megger.	
6	Miscellaneous, if a	ny.	

9. MAINTENANCE SCHEDULES OF AUTO TRANSFORMERS (12.3 MVA /8.0 MVA)

Monthly:

Sl.	Item	Inspection And Work to be Carried Out	Remarks
No.			
1.	Maximum		
	temperature of	Check and compare it with the previous values.	
	transformer oil on	Abnormal change in the temperature should be	
	dial indicator	further investigated and reset indicator	
2.		Check and compare it with the previous values.	
	Maximum	Abnormal change in the temperature should be	
	temperature of	further investigated and reset indicator	
	transformer winding		
	on Dial indicator		
3.	Oil level in	Check as per transformer oil temperature	
	conservator	indication. If low, top up with the filtered oil	
	(MOLOG)		



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4.			DGA report must be examined for any abnormality.
5.	Immigrated Paper	 In case of sealed bushing, if no oil./less than minimum level indication. Measure Tan-Delta & capacitance and compare the test values 	Delta- 0.007 and capacitance is 110% of the factory set value respectively or as per OEM manual.
6.		Check & clean dirt deposits, leakage and crack. If crack/leakage is observed, replace/attend it.	
7.	Dehydrating breather	 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. 	
8.	Marshaling box	Check for proper functioning. In case not working, the connection should be checked and rectified.	
9.		Check abnormal humming, observe and arrest the humming sound.	Find out the reason
10.	connection	Check visually that all connections are normal without any discoloration due to local heating. In case of any sign of heating, clean and tighten the bolts and nuts.	
11	NIFPS	Visually Check for any abnormality in Nitrogen Injection Fire Protection System (NIFPS).	
12	Miscellaneous, if any		



Half yearly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out followin	g work in addition to monthly schedule	
2.	Test oil sample with oil test kit	Test for BDV and acidity. Compare and take action as indicated in enclosed ANNEXURE-1	
3.	Insulation resistance of Winding and polarization. Index (PI) with 2.5kV Or 5kV megger for HV-L HV-E LV-E.	Insulation resistance is to be measured for 10sec.,60sec.and600sec.forHV-LV, HV-E and LV-E. Calculate PI (Polarization index) 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 1.0Dangerous Poor 1.25Questionable 1.25 - 2.0Satisfactory >2.0Good 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.	Ensure that transformer Ensure busing are clean and free from moisture and temperature on which IR value is recorded The OEM's manual may also be referred.
4.	PRD/explosion vent	Check & investigate for operation of PRD/explosion vent for any damage and presence of oil. Check connection and operation of PRD/explosion vent. Replace the damage PRD with new PRD, if required.	
5.	Miscellaneous, if a	iny.	

Yearly:

SN	Ref :- TI / MI / 0038 (Rev. II) dt. 10.05.2006 & ACTM VOL II, part-1, para- 20205, 20246 & Camtech Maint manual (2010)			
	In addition to monthly & Half yearly sch.			
1	Infrared temperature scanning for tank, bushing, tap changer, radiators and connectors			
2	Tan Delta and capacitance test of condenser bushing (< 0.007)	Refer Annex. B		
3	Tan Delta and capacitance test of Transformer windings (In case of doubtful IR reading results, as compared to pervious results)	Refer Annex. C		
4	Check gasket joints for any leakage and tighten the nut & bolts if loose			
5	Checking of arcing horn (rod gap setting)/			
6	Testing of bushing Oil sample . Testing for if			



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	bushing not hermetically sealed	
7	BDV of transformer oil	> 50 KV
8	Testing of transformer oil sample for DGA	Refer Annex. D
9	Testing of transformer oil sample as per Is 18662000 / 1866-2000	Refer Annex. E
10	Working of tap changer switches	
11	Checking of IR of tap changer motor with 500V megger	
12	Checking of control circuit, Relay, gauges, Alarm & their circuit	
13	Check of vermin proofing and water leakage inside of control boxes and terminal box	
14	Check Oil Temperature Indicator for proper working and setting	
15	OTI Alarm setting	80 °C
	OTI trip setting	85 °C
17	Check Winding Temperature Indicator for proper working and setting	
18	WTI Alarm setting	90 °C
51	WTI Trip setting	95 °C
20	Check oil gauge for proper working	
21	Measure the earth resistance and record	
22	Check operation of Buchholz relay, Continuity test for contacts with test lock screw set at 5 0	
23	IR of Buchholz Relay	> 20 M Ohms
24	Check Voltage Ratio of transformer on various taps	
	Primary Voltage	
	Secondary Voltage	
	Voltage ratio	
25	Winding Resistance test on principal tap, compare it with factory test value deviation permitted by +/-5%	

10 <u>Maintenance schedules for 25 KV/230 Volt Auxiliary Transformers (capacity 100 KVA, 50 KVA, 25 KVA and 10 KVA)</u>

(As per DFCC Maintenance Manual)

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

Quarterly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Visual	Check any sign of oil leakage, overheating. If observed,	
	Inspection of	attend it.	
	transformer.		



2.		Clean the transformer, conservator, bushing and tank	
۷.		externally with clean cotton cloth.	
	transformer	externally with elean cotton croth.	
3.	Silica gel	 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.		Check & clean AT surrounding area /enclosure for vegetation and other materials. Ensure AT mast, Earth pit and bonds are clear of vegetation, soil, track ballast etc.	
7.	Condition of pole mounted ICDP (MCCB)	Check operation of DP switch along with mechanism. Check condition of pole mounted ICDP (MCCB) switch, control panel and its fuses. Replace overheated lugs, fuses and tighten loose connections. Note: Use tinned copper fuse wire of 20 SWG for 10 KVA, 16 SWG for 25 KVA,12 SWG for 50 KVA, MCB/MCCB for 100 KVA	
8.		Check caution board and anti-climbing device for availability and proper condition.	
9.	Earthing connections	Check & tight the earth connections, if found loose. Check earthing of LV Box, cable armour and all earth connections as per approved E&B plan.	
10.	Arcing horn HV busing		Attend
11.		Check the condition of DO fuse barrel and fuse element. Replace the broken, rusted, over heated and nonstandard fuse wire, if any.	
12.	Miscellaneous, i	f any.	
	•		

Half Yearly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in ac	ldition to quarterly schedule	
2.		Tune sumpre or our mount contain or	BDV more than 30 kV (with 2.5 mm gap)



Check earth connections, measure &record the earth resistance of AT earth pit by earth tester. 6. Attention to Earth pit and connection Apply petroleum jelly on connections/bolts. Paint ER value on the cover with black letters and yellow back ground. 7. LT cable Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch to ACO panel by 500 V megger. 8. Ensure fuse on 25 KV and LT side with correct rupturing Check earth connections, measure & arch at resistance of AT earth pit by earth tester. All connections shall tight and bonds prope dressed without uplif Paint bond flats with coats of grass green colour. 2 M ohm min. at 30°Temperature. 2 M ohm min. at 30°Temperature. Check and clean LV Carry out all works of the correct rupturing arch at the coats of grass green colour. Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between ICDP (MCCB) switch to ACO panel by 500 V megger. Check and clean LV Carry out all works of the connections shall to the cover as per approved drawing. All connections shall tight and bonds proper dressed without uplif and bonds proper dressed without plants and bonds proper dressed without uplif and bonds proper dr	डडाकटंड :	फेट कोरीडोर		
(ii) HV-Earth 200 M ohm. Minimum (use 2.5 KV megger) (iii) HV-LV 200 M ohm. Minimum (use 2.5 KV megger) 5. Measure earth resistance 6. Attention to Earth pit and connection 6. Attention to Earth pit and connection 6. Attention to Earth pit and cover as per approved drawing. Apply petroleum jelly on connections/bolts. Paint ER value on the cover with black letters and yellow back ground. 7. LT cable Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch. Between ICDP (MCCB) switch to ACO panel by 500 V megger. 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT DO fuse rating - 100 KVA-5 Amp, 50 KVA-3.0 Amp, 25 KVA-1.5 Amp, 10 KVA-1.0 Amp (MCB/MCCB), 50 KVA-315 Amp, 25 KVA-125-150 Amp, 10 KVA-50 pened spare holes if by M-seal.		fixed 9- Ton insulator	horn and measure the gap of arcing	
(ii) HV-Earth 200 M ohm. Minimum (use 2.5 KV megger) (iii) HV-LV 200 M ohm. Minimum (use 2.5 KV megger) 5. Measure earth resistance 6. Attention to Earth pit and connection 6. Attention to Earth pit and connection 6. LT cable 7. LT cable Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch to ACO panel by 500 V megger. 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of KVA-1.0 Amp (MCB/MCCB), 50 KVA-315 Amp, 25 KVA-125-150 Amp, 10 KVA-63 Amp (MCB/MCCB), 50 KVA-315 Amp, 25 KVA-125-150 Amp, 10 KVA-63 Amp (Select fuse rating 1.25 -1.50 times the AT full load current)	4	Measure & record the Insulation	on Resistance between	
(iii) HV-LV (iii) LV-Earth 5. Measure earth resistance Check earth connections, measure & record the earth resistance of AT earth pit by earth tester. Check earth connections, measure & record the earth resistance of AT earth pit by earth tester. Check earth connections, measure & record the earth resistance of AT earth pit by earth tester. Check earth connections, measure & record the earth resistance of AT earth pit by earth tester. Ensure provision or pit box and cover as per approved drawing. Apply petroleum jelly on connections/bolts. Paint ER value on the cover with black letters and yellow back ground. 7. LT cable Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch. Between ICDP (MCCB) switch to ACO panel by 500 V megger. 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT DO fuse rating - 100 KVA-5 Amp, 50 KVA-3.0 Amp, 25 KVA-1.5 Amp, 25 KVA-1.5 Amp, 10 KVA-63 Amp (MCB/MCCB), 50 KVA-315 Amp, 25 KVA-125-150 Amp, 10 KVA-63 Amp (Select fuse rating 1.25 -1.50 times the AT full load current)				megger)
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5. Measure earth resistance Check earth connections, measure & record the earth resistance of AT earth pit by earth tester. 6. Attention to Earth pit and connection Attention to Earth pit and connection Ensure provision or pit box and cover as per approved drawing. Apply petroleum jelly on connections/bolts. Paint ER value on the cover with black letters and yellow back ground. 7. LT cable Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch to ACO panel by 500 V megger. 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT DO fuse rating - 100 KVA-5 Amp, 10 KVA-1.0 Amp LV fuse rating-100 KVA- 450 Amp (MCB/MCCB), 50 KVA- 315 Amp, 25 KVA-125-150 Amp, 10 KVA-63 Amp (Select fuse rating 1.25 -1.50 times the AT full load current) Not more than 8.0 oh All connections shall tight and bonds propers dressed without uplif Paint bond flats with coats of grass green colour. 2 M ohm min. at 30°Temperature. Check and clean LV Carry out all works of monthly schedule. Clean to the complex of the				
6. Attention to Earth pit and connection Ensure provision or pit box and cover as per approved drawing. Apply petroleum jelly on connections/bolts. Paint ER value on the cover with black letters and yellow back ground. Totable Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch. Between ICDP (MCCB) switch to ACO panel by 500 V megger. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT DO fuse rating - 100 KVA-5 Amp, 50 KVA-3.0 Amp, 25 KVA-1.5 Amp, 10 KVA-1.0 Amp (MCB/MCCB), 50 KVA-315 Amp, 25 KVA-125-150 Amp, 10 KVA-63 Amp (Select fuse rating 1.25-1.50 times the AT full load current) Check and clean LV carry out all works on onthly schedule. Clean CKVA-63 Amp (Select fuse rating 1.25-1.50 times the AT full load current) Check and clean LV carry out all works on onthly schedule. Clean CKVA-63 Amp (Select fuse rating 1.25-1.50 times the AT full load current) Check and clean LV carry out all works on onthly schedule. Clean CKVA-63 Amp (Select fuse rating 1.25-1.50 times the AT full load current) Check and clean LV carry out all works on onthly schedule. Clean CKVA-63 Amp (Select fuse rating 1.25-1.50 times the AT full load current) Check and clean LV carry out all works on onthly schedule. Clean CKVA-63 Amp (Select fuse rating 1.25-1.50 times the AT full load current) Check and clean LV carry out all works on onthly schedule. Clean CKVA-63 Amp (Select fuse rating 1.25-1.50 times the AT full load current) Check and clean LV carry out all works on the check and clean LV carry out all works on the check and clean LV carry out all works on the check and clean LV carry out all works on the check and clean LV carry out all works on the check and clean LV carry out all works on the check and clean LV carry out all works on the check and clean LV carry out all works on the check and	5.	Measure earth resistance	Check earth connections, measure & record the earth resistance of AT	Not more than 8.0 ohm.
overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch to ACO panel by 500 V megger. 8. Ensure fuse on 25 KV and LT side with correct rupturing capacity as per KVA capacity of AT DO fuse rating - 100 KVA-5 Amp, 50 KVA-3.0 Amp, 25 KVA-1.5 Amp, 10 KVA-1.0 Amp LV fuse rating-100 KVA-450 Amp (MCB/MCCB), 50 KVA-315 Amp, 25 KVA-125-150 Amp, 10 KVA-63 Amp (Select fuse rating 1.25 -1.50 times the AT full load current) Overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch to ACO panel by 500 V megger. Check and clean LV Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of the capacity of AT Carry out all works of monthly schedule. Clean Company of AT Carry out all works of monthly schedule. Clean Company of AT Carry out all works of monthly schedule. Clean Company of AT Carry out all works of monthly schedule. Clean Company of AT Carry out all works of monthly schedule. Clean Company of AT Carry out all works of monthly schedule. Clean Company of AT Carry out all works of the	6.		Ensure provision or pit box and cover as per approved drawing. Apply petroleum jelly on connections/bolts. Paint ER value on the cover with black letters	
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9. Miscellaneous, if any.		side with correct rupturing capacity as per KVA capacity of AT	Amp, 50 KVA-3.0 Amp, 25 KVA-1.5 Amp, 10 KVA-1.0 Amp LV fuse rating-100 KVA- 450 Amp (MCB/MCCB), 50 KVA- 315 Amp, 25 KVA-125-150 Amp, 10 KVA-63 Amp (Select fuse rating 1.25 -1.50 times	
	9.	Miscellaneous, if any.	<u> </u>	



