



Gujarat Energy Transmission Corporation Ltd.

TRANSMISSION CIRCLE

P. O. Maktampur, BHARUCH-392 012

CIN: U40100GJ1999SGC036018

Telephone No. (02642) 227306 Fax No. (02642) 227303

Site : www.getcogujarat.com Email: setrbharuch@rediffmail.com

SAVE ENERGY FOR BENEFIT OF SELF AND NATION

TENDER NOTICE No: **TCBRH/26-27/2613**

SE (TR) Bharuch invites "On line Tenders" (e-tendering) for the works of following items. Tender Papers & Specifications may be down loaded from Web site <https://tender.nprocure.com> (For view, down load and on line submission) and GUVNL/GETCO web site www.gseb.com & www.getcogujarat.com (For View & down load only). Tender fee including **GST** may be paid along with submission of tender with EMD in online form only for respective tender. "All the relevant documents of tender to be upload (Notarized/self-attested copies of original-as specified in tender document) through online only (mandatory) on (n) procure portal including tender fee & EMD. **Tender fee & EMD are to be submitted in online form only. "NO COURIER SERVICE OR HAND DELIVERY" will be allowed.**

All the bidders, in respect of tender item must have vendor registration with the GETCO viz. prior to the date of opening of technical bid of the tender otherwise their bids will not be considered eligible for technical scrutiny and as such, their technical bids will not be opened.

Sr. No.	Description	
1	Tender No.	TCBRH/26-27/2613
2	Works of	Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture & CCTV Camera etc at 66 kV Mota Borasara.2 SS under construction Division Bharuch
3	Estimated cost with GST in	Rs. 34,47,907.62
4	Tender Fee (non-refundable)including GST	Rs. 1180.00
5	Earnest Money Deposit amount in	Rs. 34,479.00
6	On line (E-tendering) tender/ offer submission last date up to 16.00 hours only (This is mandatory)	
7	Physical submission of Tender detail (Receipt of EMD & tender fee online Payment) , last date up to 15.00 hours. By RPAD or SPEED POST only.	NA
8	Date of opening of Tender fee, EMD cover, Vendor registration and technical bid physical as well as on – line opening at 16.00 Hours.	
9	Tentative Date of on – line opening of Price bid, (if possible), at 11.00 Hours	Shall be intimated separately
10	Prices	Firm
11	Time Limit	90 Days
12	Validity of Bid	180 days

IMPORTANT:

1. All the relevant documents as per requirement of the **Tender must be submitted through online form only. And copy of online payment receipt of Tender Fee and EMD is to be submitted by mail not physically on OR before due date and time.** Bidder has to upload scanned copies of original (Notarized/self-attested copies of original-as specified in tender document) Documents with bid and No physical documents to be submitted. except Tender fee and EMD online payment receipt. Payment receipt should be strictly submitted by RPAD / speed post only before due date. otherwise the offer will not be considered and no any further communication in the matter will be entertained. **The tender documents in physical form is not to be accepted. (All the online Annexures & Price bid i.e. Annexures, GTP and price bid are not to be submitted with the physical documents).**
2. Any deviation found in Data / Details / Documents between in line offer (E-tendering) and Online submitted documents (Tender document) of bidder, offer of the same bidder will not considered and no any further communication in the matter will be entertained. Tender will be evaluated on Data / Details / Documents of the on line offer. Whatever item quoted in Annexure-IV/(4) are consider for technical evaluation. **The quantity & GST offered in online price bid shall be considered as final in case of any discrepancy.**
3. It is mandatory for all the bidders to submit their tender documents by on-line (E-tendering) in schedule time. If tender documents submitted physically in that case the same tender will not be considered.
4. The bidders are required to fill up all the online annexure/forms. This is intended for transparency and speedy evaluation of the bids. Instead of simply confirming / attached in bid / refer physical offer, the Bidder shall fill in the particulars against appropriate place in respect of each line appearing in each online annexure. Wherever required, bidder shall invariably have to submit supporting authentic documents in the physical bid.

(In the absence of required details in the online annexure, the purchaser has every right to evaluate the bids accordingly and bidder cannot raise any objection against any point during evaluation.)
5. Bidders are requested to remain in touch with the website for any amendment/ corrigendum or extension of due date etc.
6. As per new guideline – **It is mandatory to use CBud app.**

(1) **To do any type of digging only after prior intimation through “Call Before U Dig” App & as per its term & condition.**

(2) **To use the App before commencing any type of digging anywhere in the state**

Any technical questions, information and clarifications that may be required pertaining to this enquiry should be referred to SE (TR) Bharuch GETCO reserves the right to reject any OR all tenders without assigning any reasons thereof.