	1 carry.				
SN	Item	Inspection And Work To Be CarriedOut	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 tapi	ngs		
4.	Acidity of oil	Check the acidity of transformer oil.	Maximum KOH/gm	0.5mg	
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.			

11 BATTERY AND BATTERY CHARGER MAINTENANCE REGISTERS

Fortnightly Maintenance schedules:

Sl.No.	Item	Inspection And Work to be Carried Out			
Battery	Battery bank				
1.	Check General condition of cells and battery room	Clean the room and make free from dust, dirt and deposits. Attend leakage of electrolyte. Remove garbage /nests/ webs /unwanted material from in battery room.			
2.	Condition of door, locking, ventilator, Exhaust fan, lights etc.	Shall be in good condition. Repair if required.			
3.	Availability of Hydrometer, thermometer, temperature correction chart, Cell tester/Volt meter, plastic jug/glass etc	Shall be available at each battery room. Arrange if not available. Ensure availability of rain sheds on ventilator and Exhaust fan.			
4.	Specific gravity	Check & record the specific gravity of each cell. At 27°C shall be 1210 in charged condition and 1180 means discharged condition. Charge the battery on boost charge if required.			
5.	Electrolyte level and topping up distilled Water	Check the level of electrolyte of the cells. Top up to the maximum mark, if required.			
6.	Temperature	Check & record the temperature of each cell.			
7.	Condition of plate	Check & clean physical condition such as cracks, distortions and accumulation of whitish deposit on +ve plates. Replace cell, if required.			



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Check cell covers/lids/container.	Check the proper sealing of cell covers. Provide sealing compound if necessary. Check container for any bulging, replace if found bulged.
Cell voltage	Check & record the voltage of each cell, it should be in the range of 2.0V to 2.2V.
Total voltage	Check & record the total voltage of battery, it should not be less than 110 Volts.
Vent plugs	Check for clear passage of gases. If hole is blocked, clean it.
Sedimentation and any internal damage	Check the cells for undue sedimentation and any internal damage. If observed, clean it. If damage cannot be attended, replace the cell.
Inter cell connections	Check & clean with dry cloth. Replace defective nuts, bolts & washers. Tighten connections if required. Clean sulphation if any and apply petroleum jelly.
Battery stand	Check for any corrosion/erosion due to fall of electrolyte. Clean battery stand. Ensure correct leveling and availability of foot insulators.
chargers	
Record readings	Check all meters and record AC and DC voltages, Currents etc
Functioning of stand by charger and load change over	Check functioning of standby charger and if found alright, take load on it for next 15 days.
Checking of fuses and tightness of connections	Check all AC and DC fuses and replace if found blown/flashed/heated. Carry out inspection of charger by opening door/top cover after transferring load on another charger and tighten the connections. Blow dust by blower. Clean all dust, webs etc by dry cloth /brush ensuring proper electrical disconnection/earthing.
Check condition of AC incoming and DC outgoing cables	Shall be properly dressed, tagged and trenches be clean and free from dusts etc.
Check earthing of chargers	Each battery charger shall be connected to Earth grid with 02 separate and distinct connections.
	Check cell covers/lids/container. Cell voltage Total voltage Vent plugs Sedimentation and any internal damage Inter cell connections Battery stand chargers Record readings Functioning of stand by charger and load change over Checking of fuses and tightness of connections Check condition of AC incoming and DC outgoing cables

Yearly Maintenance schedules:

Sl.	No.	Item	Inspection And Work to be Carried Out
Ba	ttery	bank	
		Carry out all fortnightly schedules	Complete all works as per schedule.
		<u> </u>	Shall be in good condition. Repair or replace cell if polarity is found reversed.
		Cell continuously showing low SPG/Voltage.	Replace the cell by healthy one.



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Battery	ttery chargers			
1.	Carry out all fortnightly schedules	Complete all works as per schedule.		
2.	Attention under shut down.	Shutdown the charger and inspect from inside. Ensure no flashing, melting, overheating mask. Check all connections and tighten. Check lugs and replace if required. Clean from inside thoroughly by blower.		
3	Charger	Check & clean the charger outside and Inside with dry cloth		
	4 Voltmeter & Ammeter	Check the proper function of voltmeter & ammeter.		
	5 Overheating	Check any sign of overheating inside the charger. Find out the reason and attend it.		

Note: please refer OEM manual.

12 <u>Maintenance schedules for General works at TSS, SSP, SP.ATS, PP</u> (As per DFCC Maintenance Manual)

Monthly:

Sl.No.	Item	Inspection And Work to be Carried Out	Remarks
1.	General cleanliness	Check surface of the roadway, proper drainage, rail access and pathways in the substation. Roadway and pathway should be firm and sufficiently elevated to prevent water-logging and proper drainage.	
2.	Vegetation	Check & clean vegetation near and around equipment in yard.	
3.	Tree and branches	Check & trim tree branches likely to come in the vicinity of live lines.	
4.	Caution, danger board, shock treatment chart and other boards	Check & clean the boards for damages, availability and well secured, replace if any damage is observed.	
5.	Fire extinguishers, fire buckets and first aid Box	Check for expiry of fire extinguisher and first aid box and refill with necessary medicines. Fill up/replace sand in fire buckets, if required.	
6.	Structure and plant foundations	Check for any sinking or cracking and go round the structural work for checking tightness of various bolts and nuts.	
7.	All indication lamps on control panels	Check loose connections, fuse indication etc. Tighten the same and replace the fuse, if required.	



8.	State electricity board meter readings	Check & record meter reading, MD, variation in voltage, frequency and power factor and important data parameters.	
9.	All jumpers &other connections	Check visually for flash/spark marks on jumper, nuts & bolts. Tighten the respective bi- metallic clamp/connections. Replace, if required.	
10	Discharge Rod	Check for cable strands broken and damages. If strands 20% broken, replace the cable.	
11	Miscellaneous, if any.		

Half yearly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following wo	rk in addition to monthly and quarterly schedul	le
2.	Fencing	Inspect all around switching station to observe any abnormality. If seen, attend the same.	
3	Bus bar, clamps& connectors by thermos vision camera	Check nut, bolt & washers for overheating. Replace, if necessary.	
4	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.	
5	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	
6	Fire extinguisher, buckets, first aid boxes	Inspect expiry date of fire extinguisher, fill buckets with sand, Re-fill first aid boxes with necessary medicine with valid date of expiry.	
7	Oil sump, if Available	Check & clean oil sump for dirtiness	
8	Miscellaneous, if any.		



13 <u>General Maintenance schedules for various control and relay panels installed</u> <u>at TSS.SP.SSP.ATS.PP control room</u> (As per DFCC Maintenance Manual)

(Applicable for Main control and relay panels, 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.) Monthly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Cleaning of panel from inside and outside	Check and clean accumulated dust externally& internally with air blower and dry cloth	
2.	Indicating and recording instrument	Check all indicating and recording instruments/ meters are working normally. Check for healthiness of all indication lamps and replace if faulty. Check buzzers, alarms, semaphore signals and annunciators for proper functioning.	
3.	Relay	Check & clean outer terminals of relays for any abnormality. Ensure tightness /correct fixing of relay glass covers.	
4.	Cable connections	Check & tighten all cable connections, if found loose. Check for any heating, flashing etc.	
5.	Terminal boards	Check & clean all terminal boards, 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 and gaskets	Check doors & hinges for intactness and proper closing. Check gaskets and ensure correct fittings.	
9.	Holes in Panel	Check & plug the redundant holes to avoid entry of moisture and insects.	
10	Cables and trenches	Check condition of cables and trench below and around panels. Clean the trenches if any garbage, dust, debris are there. Check for rain water entry and pump out if water is there.	
11.	Insulation mats	Clean all insulation mats laid in front or back side of panels.	
12.	Door switch and lamps inside panels	Check for correct functioning.	
13.	Miscellaneous, if any	•	



Half yearly

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following	schedules in addition to monthly schedules :	
2.	Tightness of all connections	Check all terminal blocks, relay, meter and annunciator terminal connections for tightness.	
3.	CT/PT connections	Check and tighten connections.	
4.	MCBs	Check all MCBs for any abnormality, proper functioning and correct rating.	
5.	Fuses	Check all fuses for proper rating & overheating, replace, if necessary.	
6	Functioning of Heaters	Check for functioning of heaters provided inside panels to remove moistures.	
7.	Holes in panel	Check & plug the holes to avoid entry of moisture and insects	
8.	Miscellaneous, if any.	1	

AC/ DC Distribution Panel: Quarterly:

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	Measure & record the temperature at termination	
	termination	Points. If variation is more than 5 deg. With room temp,	
	points	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	
σ.		insects	

Half Yearly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work	in addition to quarterly schedule	
2.		Check & clean the panel inside and outside by soft wire brush.	
3.		Check & clean for smooth operation & working without obstruction	



4.	Tightness	Check & tight cable termination of MCBs,	
		rotary	
		switch and bus bar	

Yearly:

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 M
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.	

14. Maintenance schedules for General Works on TSS,SSP & SP (As per DFCC Maintenance Manual)

MONTHLY SCHEDULE:-

Sl.	Item	Inspection And Work to be Carried Out	Remarks
No.			
1.	General upkeep of		
	TSS premises		
		Clean all roadways, pathways, transformer plinth area ,cross tracks with broom. Clean switchyard area by removing any untoward item/garbage materials viz tree branches, leaves, waste cotton, bird /animal discharges, plastic or any other things. Clean all cable trenches by removing covers in switchyard and control room. Remove any foreign/untoward materials/debris/dust from trenches. Clean cables with cloth. Check cables for any cut/damage and list out. Clean all rooms of control building including control	



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		room, battery room, PQCR panel room, office and stores by brooming/moping/washing as per direction of Exe/Elect as required.	
2.	Check and attend water logging and seepage from roof	Check for water logging in any part of TSS viz, near structure, equipments, cable trenches, oil sumps, drains etc and take action to rectify as required. Check for any seepage of water from roof of TSS and take necessary action to rectify.	
3.	Removal of unwanted vegetation	Check & clean vegetation near and around equipment in switch yard and TSS fenced area.	
4.	Attention to horticulture provided in TSS area	Check & trim tree branches likely to come in the vicinity of live lines. Provide necessary attention to garden plants, trees etc provided in TSS fenced area.	
5.	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.	
6.	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.	
7.	Structure and plant foundations	Check for any sinking or cracking and ground the structural work for checking tightness of various bolts and nuts.	
8.	All indication lamps on control panels	Check loose connections, fuse indication etc. Tighten the same and replace the fuse, if required.	
9.	State electricity board meter readings	Check & record meter reading, MD, variation in voltage, frequency and power factor and important data parameters.	
10	All jumpers& other connections	Check visually for flash/spark marks on jumper, nuts & bolts. Tighten the respective bi-metallic clamp/connections. Replace, if required.	
11	Checking and attention to Discharge Rod	Check for cable strands broken and damages. If strands 20% broken, replace the cable.	
12	Checking and attention to all TSS equipments	Check and clean all safety equipments viz boards, instruments, T&P items, stretcher, first aid box, key box, electrical fittings and ensure proper housekeeping.	



	Visually check Bus	Check nut, bolt & washers for overheating. Replace, if necessary.	
13	Miscellaneous, if any	' .	

HALF YEARLY SCHEDULE:-

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following wo	ork in addition to monthly 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, Re-fill first aid boxes with necessary medicine with valid date of expiry.	
6.	Oil sump, if Available	Check & clean oil sumps.	
	Check Bus bar, clamps & connectors for tightness under power shut down.	Check nut, bolt & washers for overheating. Replace, if necessary. Check all clamps, bimetallic strips etc. for heating mark etc. and replace if required.	
7.	Miscellaneous, if any.		

15. Earthing & Bonding: Half Yearly

SN	Item	Inspection And Work to be Carried Out	Remarks
	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	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 For TSS < 0.5 combined electrode without disconnecting it from common earth system by earth tester. SP and SSP < 2.0 ohm

16 Yearly buried, rail maintenance:

SN	Item	Inspection And Work to be carried out	Remarks
1.			
2.		Check condition of connections traction rail to buried rail and mat to buried rail. Clean & tighten all connections, paint with red oxide paint.	

17 <u>Maintenance schedules for 55 KV/0.65 KV 3MVA Transformers of capacitor bank.</u>

(As per DFCC Maintenance Manual)

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

Monthly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Visual	Check any sign of oil leakage, overheating. If observed,	
	Inspection of	attend it.	
	transformer.		
2.	Cleaning of	Clean the transformer, conservator, bushing and tank	
	transformer	externally with clean cotton cloth.	
3.	Silica gel	 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 bushing terminals.	
5.	Oil level in conservator	Check & top up oil level in conservator with new filtered oil up to mark, if required.	



		Check & clean AT surrounding area /enclosure for vegetation	
		and other materials. Ensure AT mast, Earth pit and bonds are	
	area.	clear of vegetation, soil, track ballast etc.	
7.	Condition of	Check operation of DP switch along with mechanism. Check	
	pole mounted	condition of pole mounted ICDP (MCCB) switch, control	
	ICDP	panel and its fuses. Replace overheated lugs, fuses and	
		tighten loose connections.	
		Note: Use tinned copper fuse wire of 20 SWG for 10 KVA,	
	panel and its	16 SWG for 25 KVA,12 SWG for 50 KVA, MCB/MCCB for	
	fuses	100 KVA	
8.		Check caution board and anti-climbing device for availability	
	Caution board	and proper condition.	
	and ant		
	climbing device		
	Earthing	Check & tight the earth connections, if found loose.	
		Check earthing of LV Box, cable armour and all earth	
		connections as per approved E&B plan.	
10.	_	· ·	Attend
	busing	observed & check the arcing	
		horn gap. Arcing horn gap for split type is 100 mm+100 mm,	
		for non-split type-165 mm	
11.	Miscellaneous, i	f any.	

Half Yearly:

SN	Item	Inspection And Work to be Carried Out	Remarks
1.	Carry out following work in ad	ldition to quarterly schedule	
2.		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 gap)
3.		Check for any flash mark on arcing horn and measure the gap of arcing horns.	Maintain gap 165 mm (min) & record.
4.	Measure & record the Insulation	ion 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)	
	LV-Earth	2 M ohm. Minimum (use 500 KV m	
5.		&record the earth resistance of AT earth pit by earth tester.	Not more than 8.0 ohm.
6.	connection	Apply petroleum jelly on connections/bolts. Paint ER value	All connections shall be tight and bonds properly dressed without uplifting. Paint bond flats with two coats of grass green



		yellow back ground.	colour.
7.	LT cable	Check & replace damage, overheating of wires, lugs etc. of LT cable. Measure & record IR value of cable: Between AT to ICDP (MCCB) switch. Between ICDP (MCCB) switch to ACO panel by 500 V megger.	30 ⁰ Temperature.
8.	Miscellaneous, if any.		

Yearly:

SN	Item	Inspection And Work To Be Carried Out	Remarks	
1.		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 KOH/gm	0.5mg
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.		





PART-VIII

MILESTONES AND TIME SCHEDULE



PART-VIII MILESTONES AND TIME SCHEDULE

Time Schedule:

1. Time of start and completion:

The time allowed for completion of the works is 24 (Twenty-Four Months) from the date of start of work or as mentioned in LOA. The contractor shall be expected to mobilize to the site of works and commence execution of the works within 15 (days) as mentioned in LOA issued by DFCCIL. The contractor shall be expected to complete the whole work in 24 (Twenty-Four Months) from the date as mentioned in LOA issued by DFCCIL. If the contractor delay 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.

2. Progress of works:

The contractor shall submit a programme of deployment of staff for start of work in the form of a Bar Chart of all the activities in consistence with milestone target envisaged below. 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 thesespecial 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 24 (Twenty-Four Months) as overall completion period. Contractor will submit monthly progress of work in hard/soft to this office.





PART-XI

TENDER FORMS (INCLUDING SCHEDULE OF PRICES)



TENDER FORMS

FORM No.	SUBJECT
Form No. 1	Offer Letter
Form No. 2	Tenderer's Credentials
Form No. 2A	Technical Eligibility Criteria Details
Form No. 2B	Financial Eligibility Criteria Details
Form No. 2C	Applicant's Party Information Form
Form No. 3	Summary of Prices
Form No. 4	Schedule of Prices and Total Prices
Form No. 5	Contract Agreement
Form No. 6	Performance Guarantee Bond
Form No. 7	Standing indemnity bond for on account payment.
Form No. 8	ECS / NEFT / RTGS
Form No. 9	Draft MOU for Joint Venture Participation
Form No.10	Draft Agreement for JV
Form No.11	Pro-forma of Participation from each partner of JV
Form No.12	Power of Attorney for authorized signatory of JV Partners
Form No.13	Power of Attorney to lead partner of JV
Form No. 14	Performa for Time Extension
Form No. 15	Certificate of Fitness
Form No. 16	Performa of 7 days" Notice
Form No. 17	Performa of 48 Hours" Notice
Form No. 18	Performa of Termination Notice
Form No. 19	Format of Bank Guarantee for Mobilisation
Form No. 20	Format of Integrity Pact
Form No. 21	Anti-profiteering
Form No.22	Format for certificate to be submitted /uploaded by tenderer along with the
E N- 02	tender documents
Form No.23	Tender's Credential (BID Capacity)
Form No.23A	Statement of Works in Progress for Bid Capacity
Form No. 24	Final Supplementary Agreement
Form No. 25	Agreement towards Waiver under Section 12(5) and Section 31A (5) of Arbitration and Conciliation (Amendment) Act
Form No. 26	(Bid Security) Bank Guarantee Bond from any scheduled commercial bank of India
Form No. 27 A	PROFORMA OF 14 DAYS NOTICE FOR OFFLOADING OF PART OF CONTRACT WORK
Form No. 27B	NOTICE FOR PART OF CONTRACT WORK OFFLOADED



FORM No. 1

OFFER LETTER

Tender No. **DFC_ADI_PSI_02_2024-25**

Work of "Maintenance of 2x25kV Power Supply Installation in New Sanand South-New Makarpura section of DFCCIL Ahmedabad Unit, for a period of 24 (Twenty-Four) months.".

To.

Chief General Manager, DFCCIL, Ahmedabad

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda.
- (b) We offer to execute the Works in conformity with the Bidding Documents;
- (c) Our bid shall be valid for a period of 60 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) We have not been blacklisted/banned in accordance with para 33 of Preamble and General Instructions to tenderers.
- (e) We are neither Bankrupt/Insolvent nor in the process of winding-up nor there is a case pending before any Court on deadline of submission of the Bid in accordance with para 33 of Preamble and General Instructions to tenderers.
- (f) If our bid is accepted, we commit to obtain a Performance Guarantee in accordance with the Bidding Documents;
- (g) If our bid is accepted, we commit to deploy key equipment and key personnel consistent with the requirements of the work.
- (h) We understand that this bid, together with your written acceptance thereof included in your notification of award/Letter of Acceptance (LOA), shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (i) All information, statements and description in this bid are in all respect true, correct and complete to the best of our knowledge and belief and we have not made any tampering or changes in the bidding documents on which the bid is being submitted and if any tampering or changes/incorrect information are detected at any stage, we understand the bid will invite summarily rejection and forfeiture of bid security, the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.