Yours faithfully,

**Superintending Engineer
GETCO, CO, Bharuch**

Download Tender Documents in (PDF Format) which consists of:

Part-I: Commercial Terms & Conditions

Part-II: Technical Specifications & GTP'S, Schedule “A” indicating the quantities & items, drawing if any.

To view the PDF file please use “Acrobat Reader” software which can be downloaded from “Adobe” website.

IMPORTANT:

All the online Annexures and price bid, other tender documents (refer Table-A) must be submitted/attached through online form only.

1. Bidder has to upload scanned copies of original (Notarized / self-attested copies of original – as specified in tender document) documents with bid and **no physical documents to be submitted by bidder except Tender fee & EMD.**

2. Bidder has to submit the only Tender fee & EMD in physical form in sealed cover superscripted with the “Name of Work” on OR before due date and time. All such documents should be strictly submitted by RPAD / speed post only. Otherwise the offer will not be considered and no any further communication in the matter will be entertained on or before due date of submission

3. Suitable payment option can be selected for Tender fees & EMD. Amount should be paid by **Online-payment, payment of Tender Fees & EMD by RTGS/NEFT/on line shall be encouraged. In case of payment through RTGS/NEFT bidder has to mail following details:**

Sr. No	Required Details
1	Name & Address of the bidder
2	Bidder GST No
3	Tender No with due date
4	Mode of Transfer
5	Ref. ID with Bank Details
6	Paid Amount
7	Payment against (Tender Fee/ EMD)

To:

a. setrbharuch.getco@gebmail.com

b. detect2bharuchco.getco@gebmail.com

Bidder has to provide all above details on the same date of payment so that receipt can be generated.

❖ **GETCO Beneficiary Bank detail is as under:**

1	Name of Account Holder	Gujarat Energy Transmission Corporation Ltd.
2	Account No.	71420200000168
3	Name of Bank	BANK OF BARODA
4	Branch Code	DBBHRU
5	Address of Bank	Shalimar Complex, Station Road, Bharuch-392002, Gujarat
6	IFSC Code	BARB0STABRO
7	PAN No	AABCG4029R
8	TAN No	BRDG01026E
9	GST No	24AABCG4029R2ZC

1. In case short submission of documents with bid and / or clarification if any required from the bidder, the required details / documents may be asked from bidder in mail form only.
2. It shall be sole responsibility of the bidder that the uploaded scanned documents (in PDF from) remain legible and should not be password protected.
3. All the relevant scanned documents as per requirement of the tender are to be upload through online only on n procure portal excluding Tender fee & EMD. Physical copies of Tender fee & EMD payment receipt to be submitted in sealed cover on OR before due date and time. Which is strictly submitted by RPAD / speed post only, otherwise the offer will not be considered and no any further communication in the matter will be entertained. (All tender documents including Price bid are not to be submitted with the physical documents except Tender fee & EMD payment receipt).
4. Tender will be evaluated on Data / Details / Documents of the online offer only.

5. It is mandatory for all the bidders to upload their tender documents by on line (E-tendering) in scheduled time. **No documents shall be considered physically which are mentioned for on-line submission only.**
6. The bidders are required to fill up all the online annexure / forms (word file attached) and shall be uploaded invariably. This is intended for transparency and speedy evaluation of the bids. Instead of simply confirming / attached in bid / refer physical offer, the Bidder shall fill in the particulars against appropriate place in respect of each line appearing in each online annexure. Wherever required, bidder shall invariably have to upload supporting authentic documents in the online bid. (In the absence of required details in the online annexure, the purchaser has every right to evaluate the bids accordingly and bidder cannot raise any objection against any point during evaluation.)
7. Bidders are requested to remain in touch with the web-site for any amendment / corrigendum or extension of due date etc.
8. No tender shall be accepted / opened in case of receipt after due date and time of tender, irrespective of delay due to postal services or any other reasons and the Corporation shall not assume any responsibility for late receipt of tender.
9. The Earnest Money Deposit and tender fee will be accepted by NEFT/RTGS (online form) on any Nationalized Bank only situated at "VADODARA" drawn in favor of **"GUJARAT ENERGY TRANSMISSION CORPORATION LTD."** EMD and Tender Fee NEFT/RTGS with different purchaser or agency shall not be accepted. Tender without EMD and tender fee shall be rejected. **Two separate payment receipt for Tender fee and EMD should be submitted with sealed cover.**
10. The GETCO reserves the right to award the work to one or more bidders, considering their technical and financial capacity OR to reject any or all tenders or accept any tender without assigning any reason thereof.