(1)	We understand that you are not bound to accept the lowest bid or any other bid that you may	ay
	receive.	
Name	In the capacity of	
	rized to sign the Bid for and on behalf of	
	Date	



FORM No. 2

TENDERER'S CREDENTIALS

S. No	Description
1.	For technical experience/competence, give details of similar completed works during the last Seven financial years (i.e. current Financial year and three previous Financial Years) in the Performa given in Form-2A
2.	For financial capacity and organizational resources, give details of contractual payments received for the last three financial years (i.e. current Financial year and three previous financial years) as per audited balance sheet certified by Chartered Accountant in the Performa given in Form-2B
3.	Give constitution of your firm. Attach certified copies of legal documents in support thereof. Form-2C



FORM No. 2A

TECHNICAL ELIGIBILITY CRITERIA DETAILS

Details of the similar works completed (as per Para 31 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					
Employer's Name:	Employer's Name:				
Address:					
Telephone/Fax number					
E-Mail:					
Description of the similarity in accordance with Criteria 31 (A)					

The Bidder shall attach Certified completion certificates issued by the client duly attested by Notary as per Eligibility Criteria of the tender documents.

Signature of the Tenderer with Seal



FORM No. 2B

FINANCIAL ELIGIBILITY CRITERIA DETAILS

Each Bidder or each member of JV must fill in this form separately.

Name of Bidder/JV Partner

Details of contract	ual payments	received during	g the last	three final	ncial years a	and current
financial year						

Annual Contractual Tur	nover Data for the Previo	ous 3/4 Years		
(Contractual Payment o		ous of I cars		
Year	Amount Currency	Exchange Rate	Indian National Rupees Equivalent	
Average Annual Contra	ctual Turnover for last 3	years		

- 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.
- 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)



APPLICANT'S PARTY INFORMATION FORM

Applicant name:						
[insert full name]						
Applicant's Party name:						
[insert full name of Applicant's Party]						
Applicant's Party country of registration:						
[indicate country of registration]						
Applicant Party's year of constitution:						
[indicate year of constitution]						
Applicant Party's legal address in country of constitution:						
[insert street/ number/ town or city/ country]						
Applicant Party's authorized representative information						
Name: [insert full name]						
Address: [insert street/ number/ town or city/ country]						
Telephone/Fax numbers: [insert telephone/fax numbers, including country and city codes]						
E-mail address: [indicate e-mail address]						
1. Attached are copies of original documents of						
Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above.						
☐ 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



FORM No. 3

SUMMARY OF PRICES

(Summary of Prices has been separately attached as per SCHEDULE uploaded at IREPS site)



Part-IX

SCHEDULE OF PRICES & TOTAL PRICES Tender Schedule



SCHEDULE OF PRICES & TOTAL PRICES Tender Schedule

Description of Work:- Maintenance of 2x25kV Power Supply Installation in New Sanand South-New Makarpura section of DFCCIL Ahmedabad Unit, for a period of 24 (Twenty Four) months.

PSI Maintenance Activity

Schedule 1 Maintenance of Traction Sub Stations:

S. N	Description of Work	Unit	Quantity	Unit Rate including @18 % GST	Total Amount (Rs.)
1	Monthly Maintenance of 220 kV/55kV, 60/84/100 MVA Traction Power Transformer.	Each	96	1557.85	149553.6
2	Half Yearly Maintenance of 132/220 kV/55kV, 60/84/100 MVA Traction Power Transformer.	Each	16	2084.6	33353.6
3	Yearly Maintenance of 132/220 kV/55kV, 60/84/100 MVA Traction Power Transformer.	Each	8	3258.59	26068.72
4	Monthly Maintenance of 132/220kV TP SF-6 Circuit Breaker	Each	144	1042.3	150091.2
5	Half Yearly Maintenance of 132/220kV TP SF-6 Circuit Breaker	Each	24	1623.7	38968.8
6	Yearly Maintenance of 132 kV/220kV TP SF-6 Circuit Breaker	Each	12	1952.91	23434.92
7	Monthly Maintenance of 132/220kV Current Transformer (Protection)	Each	288	515.54	148475.52
8	Half Yearly Maintenance of 132/220kV Current Transformer	Each	48	773.98	37151.04
9	Yearly Maintenance of 132/220kV Current Transformer (Protection)	Each	24	1042.3	25015.2
10	Monthly Maintenance of 132/220kV Current Transformer (Metering)	Each	864	515.54	445426.56
11	Half Yearly Maintenance of 132/220kV Current Transformer (Metering)	Each	144	778.92	112164.48
12	Yearly Maintenance of 132/220kV Current Transformer (Metering)	Each	72	1042.3	75045.6
13	Quarterly Maintenance of 132/220kV Potential Transformer (Metering PT)	Each	288	515.55	148478.4

14	Half Yearly Maintenance of 132/220kV Potential Transformer (Metering PT)	Each	144	515.54	74237.76
15	Yearly Maintenance of 132/220kV Potential Transformer (Metering PT)	Each	72	1042.3	75045.6
16	Monthly Maintenance of 120/198 kV Lightning Arrester	Each	720	1309.01	942487.2
17	Half Yearly Maintenance of 120/198 kV Lightning Arrester	Each	120	1042.3	125076
18	Monthly Maintenance of 132/220kV TP Motorised Isolator with or without earthing heel	Each	312	516.33	161094.96
19	Half Yearly Maintenance of 132/220kV TP Motorised Isolator with or without earthing heel	Each	52	778.92	40503.84
20	Yearly Maintenance of 132/220kV TP Motorised Isolator with or without earthing heel	Each	26	1173.99	30523.74
21	Monthly Maintenance of 55 kV Current Transformer	Each	2256	515.54	1163058.24
22	Half Yearly Maintenance of 55 kV Current Transformer	Each	376	778.92	292873.92
23	Yearly Maintenance of 55 kV Current Transformer	Each	188	1042.3	195952.4
24	Monthly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker	Each	624	394.78	246342.72
25	Half Yearly Maintenance of 55/72.2kV DP SF-6 Circuit Breaker	Each	104	778.92	81007.68
26	Yearly Maintenance of 55/72.2kV DP SF- 6 Circuit Breaker	Each	52	1556.27	80926.04
27	Monthly Maintenance of 55 /72.5 kV DP Motorised Isolator without earthing heel	Each	1488	775.02	1153229.76
28	Half Yearly Maintenance of 55/72.5 kV DP Motorised Isolator without earthing heel	Each	248	1304.86	323605.28
29	Yearly Maintenance of 55/72.5 kV DP Motorised Isolator without earthing heel	Each	124	1952.09	242059.16
30	Monthly Maintenance of 42/60 kV Lightning Arrester	Each	1248	394.78	492685.44
31	Half Yearly Maintenance of 42/60 kV Lightning Arrester	Each	208	647.23	134623.84
32	Monthly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformer	Each	288	1557.31	448505.28
33	Half Yearly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformer	Each	48	2082.99	99983.52
34	Yearly Maintenance of 55kV/27.5 kV, 12.3 MVA Auto Transformer	Each	24	3256.95	78166.8
35	Quarterly Maintenance of 25 kV Potential Transformer Protection PT	Each	96	515.54	49491.84

	T				
36	Half Yearly Maintenance of 25 kV Potential Transformer Protection PT	Each	48	779.18	37400.64
37	Yearly Maintenance of 25 kV Potential Transformer Protection PT	Each	24	1042.3	25015.2
38	Monthly Maintenance of 25 kV Current Transformer at Auto Transformer	Each	288	515.54	148475.52
39	Half Yearly Maintenance of 25 kV Current Transformer	Each	48	779.18	37400.64
40	Yearly Maintenance of 25 kV Current Transformer	Each	24	1042.3	25015.2
41	Monthly Maintenance of 25 kV DP Circuit Breaker	Each	288	395.07	113780.16
42	Half Yearly Maintenance of 25 kV DP Circuit Breaker	Each	48	778.92	37388.16
43	Yearly Maintenance of 25 kV DP Circuit Breaker	Each	24	1557.85	37388.4
44	Monthly Maintenance of 25 kV DP Motorised Isolator without earthing heel	Each	576	779.18	448807.68
45	Half Yearly Maintenance of 25 kV DP Motorised Isolator without earthing heel	Each	96	1305.68	125345.28
46	Yearly Maintenance of 25 kV DP Motorised Isolator without earthing heel	Each	48	1952.91	93739.68
47	Monthly Maintenance of 25 kV DP Interrupter	Each	144	395.07	56890.08
48	Half Yearly Maintenance of 25 kV DP Interrupter	Each	24	778.92	18694.08
49	Yearly Maintenance of 25 kV DP Interrupter	Each	12	1557.85	18694.2
50	Quarterly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer	Each	48	395.07	18963.36
51	Half Yearly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer	Each	24	778.92	18694.08
52	Yearly Maintenance of 25kV/240V, 100kVA LT Auxiliary Transformer	Each	12	2084.6	25015.2
53	Monthly Maintenance of 55kV/0.65 kV, 3 MVA Transformer of Capacitor bank.	Each	144	394.78	56848.32
54	Half Yearly Maintenance of 55kV/0.65 kV, 3 MVA MVA Transformer Capacitor bank.	Each	24	775.02	18600.48
55	Yearly Maintenance of 55kV/0.65 kV, 3 MVA Transformer Capacitor bank.	Each	12	2082.99	24995.88
56	Quarterly maintenance of 2500 KVAR CAPACITOR Bank Including Series REACTOR	Each	48	778.92	37388.16
57	Half yearly maintenance of 2500 KVAR CAPACITOR Bank Including Series REACTOR	Each	24	2084.6	50030.4
58	Yearly maintenance of 2500 KVAR CAPACITOR Bank Including Series REACTOR	Each	12	3126.9	37522.8

59	Quarterly Maintenance of 25 kV Neutral Current Transformer	Each	24	778.92	18694.08
60	Yearly Maintenance of 25 kV Neutral Current Transformer	Each	6	1557.85	9347.1
61	Fortnightly battery & battery charger maintenance of TSS	Each	144	515.54	74237.76
62	Yearly battery & battery charger maintenance of TSS	Each	6	12496.41	74978.46
63	Half Yearly maintenance of Earthing station	Each	720	197.54	142228.8
64	Yearly Buried Rail Connection	Each	6	20834.82	125008.92
65	Half Yearly Thermal Imaging of Equipment connector	Each	1920	515.54	989836.8
66	Yearly Maintenance of Earth Screen Conductor	Each	6	1952.91	11717.46
67	Yearly maintenance of Cable Trench Cleaning	Each	6	10411.8	62470.8
68	Reclamation of DCP(5kG,10 kG & 25 kG),CO2(9kG) & form type fire extinguisher.	Each	24	78.86	1892.64
69	Refilling of DCP(5kG,10 kG & 25 kG),CO2(9kG) & form type fire extinguisher.	Each	24	642.37	15416.88
		1,09,82,631.96			

Schedule 2 SP/SSPs/ATS/PP Maintenance :

S. N	Description of Work	Unit	Total Quantity	Unit Rate including @18 % GST	Total Amount (Rs.)
1	Monthly Maintenance of 8 MVA/ 12.3 MVA Auto Transformer	Each	384	1557.31	598007.04
2	Half Yearly Maintenance of 8 MVA / 12.3 MVA Auto Transformer	Each	64	2082.99	133311.36
3	Yearly Maintenance of 8 MVA/ 12.3 MVA Auto Transformer	Each	32	3256.95	104222.4
4	Monthly Maintenance of 25 kV Current Transformer at Auto Transformer	Each	1056	515.54	544410.24
5	Half Yearly Maintenance of 25 kV Current Transformer	Each	176	779.18	137135.68
6	Yearly Maintenance of 25 kV Current Transformer	Each	88	1042.3	91722.4
7	Monthly Maintenance of 25 kV DP Interrupter	Each	2040	395.07	805942.8
8	Half Yearly Maintenance of 25 kV DP Interrupter	Each	340	778.92	264832.8
9	Yearly Maintenance of 25 kV DP Interrupter	Each	170	1557.85	264834.5

III	7		_		
10	Monthly Maintenance of 25 kV DP Isolator (Manual)	Each	4080	775.02	3162081.6
11	Half Yearly Maintenance of 25 kV DP Isolator (Manual)	Each	680	1305.68	887862.4
12	Yearly Maintenance of 25 kV DP Isolator (Manual)	Each	340	1952.91	663989.4
13	Monthly Maintenance of 25 kV SP Isolator (Manual)	Each	240	394.78	94747.2
14	Half Yearly Maintenance of 25 kV SP Isolator (Manual)	Each	40	778.92	31156.8
15	Yearly Maintenance of 25 kV SP Isolator (Manual)	Each	20	1173.99	23479.8
16	Quarterly Maintenance of 25 kV Potential Transformer .	Each	288	515.54	148475.52
17	Half Yearly Maintenance of 25 kV Potential Transformer.	Each	144	779.18	112201.92
18	Yearly Maintenance of 25 kV Potential Transformer .	Each	72	1042.3	75045.6
19	Monthly Maintenance of 42 kV Lightning Arrester	Each	3000	394.78	1184340
20	Half Yearly Maintenance of 42 KV Lightning Arrester	Each	500	647.23	323615
21	Quarterly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer with LT cable up to ACDB	Each	288	395.07	113780.16
22	Half Yearly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer with LT cable up to ACDB	Each	144	778.92	112164.48
23	Yearly Maintenance of 25kV/240V, 10kVA LT Auxiliary Transformer with LT cable up to ACDB	Each	72	2084.6	150091.2
24	Fortnightly battery & battery charger maintenance at SCPs	Each	672	515.54	346442.88
25	Yearly Maintenance of Battery And Battery Charger	Each	28	12496.41	349899.48
26	Half Yearly maintenance of Earthing Station	Each	1200	197.54	237048
27	Yearly Maintenance of Earthing station	Each	600	197.54	118524
28	Yearly maintenance Buried Rail Connection	Each	72	20834.82	1500107.04
29	Monthly Maintenance of 25 kV SP Interrupter	Each	264	395.07	104298.48
30	Half Yearly Maintenance of 25 kV SP Interrupter	Each	44	778.92	34272.48
31	Yearly Maintenance of 25 kV SP Interrupter	Each	22	1557.85	34272.7
32	Half Yearly Thermal Imaging of Equipment connector	Each	1000	515.54	515540
33	Yearly Maintenance of Earth Screen Conductor for complete SCP.	Each	42	1952.91	82022.22

34 Yearly maintenance of Cable Trench Cleaning Each 42 4169.21 175106.82 35 Reclamation of DCP (5kG, 10 KG & 25 KG),CO2 (9kG) & form type fire extinguisher. Each 84 78.86 6624.24 36 Refilling of DCP (5kG, 10 KG & 25 KG),CO2 (9kG) & form type fire extinguisher. Each 84 642.37 53959.08			1,35,85,567.72			
34 Cleaning Each 42 4169.21 175106.82 Reclamation of DCP (5kG, 10 KG & 25 Fach 84 78.86 6624.24	36		Each	84	642.37	53959.08
1 34 1 °	35		Each	84	78.86	6624.24
	34	Yearly maintenance of Cable Trench Cleaning	Each	42	4169.21	175106.82

Schedule 3 -Panels & Gantry Bus Bar insulator other Maintenance:

S. N	Description of Work	Unit	Total Quantity	Unit Rate including @18 % GST	Total Amount (Rs.)
1	Monthly panel maintenance in TSS	Each	72	3220.57	231881.04
2	Monthly panel maintenance in SP/SSP	Each	336	1610.28	541054.08
3	Half yearly Cross gantry or any others Gantry Bus Bar maintenance of TSS	Each	72	18648.62	1342700.64
4	Half yearly Cross gantry or any others Gantry Bus Bar maintenance of SP/SSPs	Each	128	12883.49	1649086.72
5	Half yearly Cross gantry or any others Gantry Bus Bar maintenance of PPs	Each	8	6441.75	51534
6	Removal and re-erection of PSI Equipment	Each	20	6442.36	128847.2
7	Supply & Erection of Caution Board	Each	100	345.75	34575
8	Supply and spreading of ballast/Pebbles /Gravels in Switching Stations/TSS yard	CUM	100	1556.39	155639
9	Reinforce concrete for cable trench & cover	Sqm.	160	1498	239680
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 approve brand i.e Asian, Berger etc. as per IS 2932 all latest.	Sqm.	3000	44.03	132090
11	Supply and re paininting of PSI assets i.e. Fencing Panels, Fencing UP right, bar- bared wire, Tubular pole at TSS/SP/SSP with Aluminium Paint i.e. Asian Berger etc. as per IS 2339 or latest	Sqm.	4000	40.21	160840
12	Supply and erection of Earth Pit cover & Box	Each	40	1022.28	40891.2
13	Provision of Shock Treatment Chart	Each	50	981.31	49065.5
14	Drilling of holes in mast/ rails with contractor own labour and T&P complete.	Each	200	42.48	8496
15	Supply and erection of earth leads 75 x 8 mm mild steel flat laid in the ground or exposed as per site requirement	Mtr	100	293.34	29334

TIII	Tender No. DFC_ADI_EL_PSI_02_2024-25						
16	Supply and erection of earth leads 50 x6 mm mild steel flat laid in the ground or exposed as per site requirement	Mtr	300	163.09	48927		
17	Supply and erection of 8 SWG GI Wire for earthing.	Mtr	200	42.69	8538		
			Total of	Schedule-03	48,53,179.38		
	dule 4: -TSS Manning & Housekeeping:						
(Note	: Please quote either "At Par" or "Above" in t	he schedule	-04)				
S. N	Description of Work	Unit	Total Quantity	Unit Rate including @18 % GST	Total Amount (Rs.)		
1	Regular House Keeping of TSS	Man Days	1872	820.73	1536406.56		
2	Manning of TSS (optional as per requirement)	Man Days	7488	1066.3	7984454.4		
3	Maniing of SCPs (optional as per requirement)	Man Days	3744	1066.3	3992227.2		
	Total of Schedule-04						
Sched	lule 5 -Break down attention						
S. N	Description of Work	Unit	Total Quantity	Unit Rate including @18 % GST	Total Amount (Rs.)		
1	Breakdown attention of PSI equipments at TSS/SP/SSPs	Hrs	150	691.96	103794		
2	Maintenance of 25 KV dropout fuse AT TSS/SP/SSP	Each	100	1159.41	115941		
3	Manning of SP/SSP in case of Emergency	Man Days	300 Total of Schedule- 05	1372.18	411654 6,31,389.00		
Sched	 lule 6: Additional PSI maintenance Activity						
S. N	Description of Work	Unit	Total Quantity	Unit Rate including @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 Annexure-A	As per Annexure A	As per - Requirem ent	As per Annexure A	2500000		
			Total of	Schedule-06	25,00,000.00		

Schedule 7. Manifeliance of Fraction Sub Stations / Sch S robtionari	Sub Stations /SCPs (optional)
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S. N	Description of Work	Unit	Total Quantity	Unit Rate including @18 % GST	Total Amount (Rs.)
1	Oil Filtration for power Transformer: Streamline Oil filtration work & Conservator tank	Litres	L.S	2.39	
2	Oil Filtration for power Transformer :Oil to be drained from main tank and to be stored in separate Containers	Litres	L.S	0.64	
3	Oil Filtration for power Transformer: Refilling of oil from container to Main Tank after filtration.	Litres	L.S	0.64	
4	Bushings Oil leakage attention in Transformer: Streamline Oil filtration work & Conservator tank	Litres	L.S	2.39	
5	Bushings Oil leakage attention in Transformer: Oil to be drained from main tank and to be stored in separate Containers	Litres	L.S	0.64	
6	Bushings Oil leakage attention in Transformer: Refilling of oil from container to Main Tank after filtration.	Litres	L.S	0.64	
7	Bushings Oil leakage attention in Transformer: Leakage attention to OLTC tapping Gear and new Gasket O-ring changing work	Job	L.S	7103.67	
8	Bushings Oil leakage attention in Transformer: Leakage attention of HV Bushings - 3 Nos and bottom Flange and its related works	Job	L.S	15498.9	
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	3874.72	
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	7103.67	
11	Bushings Oil leakage attention in Transformer: Rental Charges for Cranes	Day	L.S	7103.67	
12	Bushings Oil leakage attention in Transformer: Transport charges for oil filtration van up & down, Toll	Trip	L.S	14271.91	
13	Bushings Oil leakage attention in Transformer: Transport Charges for empty barrels vehicle up & down, Toll	Trip	L.S	21956.78	

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14	Bushings Oil leakage attention in Transformer: Supply of Grade-1 New gasket (6mm and 10mm)	Set	L.S	9041.03	
15	Bushings Oil leakage attention in Transformer: Oil leakage attention and overhauling of TAP Changer Streamline Oil filtration work & Conservator tank	Litres	L.S	2.32	
16	Bushings Oil leakage attention in Transformer: Oil to be drained from main tank and to be stored in separate Containers	Litres	L.S	0.64	
17	Bushings Oil leakage attention in Transformer: Refilling of oil from container to Main Tank after filtration.	Litres	L.S	0.64	
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	5812.08	
19	Oil Leakage attention and overhauling of TAP changer: Rental and Transportation charges for oil barrels for storing Transformer oil	Job	L.S	8395.24	
20	Oil Leakage attention and overhauling of TAP changer Transformer oil Transformer oil Transportation charges for oil filtration van up & down	Trip	L.S	4649.67	
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	54727.77	
			Total of	Schedule-07	7,00,000.00
Sched	lule 8: Schedule for oil testing				
S. No	Testing of Transformer Oil as per IS:1866 of all Traction, Auto, and Distribution Transformer installed at different stations and location between Madar - Iqbalgarh section	Unit	Total	Unit Rate including @18 % GST	Total Amount (Rs.)
1	Physical Condition & Appearance of Oil (Colour & Order)	Per Sample	70	125.04	8752.8
2	Density at Room Temperature	Per Sample	70	187.56	13129.2
3	Electric Breakdown Voltage	Per Sample	70	375.13	26259.1
4	Moisture Content by Karl Fisher Method	Per Sample	70	625.21	43764.7
5	Neutralization Value	Per Sample	70	625.21	43764.7