Any technical questions, information and clarifications that may be required pertaining to this enquiry should be referred to: **The Superintending Engineer (TR), Gujarat Energy Transmission Corporation Limited, Circle Office, Bharuch**

GETCO reserves the right to reject any OR all tenders without assigning any reasons thereof.

Yours faithfully,

**Superintending Engineer
GETCO, Bharuch**

**GUJARAT ENERGY TRANSMISSION CORPORATION
LIMITED**

TRANSMISSION CIRCLE BHARUCH, GETCO



TENDER SPECIFICATION, FOR

**Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture & CCTV Camera etc at 66 KV 66kV Mota Borasara-2 S/S under construction
Division Bharuch**

Estimated Cost – Rs. 34,47,907.62

Tender fee – Rs. 1180.00

EMD –Rs. 34,479.00

Time limit-90 days

TECHNICAL BID

TENDER NO. TCBRH/26-27/2613

Qualification Requirement

1. **Registration:** The Bidder shall be registered contractor of GETCO **for erection work of 66 KV s/s.**
2. **Experience:** Bidder shall have executed as **Main contractor** minimum **01 No** of 66/11KV or higher voltage class substation with State or Central Transmission Utility or major industries OR **03 Nos** of 66KV or higher voltage class Transformer/Feeder bays at same or different locations. Substations include minimum 2 Nos. of feeder bays, 1 No. of Transformer bay. Attested Xerox copy of work orders executed from GETCO and satisfactory completion certificate **(form 3A only)** from respective department should be submitted
3. **Solvency:** Latest bank solvency certificate from any Bank of a sum of minimum 20 % of the estimated cost shown in the tender.
4. **Provident Fund Code:** Separate provident fund code number towards firm registered with Regional P. F. Commissioner.
5. **Profit & Loss Account Statement:** The Bidder should submit certified Xerox audited copy of Balance sheet with profit and loss account & IT return of last three Financial Years.
6. **Nature of Firm:** Attested copy of **Partnership Deed, Power of Attorney**, if any, for signing the bid documents in case of partnership firm & **self-affidavit for proprietorship firm**. All such documents shall have to be **NOTARISED**
7. **GST Registration:** The Bidder shall be registered under the GST Act and a certified copy of such registration under the GST act indicating the GSTIN shall have to be submitted along with the bid by the bidder.
8. **I.T. PAN CARD:** The bidder should submit the attested zerox copy of PAN Card of their firm.
9. **Bidder shall have valid electrical contract license & approved vender of GETCO/STU/CTU, registered under GST Act & should have CPF/PF registration certificate.**
10. **All documents submitted by bidder must be self-attested.**

Signature of Contractor

Superintending Engineer (TR)

GETCO, CO, Bharuch

CHECK LIST OF DOCUMENTS SUBMISSION

TABLE-A		
Mandatory to upload on-line only (pdf file)		
No.	Particulars	Check Mark
1	Scan copy of online payment receipt of Tender fee & EMD	
2	All Pages of Technical Bid with Bidder Signature and Rubber Stamp (encouraged for digitally signed)	
3	Registration document as Approved Contractor in Appropriate Class	
4	Work completion certificate in Form No.3A (Experience Certificate as main contractor) only as Per Qualification Requirement	
5	Bank Solvency Certificate	
6	Provident Fund Code Number Documents	
7	GST Registration Number Documents	
8	Income Tax Return, Profit Loss Accounts and Balance sheet of Last Three Financial Years	
9	Nature of Firm:	
	Partnership deed/Latest Form-G/ POA/Authorized Signatory Certificate for Partnership	
	Self-Affidavit/POA/Authorized Signatory Certificate for Proprietorship	
10	PAN Number Document	
11	Filling all Annexure	

TABLE-B		
Mandatory to attach in Physical bid		
No.	Particulars	Check Mark
1	Receipt of payment of EMD paid online	Not required
2	Receipt of payment of tender fee paid online	

Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture etc at Mota Borasara-2 S/S under construction Division Bharuch

Index

- Instructions to Bidders
- General Conditions of Contract
- Erection Conditions of Contract
- Special Conditions of Contract
- Technical particulars
- Forms & Appendices to be filled in by the bidders.