6	Specific Resistance at room temperature & 90 degree C	Per Sample	70	1000.34	70023.8	
7	Dissipation Factor (tan 0) at room temp. & 90 degree C	Per Sample	70	1000.34	70023.8	
8	Interfacial tension test at + room temp	Per Sample	70	375.13	26259.1	
9	Flash Point	Per Sample	70	250.08	17505.6	
10	Sediment & Perceptible Sludge	Per Sample	70	250.08	17505.6	
11	Dissolved Gas Analysis	Per Sample	70	3376.13	236329.1	
12	Furan Analysis	Per Sample	70	4226.42	295849.4	
13	Sample Collection Charges	Per Sample	70	625.21	43764.7	
14	Transportation Charges	Per Job	3	12504.2	37512.6	
	Total of Schedule-08					

Schedule-09: Supply of Tools and Plants

S. No	Description of tool	Unit	Total Quantity	Unit Rate including @18 % GST	Total Amount (Rs.)
1	Screw driver 6",8",10"	Set	8	340	2720
2	Cutting pliers 8"	Nos	8	255	2040
3	Line tester	Nos	16	65	1040
4	Nose Pliers 6"	Nos	8	260	2080
5	Double open ended Spanner (6 to 32)	Set	8	940	7520
6	Measuring Tape 5m	Nos	4	167	668
7	Adjustable wrench 8"	Nos	4	590	2360
8	Ball pen Hammer 500gm	Nos	8	345	2760
9	Combination plier, 280mm	Nos	8	260	2080
10	Allen key 2 to 16mm	Set	8	620	4960
11	D shackles 1", 5/8", 3/4"	Set	8	835	6680
12	1/2" Socket set containing 19 socket with 6 attachment	Set	4	4725	18900
13	Crimping tool up to 16mm ² size	Nos	4	820	3280
14	Pipe wrench 8", 12"	Set	4	775	3100
15	Contact less thermo meter	Nos	4	2230	8920
16	Adjustable spanner 8", 12"	Set	8	1100	8800
17	Ring spanner (6 - 41)	Set	8	1450	11600

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18	DE spanner (6-41)	Set	8	910	7280
19	Double sleeve pulley block 3½ x ½" groove steel	Nos	4	1460	5840
20	Desoldering iron	Nos	2	1180	2360
21	Soldering iron 60 W	Nos	2	460	920
22	Wire stripping pliers, 150mm	Nos	8	75	600
23	Hydraulic crimping machine up to 300mm ²	Nos	2	5300	10600
24	Manila rope 15, 25mm dia (20 m Each)	Set	4	4870	19480
25	Nylon rope 15, 25, 40mm dia (20 m Each)	Set	4	4520	18080
26	Digital spirit level	Nos	4	1180	4720
27	Digital Vernier calliper	Nos	2	2533	5066
28	Digital micrometer	Nos	2	2415	4830
29	Round cable and wire cutter, 900mm	Nos	8	3340	26720
30	Hydraulic jack 50 ton cap	Nos	1	22920	22920
31	Grease gun	Nos	4	737	2948
32	Crow bar 24"x3/4	Nos	4	770	3080
33	Bolt cutter 12", 36"	Nos	4	2045	8180
34	Steel Tape (3m, 5m, 15m)	Set	4	640	2560
35	Sledge hammer 1kg, 5kg	Set	4	3725	14900
36	Flat file/250mm	Nos	4	240	960
37	Round file,288m	Nos	4	335	1340
38	Triangular file,288 mm	Nos	4	300	1200
39	Half round file,250mm	Nos	4	380	1520
40	Flat Chiesel, 10"	Nos	4	190	760
41	Pin punch, 10"	Nos	4	170	680
42	Centre punch	Nos	4	180	720
43	Inner circlip pliers straight nose,19-60 mm Capacity	Nos	4	320	1280
44	Inner circlip pliers bent nose, 19-60 mm Capacity	Nos	4	295	1180
45	Torque Wrench, 60-330 Nm	Nos	2	6150	12300
46	Bench vise 6"	Nos	2	3175	6350
47	Digital Earth tester Model No. btc - 96	Nos	2	4430	8860
48	Aluminium step ladder 16' wall support	Nos	4	5620	22480
49	Hand held electric blower	Nos	2	2379	4758
50	Aluminium ladder extensible 36 feetclosed	Nos	4	13590	54360
51	Portable Electric grinder	Nos	2	3585	7170
52	Acidity testing kit	Nos	4	3040	12160
53	Portable electric Hand Drill Machine	Nos	2	6200	12400
54	Pull lift3/4 ton	Nos	2	6590	13180
55	Digital multimeter	Nos	4	1870	7480
56	Oil BVD testing kit	Nos	4	212400	849600

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	6	T	ı	1	
57	Discharge Rod high rise	Nos	8	22550	180400
58	Pull lift 3 Tonne	Nos	2	11440	22880
59	Drop out fuse Operating rod	Nos	4	7870	31480
60	Single Sleeve pulley fiber 3.5"x0.5	Nos	10	735	7350
61	Single Sleeve pulley steel 3.5'x0.5	Nos	10	840	8400
62	Al Ladder 8 Meter with Hook on Top	Nos	4	8090	32360
63	Single Sleeve pulley steel 6'x1"	Nos	10	1355	13550
64	Hot stick suitable for High Rise	Nos	2	9950	19900
65	Clip on Tong Tester	Nos	4	2950	11800
66	Insulation Tester / Megger 500V	Nos	2	4330	8660
67	Measuring Tape 15 Meter PVC	Nos	4	340	1360
68	Measuring Tape 30 Meter PVC	Nos	4	420	1680
			Total of	Schedule-09	16,11,150.00
		T	otal of Sched	lule-01 to 09	4,93,27,450.42



PART - X

Offer Sheet



OFFER SHEET Offer to be filled up by Tenderer(s) in below table Below/ % quoted **Estimated** % quoted **Total** by bidder S.N. Scope of work Above/ by bidder cost(Rs.) cost in words At par Col.-Col.-2 Col. -3 Col.-4 Col. -6 Col.-5 Col.-7 1 Schedule 1: 1. Maintenance of 1,09,82,631.96 **Traction Sub Stations** Schedule 02: -2. SP/SSP/ATS/PP 1,35,85,567.72 Maintenance Schedule -03: Panels & Gantry Bus Bar 3. insulator other 48,53,179.38 Maintenance: Schedule 04: TSS Manning & Housekeeping (Note: 4. Please quote either 1,35,13,088.16 "At Par" or "Above" in the schedule -04) Schedule 05: -Break 5. down attention 6,31,389.00 Schedule 06: 6. Additional PSI 25,00,000.00 maintenance Activity Schedule 07: Maintenance of 7. **Traction Sub Stations** 7,00,000.00 /SCPs (Optional) Schedule 08: 8. Schedule for oil 9,50,444.20 testing Schedule-09: Supply 9. 16,11,150.00 of Tools and Plants

1. The above price is inclusive of GST.



हेडीकेटेड क्रि. कोर्सिकाderer is not allowed to quote for individual section(s).

- 3. Tenderer should offer rate in above table in % below, above and at par in figures as well as in words.
- 4. Tenderer must sign the following certificate.

I/We offer and agree to execute the above work at rate uploaded on line at www.ireps.gov.in through digital Signature.

Signature of tenderer with seal





SAMPLE CONTRACT AGREEMENT

THIS AGREEMENT ("Agreement") is made at A	hmedabad on theday of
BE	TWEEN
having its principal place of business at, Offi Freight Corridor Corporation of India	Limited, incorporated under the laws of India and ice of the Chief General Manager, Dedicated Limited, OCC Building, 'D' Cabin Road, adia (hereinafter called "the Employer"), and
	usiness at (hereinafter
as per Tender paper a Tender hereto and whereas the said Tender of . As per copy of the Letter of Acceptance of Tecomplete with enclosure at the accepted rate (Rupees only). Now the agreement with payment to be made by the Employer to the Coshall supply all equipment's and materials and Tender of the Contractor has been accepted, str "A" and "B" hereto and upon such supply, ex Purchaser, the Purchaser shall pay to the contractor "B" and in terms of the provisions therein.	Name of Work)
•	respective hands and seals) the day and year first
For and on behalf of the Contractor	For and on behalf of the Employer
Signature of the authorized official Name of the official	Signature of the authorized official Name of the official

Signature of tenderer (s) Date:

Stamp/seal of the Contractor

Stamp/Seal of the Employer



SIGNED, SEALED AND DELIVERED

Ву	the	said	By	the	said
by the said			by the said		
-		Name			Name
On behalf of the	Contractor in the p	<u>oresence</u>	On behalf of the	e Employer in the pre	sence_
<u>of :</u>			of:		
Witness			Witness		
Name			Name		
Address			Address		
Enclosures:-					
1. Annexure "A" -	Tender Papers No.				

2. Annexure "B" - Letter of Acceptance of Tender No._Dated_ Along with Summary of Prices



SAMPLE

Name of	The Bank			
Managing Director/ DFCCIL Bank Guarantee Bond No Acting through(Designation Dated and address of contract signing authority)				
	PERFORMANCE GUARANTEE BOND			
Manager Freight () the term	sideration of the Managing Director / DFCCIL acting through Chief General c/DFCCIL/Ahmedabad (Designation & Address of Contract Signing Authority), Dedicated Corridor Corporation of India Limited hereinafter called "DFCCIL") having agreed under and conditions of agreement/Contract Acceptance letter No			
	(hereinafter called "the said contractor(s)" for the work			
performa	Bank Guarantee Bond for Rs. (Rs. Only) as a ance security Guarantee Bond from the contractor(s) for compliance of his obligations in the with the terms & conditions in the said agreement.			
1.	We (indicate the name of the Bank) hereinafter referred to as the Bank, undertake to pay to the Government an amount not exceeding Rs. (Rs. Only) on demand by the Government.			
2.	We			
3 (a)	We,(indicate the name of Bank) further undertake to pay to the Government any money so demanded notwithstanding any dispute or dispute raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.			
(b) T	The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such			



4.	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 all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by(Designation & Address of contract signing authority) on behalf of the Government, certify that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor (s) and accordingly discharges this guarantee.
5.	(a) Not withstanding 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 Government or until (date of validity/extended validity) whichever is earlier and no claim shall be valid under this guarantee unless notice in writing thereof is given by the Government within validity / extended period of validity of guarantee from the date aforesaid.
	(b) Provided always that we
6.	We,
7.	This guarantee will not be discharged by any change in the constitution of the Bank or the Contractor (s).
8.	We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
9.	This guarantee shall be valid upto(Date of completion plus 60 days beyond that). Unless extended on demand by Government. Notwithstanding anything to the contrary contained herein before, our Liability under this guarantee is restricted to RsOnly) unless a demand under this guarantee is Made on us in writing on or beforewe, shall be discharged from our liabilities under this guarantee thereafter.

$Tender\ No.\ DFC_ADI_EL_PSI_02_2024-25$



Dated	the day of _	F	For(Indicate the name of bank)
			Signature of Bank Authorize official
			(Name):
			Designation:
			Full Address.
Witness:			
		_	
2		<u> </u>	

Signature of tenderer (s)
Date:



SAMPLE STANDING INDEMNITY BOND FOR "ON ACCOUNT" PAYMENTS

(On paper of requisite stamp value)

We, M/shereby undertake that we hold at our stores
Depot/s atfor and on behalf of the Managing Director/ DFCCIL acting in
the premises through the Chief General Manager/
DFCCIL/Ahmedabad 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 $\begin{tabular}{lllllllllllllllllllllllllllllllllll$
vide letter of Acceptance of Tenderdated_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 Chief General
Manager/DFCCIL/Ahmedabad 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 Part IX, X (Form - 4) to 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.
other Contract.
Dated this day day of 2023
For and on behalf of
M/s(Contractor)
Signature of witness
Name of witness in Block letter.
Address.



ECS / NEFT / RTGS MANDATE FORM

Date:- To,

Dy.CPM/PM/Finance DFCCIL/Ahmedabad

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



DRAFT MEMORANDUM OF UNDERSTANDING (MOU) For JOINT VENTURE PARTICIPATION BETWEEN (IF APPLICABLE)

and M/sand	having its registered office at (Hereinafter referred to as) in the capacity of a Joint Partner of the other part.
	having its registered office at (Hereinafter Referred to") in the capacity of a Joint Partner of the other part.
their	expressions of
Dedic	EREAS: cated Freight Corridor Corporation of India Limited (DFCCIL) [hereinafter referred to as "Client"] exited bids for"
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/sto M/s
tł	ne '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.

Tender No. DFC_ADI_EL_PSI_02_2024-25



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 following fax numbers and addresses: Lead Partner	confirmed by registered mail or commercial courier to the Other Partner(s)
(Name & Address)	(Name & Address)
IN WITNESS WHEREOF THE PARTIES, written.	have executed this MOU the day, month and year first before
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
Fron	u:
	······································
Ded OC0	f General Manager, cated Freight Corridor Corporation of India Limited, Building, 'D' Cabin Road, Sabarmati, Ahmedabad- 119, Gujarat.
Re:	"[Insert name of work]"
Ref:	Your notice for Invitation for Bid (IFB) No
1.	We wish to confirm that our company/firm has formed a Joint Venture with (i)
(Mei	whers 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
(Mei	nber(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

डेडीकेटेड फ्रेंट कोरीआubsequently entered into between Dedicated Freight Corridor Corporation of India Limited and our JV.

*I/We, further agree that entire execution of the contract shall be carried out exclusively through the lead partner.

Yours		faithfu	lly,			
(Signatu	ıre)					
(Name	of	Signatory).			••	
(Capaci	ty of	Signatory).				
Compa	ny S	eal		* Delete	e as appli	cable

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)

who is presently employed with us and hold our name and on our behalf, all such acts, dee incidental to our bid for the work of Including signing and submission of all docu Dedicated Freight Corridor Corporation of Indi	hereby constitute, appoint and authorise Mr/Ms ding the position ofas our attorney, to do in ds and things necessary in connection with or
	nings lawfully done by our said attorney pursuant deeds and things done by our aforesaid attorney one by us.
Dated this the day of 2023.	
(Signature of authorised Signatory)	
Signature of Lead Partner	Signature of JV Partner(s)
(Signature and Name in E Seal of Company Witness 1:	G • • • • • • • • • • • • • • • • • • •
Witness 1: Name:	Witness 2: Name:
Address:	Address:
Occupation:	Occupation:
*Notes: i) To be executed by all the partners join	ntly, 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*

*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.

2024-25

F.	Tender No. DFC_ADI_EL_PSI_02
hated this the Day of	2023
(Signature)	
of Company Witness 1	(Name in Block letters of Executants) Seal
Name:	
Address:	
Occupation:	
Witness 2	
Name:	
Address:	
Occupation:	



Reference para 17B Registered Acknowledgement Due

PROFORMA FOR TIME EXTENSION

No	Dated:
Sub:	(i)(name of work).
	(i)(name of work). (ii) Acceptance letter no(iii) Understanding/Agreement no
Ref:	(Quote specific application of Contractor for extension to the date
recei	ved)
Dear 1.	The stipulated date for completion of the work mentioned above isFrom the progress made so far and the present rate of progress, it is unlikely that the work will be
2.	completed by the above date (or "However, the work was not completed on this date"). 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
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 penalty fixed earlier) will be recovered from you as mentioned in Clause, 17-B 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 up to 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 Employer Name of the Official:-
	Stamp/Seal of the Employer



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 the employed in a factory or on a work requiring manual labour and that his/her age as near 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 lab an adult/child.	bour as
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 stated.	y should be clearly



Registered Acknowledgement Due

PROFORMA OF 7 DAYS NOTICE DECCIL.

т.	(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 in various letters of even no, dated; you have failed to start work/show adequate progress and/or submit detailed program me for completing the work.
2.	Your attention is invited to this office/Chief Engineer's office letter no, datedin 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 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 Employer Name of the Official:- Stamp/Seal of the Employer



Registered Acknowledgement Due

PROFORMA OF 48 HRS. NOTICE **DFCCIL**

То	(Without Prejudice)
	M/s
Dea	ar Sir,
	Contract Agreement No In connection with
1.	Seven days" notice under Clause 62 of 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 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 stand 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 encased and consequences which may please be noted.
Kin	dly acknowledge receipt.
	Yours faithfully
	For and on behalf of the Employer Name of the Official:- Stamp/Seal of the Employer



Registered Acknowledgement Due

PROFORMA OF TERMINATION NOTICE DFCCIL

(Without Prejudice)

No	Dated
To M/s	
Dear Sir,	
Contract Agreement NoIn connection with	
Forty eight hours (48 hrs.) notice was given to yo Dated; but you have taken progress of the work.	ou under this office letter of even no. n no action to commence the work/show adequate
terms of Clause 62 of Standard General Condi- contract will be carried out independently with participation of every member/partner in any n	ady expired, the above contract stands rescinded in itions of Contract and the balance work under this out your participation. Your participation as well as manner as an individual or a partnership firm/JV is er for executing the balance work and your Security rantee shall also be encased.
Kindly acknowledge receipt.	
	Yours faithfully
	For and on behalf of the Employer Name of the Official:- Stamp/Seal of the Employer



SAMPLE

FORMAT OF BANK GUARANTEE FOR MOBILISATION ADVANCE

(Clause 1.5.20, Part-V)

Bank guarantee made on this
WHEREAS Dedicated Freight Corridor Corporation of India Limited has awarded the Contract no
AND WHEREAS vide Clause 1.5.20 of Part-V , Special Conditions of Contract, Mobilization Advance up to % (percent) of the original contract value of Rs
Now, we the undersigned, Bank of, being fully authorized to sign and to incur obligations for and on behalf of and in the name of Bank ofhereby declare that the said Bank will guarantee the Employer the full amount of Rs/-(Rupees) as stated above.
We, Bank of
This guarantee is valid till
At any time during the period in which this guarantee still valid of the contractor fails to fulfil its obligation under the Contract, it is understood that the Bank will extend this guarantee under the same condition for the required time on demand by the Employer at the cost of the contractor.

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



The neglect or forbearance of the Employer in enforcement of payment of any money, the payment whereof is intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the Bank of their liability under this Deed.

The expressions "the Employer", "the Bank" and "the contractor" hereinbefore used shall include their respective successors and assigns.

Notwithstanding	g anythin	g conta	ained he	rein:				
Our liability	under	this	Bank	Guarantee	shall	not	exceed	Rs/-
(Rupees)							
This bank Guara	antee sha	ll be v	alid up to	0				
	i serve i							Bank Guarantee only(date of
In witness w					_			this Guarantee on the
For and on beha	alf of the	Bank	of					
Signature of Au	ıthorized	Bank	Official					
Name								
Designation								
Stamp/Seal of t	he bank							
Signed, sealed	and deli	ivered	for and	on				
Behalf of the ba	ank by th	ie abov	e name	d				
W. 1	In the	he pr	esence	of				
Witness 1								
Signature			• • • • • • • • • • • • • • • • • • • •					
Name	•••••	•••••	•••••	•••••				
Address	•••••	•••••	•••••	•••••				
Witness 2								
Signature	•••••	•••••	•••••	•••••				
Name	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	•••••				
Address								



Form no.20

PRE CONTRACT INTEGRITY PACT

General

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

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

NOW, THEREFOR,

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

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

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

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

Commitments of the CLIENT

1.1 The CLIENT undertakes that no official of the CLIENT, connected directly or indirectly with the [B], will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the [A] either for themselves or for any person, organization or third party related to the [B], in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the [B].



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

Commitments of BIDDERS

- 3. The [A] commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage) in order to secure the [B] contract or in furtherance to secure it and in particular committee itself to the following:-
 - 3.1 The [A] will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission fees, brokerage or inducement to any official of the CLIENT, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the (B] in exchange for any advantage in the bidding, evaluation, contracting and implementation of the [B].
 - 3.2 The (A] further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any Material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the CLIENT or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the [B] or any other [B] with the Government for showing or forbearing to show favour or disfavour to any person in relation to the [B] or any other [B] with the Government.
 - * [A] shall disclose the name and address of agents and representatives and Indian [A] shall disclose their foreign principals or associates.



- * [A] shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5 The [A] further confirms and declares to the CLIENT that the [A] is the original manufacturer/ integrator/ authorized government sponsored export entity of the defense stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the CLIENT or any of its functionaries, whether officially or unofficially to the award of the [B] to the [A] nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 3.6 The [A] either while presenting the bid or during pre-contract negotiations or before signing the [B] shall disclose any payments he has made, is committed to or intends to make to officials of the CLIENT or their family members, agents, brokers or any other intermediaries in connection with the [B] and the details of services agreed upon for such payments.
- 3.7 The [A] will not collude with other parties interested in the [B] to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the [B].
- 3.8 The [A] will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The [A] shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the CLIENT as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The [A] also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The [A] commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The [A] shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.



3.12 If the, [A] or any employee of the [A] or any person acting on behalf of the [A], either directly or Indirectly, is a relative of any of the officers of the CLIENT, or alternatively, if any relative of an officer of the CLIENT has financial. Interest/stake in the Bidder"s firm, the same shall be disclosed by the [A] at the time of filling of tender.

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

- 3.13 The [A] shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the CLIENT.
 - 4. Previous Transaction
- 4.1 The [A] declares that no previous transgression occurred in the last three years immediately before signing of this integrity Pact, with any other company in any country in respect of any corrupt practices 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 [A] agrees that if it makes incorrect statement on this subject, [A] can be disqualified from the ender process or the contact, if already awarded, can be terminated for such reason.
- 5. Earnest Money (Security Deposit)
- 5.1 While submitting commercial bid, the [A] shall deposit an amount ___ (to be specified in RFP) as Earnest Money/Security Deposit, with the CLIENT through any of the following instruments:
 - i. Bank draft or a pay order in favour of _____.
 - ii. 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.
 - iii. 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.



In case of the successful [A] a clause would also be incorporated in the article pertaining to performance Guarantee in the [B] that the provisions of sanctions for violation shall be applicable for forfeiture of performance bond in case of a decision by client to forfeit the same without assigning any reason for imposing sanction for violation of this pact.

- 5.4 No interest shall be payable by CLIENT to the [A] on earnest Money/Security Deposit for the period of its currency.
 - 6. Sanctions for Violations
- 6.1 Any breach of the aforesaid provisions by the [A] or any one employed by it or acting on its behalf (whether with or without the knowledge of the [A] shall entitle the CLIENT to take all or any one of the following actions, wherever required:-
 - (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 [B] is signed) shall stand forfeited fully and the CLIENT shall not be required to assign any reason therefore.
 - (iii) To immediately cancel the [B], 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 that the prevailing prime lending rate of state bank of India, while in case of a [A] from the country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to [A] from the CLIENT in connection with any other [B], such outstanding payment could also be utilized to recover the aforesaid sum and interest.
 - (v) To encash the advance bank guarantee and performance bond, if furnished by the [A], in order to recover the payments, already made by CLIENT, along with interest.
 - (vi) To cancel all or any other contracts with the [A]. The [A] shall be liable to pay compensation for any loss or damage to the Client resulting from such cancellation/rescission and the client shall be entitled to deduct the amount so payable from the money(s) due to the [A].
 - (vii) To debar the [A] from participating in future bidding processes of the



Government of India for a minimum period of five years, which may be further extended at the discretion of the CLIENT.

- (viii) To recover all sums paid in violation of this pact by [A]) to any middleman or agent or broker with a view a view to securing [B] the contract.
- (ix) In cases where irrevocable letters of credit have been received in respect of any [B] signed by the client with the [A], The shall not be opened.
- (x) Forfeiture of Performance Bond in case of a decision by the client to forfeit the same without assigning any reason for imposing sanction for violation of this pact.
- 6.2 The client will entitled to take all or any of the actions mentioned at para 6.1(i) to (x) of this pact also on the commission by the [A] or any one employed by it or acting on its behalf (whether with or without the knowledge of the [A], of an offence as defined in chapter IX of the Indian penal code, 1860 or prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 6.3 The decision of the CLIENT to the effect that a breach of the provisions of this pact has been committed by the [A] shall be final and conclusive on the [A]. However, the [A] can approach the Independent Monitor(s) appointed for the purposes of this Pact.

7. Fall Clause

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

8. Independent Monitors

- 8.1 The CLIENT has appointed Independent Monitors (hereinafter referred to as Monitors) for this pact in consultant with the central vigilance commission (Names and addresses of the Monitors to be given)
- 8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.



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 [A] will also grant the Monitor, upon his request and demonstration of a valid Interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be und 'contractual obligation to treat the information and documents of the [A] with confidentiality.
- 8.7 The client will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.
- 8.8 The monitor will submit a written report to the MD/DFCCIL within 8 to 10 weeks from the date of reference or intimation to him by the CLIENT/BIDDER and, should the occasion arise, submit proposal for correcting problematic situations.

9. Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the CLIENT or its agencies shall be entitled to examine all the documents including the Books of Accounts of the [A] and the [A] shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

- 9.1 Law and Place of Jurisdiction
 - This pact is subject to Indian law. The place of performance and jurisdiction is the seat of the CLIENT.
 - 10. 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.

- 10.1 Validity
- 10.2 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 [B] to the satisfaction of both the CLIENT and the [A] including warranty period, whichever is later. In case [A] is unsuccessful, this integrity pact shall expire after six months from the date of the signing of the [B].

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. 11. **CLIENT** BIDDER Name of the Officer CHIEF EXECUCTIVE OFFICER

Designation

10.3

Deptt./Ministry/PSU

Witness 1	Witness 1	
2	2	

Note:

- [A] To be replaced by BIDDER/Seller/Consultant/Consultancy firm/Service provider as the case was may be.
- [B] To be replaced by Contract/Supply Contract/Consultancy Contract/Works Contract as the case was may be.



ANTI-PROFITEERING DECLARATION

TO WHOMSOEVER IT MAY CONCERN

I, age, years, Son/Daughter of, resident of

1)	That I am the < Designation of the authorized signatory> of
2)	That
3)	That the Company is fully aware of the anti-profiteering provision under the Goods & Services Tax ("GST") Law(s),
4)	That the Company
5)	Further, it is to confirm also that in case (name of the organization) will receive any further benefit in future after 1 st July, 2017 by way of availment of input tax credits which were not allowed to be availed before 1 ^{sl} July, 2017 or reduction in tax rates or in any other manner which results in reduction of cost of the goods/services supplied to

हेडीकेटेड फ्रेट कॉर्मीड 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



Form No. 22 (Ref para 32 (iv))

FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

I		(1	Name and o	designation)** appointed	d as the	e attorney/aut	thorized
signatory of t	he tenderer	(includia	ng its constit	tuents),			
M/s				(hereinafter	called	the tenderer)) for the
				documents			work
				(DF	_		hereby
solemnly affi	rm and stat	e on the	behalf of th	e tenderer including its c	onstituer	nts as under:	

- 1. I/we the tenderer (s) am/are signing this document after carefully reading the contents.
- 2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
- 3. I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website www.ireps.gov.in
- . I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
- 4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
- 5. I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
- 6. I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
- 7. I/we certify that I/we the tenderer(s) is/are not blacklisted or debarred by 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/N/Society/Trust.
- 8. 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.

- 9. 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.
- 10. 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.

Signature of tenderer (s) Date:



FORM No. 23

TENDERER'S CREDENTIALS (BID CAPACITY) DFCCIL

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 value of the present tender. The available bid capacity shall be calculated as under:

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 the 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 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 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 Railway 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.



Statement of Works in Progress for Bid Capacity

Form No. 23A

S.	Name	Organizatio	Date of	Original	Date of	Payment	Balance	В
N	and	n for whom	award of	Cost of	Completio	Received	amount	"value
	place	work is	contract.	Work/Revis	n (Origin	till	of the	of work
	of	being	Contract	ed Cost (Up	al/	date of	work to	to
	work	carried out	Agreement	to latest	Extended)	opening	be	b
			No. &	corrigendum		of	execute	e done
			Date)		present	d	in "N"
						tender		years

Note:-

1. Available Bid Capacity = $[A \times N \times 2] - B$

Where

A= Maximum value of construction works executed and payment received in any one financial year during the current and last three financial years immediately preceding the current financial year, upto date of opening of 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 = Value of existing commitments and balance amount of ongoing works with the tenderer to be completed in next "N" years.
- 2. This statement should be submitted duly verified by Chartered Accountants.



FORM No. 24

FINAL SUPPLEMENTARY AGREEMENT

1.	Articles of agreement made this day _ in the year between the President of India, acting through the Railway Administration having his office at _ herein after called the Railway 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 Numberdated for the performanceherein 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 Rsincluding the Final Bill bearing voucher No datedof valueduly 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 Rs. Through the Final Bill bearing voucher Nodatedduly 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)



Form No. 25

Reference Para 64.(1)(ii)(b): & 64.6

Agreement towards Waiver under Section 12(5) and Section 31A (5) of Arbitration and Conciliation (Amendment) Act I/we
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/wedo/do not agree to waive off applicability of section 12(5) of Arbitration and Conciliation (Amendment) Act.
Signature of ClaimantSignature of Respondent
Agreement under Section 31(5)
I/we (Name of claimant) with reference to agreement no
Signature of ClaimantSignature of Respondent

*Strike out whichever not applicable.



Form No. 26 (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: MD DFCCIL Acting through Chief General Manager, DFCCIL, Ahmedabad Beneficiary: Dedicated Fright Corridor Corporation of In Date:	ndia Limited, Ahmedabad
Bank Guarantee Bond No.:	Date:
In consideration of the MD DFCCIL acting through (Designation & address of Contract Signing Authority) called "The DFCCIL") having invited the bid for, We have been informed that [called "the Bidder") intends to submit its bid (hereinaft) WHEREAS, the Bidder is required to furnish Bid Security Bid Security], in the form of Bank Guarantee, according	through Notice inviting tender (NIT) Insert name of the Bidder](hereinafter er called "the Bid"). ty for the sum of [Insert required Value of
AND	
WHEREAS,[Insert Name of the Bank], with Headquarters office at [Insert Address], hereina [Insert Name and Designation of the authorised per Bidder, agreed to give guarantee for Bid Security as he	after called the Bank, acting throughrsons of the Bank], have, at the request of the
1. KNOW ALL MEN that by these present that I/We t representatives of the Bank], being fully authorized to	_ , ,

- 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 Railway/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 Railway/DFCCIL any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Railway/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 Railway/DFCCIL without any reference to the Bidder and without the Railway/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 Railway/DFCCIL and the Bidder, will in any way absolve the Bank from the liability under this guarantee; and the Bank, hereby, waives any

trequirement for notice of any such change, addition or modification made by Railway/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 Railway/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 Railway/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	UBIN0546836
IFSC TYPE	BRANCH
BANK NAME	Union Bank of India
BRANCH NAME	Motibagh-1, Delhi Branch
CITY NAME	New Delhi
ADDRESS	Palika Bhawan, Motibagh-I, R.K. Puram, Delhi-110066
DISTRICT	New Delhi
STATE	New Delhi
BG ENABLED	YES

11. The Guarantee shall be valid in addition to and without prejudice to any other security Guarantee(s) of Bidder in favour of the Railway/DFCCIL. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Railway.

Date	
Place	Bank's Seal and authorized signature(s)
	[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 [P/Attorney] No.

Note: All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.

Signature of tenderer (s) Date:



Form No. 27 A

(Reference Clause 40(A) Registered Acknowledgement Due

PROFORMA OF 14 DAYS NOTICE FOR OFFLOADING OF PART OF CONTRACT WORK DFCCIL RAILWAY

(Without Prejudice)
То
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, 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 hehalf of the DECCH
For and on behalf of the DFCCIL



Form No. 27 B

(Reference Clause 40(A) Registered Acknowledgement Due

NOTICE FOR PART OF CONTRACT WORK OFFLOADED DFCCIL RAILWAY

(Without Prejudice)

TT.	(·· case as a signature)
То	
M/s	
Dear S	
	Contract Agreement No
	In connection with
to you	Fourteen days notice under Clause 40A of the Standard General Conditions of Contract was given under this office letter of even no., dated; but you have taken no/inadequate action oy adequate resources to commence the part(s) of work/show adequate progress of the part(s) of
_	nentioned therein.
the Sta	As you have failed to abide by the instructions issued to commence the part(s) of work/show te progress of the part(s) of work even at the lapse of 14 days' notice period under Clause 40A of andard General Conditions of Contract, few part(s) of the work under the contract have been led and being executed by other mode(s) at the cost detailed below:
1. the Star of part(Please refer your request letter no dated, wherein it was requested under clause 40 A of ndard General Conditions of Contract to offload part(s) of works at your risk & cost. The details (s) of the work under the contract which have been offloaded and being executed by other mode(s) tost detailed below:
(List of	f Part(s) of work offloaded, Details of mode of execution of such offloaded work alongwith imate cost thereof to be mentioned)
2. clause	The final measurement of work(s) already executed for above part(s) of work recorded as per 45 (A) or/and 45 (B) of the Standard General Conditions of Contract is enclosed herewith. Bill(s) of Quantities for Part(s) of work offloaded is enclosed herewith.
determine PVC au recover	additional cost in execution of offloaded work through mode(s) mentioned in para (1) above is ined as Rs, over& above the cost of execution under this contract (including the mount payable as per contract, as on the date of issue of this notice). This additional cost shall be red from your next on account bill(s) or any other dues payable to you under contract.
6. You	Contract value gets reduced to Rs are requested to continue with the balance work in the contract subsequent to offloading of above of work.
Kindly	acknowledge receipt.
Yours	faithfully
For and	d on behalf of the DFCCIL



END OF DOCUMENT