PART - I

GENERAL TERMS & CONDITIONS WITH COMMERCIAL BID

INSTRUCTIONS TO BIDDERS

A. INTRODUCTION

1.0 General Particulars

1.1 The Gujarat Energy Transmission Corporation Ltd., Bharuch hereinafter called 'GETCO'/'OWNER' intends to receive bids for **Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture etc at Mota Borasara-2 S/S under construction Division Bharuch** as detailed in the accompanying specifications in accordance with Terms and Conditions herein. The bids shall be prepared and furnished as per these Instructions.

2.0 Qualification Requirements of Bidders

2.1 To be qualified for award, the bidder shall provide following satisfactory evidence to the Owner of his capability and adequacy of resources:

- a) He is a qualified and registered contractor who is regularly executing jobs of **Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture etc at Mota Borasara-2 S/S under construction Division Bharuch** including all works in the scope of the tender specification and has adequate technical knowledge and practical experience (the Bidder shall submit documents defining legal status, registration and principal place of business; written power of attorney of the signatory of the bid to commit the bidder, performance record as contractor for erection of equipments in the last three years and details of works on hand in the past three years & contracts on hand.
- b) He has adequate financial capability and stability to meet the financial obligations arising out of the scope of works.
- c) In addition, the Qualifying Requirements if any, in the 'Special Conditions of Contracts' shall also be applicable.
- d) The registration with P.F. authority and labor license as per GETCO norms is mandatory

2.2 The above cited requirements are only indicative. The owner reserves the right to requisition any other relevant information and also **reserves the right to reject the Bid proposal of any Bidder, if in the Owner's opinion the Qualification data is incomplete** and Bidder is not qualified to perform the Contract satisfactorily.

3.0 Bidding Costs

All costs/expenses in the preparation and submission of the Bid (including any post Bid discussions/presentations) shall be fully borne by the Bidder. Owner will not be responsible/liable for these costs irrespective of the course and conclusion of this Bidding.

B. BID DOCUMENTS

4.0 Details of Documents

4.1 The following Bid documents apart from Invitation to Bid detail the material and equipment specifications/characteristics, the bidding procedures and the terms & conditions of contract:

- a. Instructions to Bidders (ITB-Part I)
- b. General Conditions of Contract (GCC-Part I)
- c. Erection Conditions of Contract (ECC-Part I)
- d. Special Conditions of Contract (SCC-Part I)
- e. Technical Specifications (TSP-Part IIA)
- f. Technical Data Sheets (TDS-Part IIB)
- g. Bid Form and Price Schedules (BF/PS-Part III)

5.0 Knowing the Bid Document

5.1 Every intending Bidder is to examine and understand all instructions, forms, terms, conditions and specifications in the Bid Documents and fully know himself all the conditions and contents therein, which may in any manner, affect the scope & content of work and the costs thereof. Submission of a Bid not substantially responsive to the Bid Document in all respects and/or failure to furnish all information required by the Bid Document may entail rejection of the Bid at the Bidder's risk.

6.0 Clarifications on Bid Documents

6.1 In case an intending Bidder finds any discrepancy or omission in the documents and specifications or is in doubt as to the true meaning of any part, he shall make a request, in writing not later than the date of pre Bid discussion, to the owner in triplicate. The owner will issue explanations, interpretations and clarifications as deemed fit in writing as a response to this request. On receipt of such interpretations/clarifications, the Bidder may submit his Bid within the date and time stipulated in the Bid invitation, all such explanations, interpretations and clarifications from the Owner shall be deemed as part of Bid Documents and shall invariably accompany the Bidder's proposal.

6.2 Any verbal/telephonic clarifications and information given by the Owner or his employee (s) or his representative(s) will not in any way be binding on the Owner.

7.0 Amendment of bidding document

7.1 At any time prior to the deadline for submission of Bids the Owner may, for any reason, whether at his own initiative or in response to a clarification requested by the intending Bidder, modify the Bidding Document with amendment(s).

7.2 The amendment will be notified in writing or Fax /web site to all intending Bidders who have received the Bidding Document at the address contained in the letter of request for issue of bidding document from the Bidders. Owner will bear no responsibility or liability arising out of non-receipt of the same in time or otherwise.

7.3 In order to afford prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Owner may, at his discretion, extend the deadline for the submission of bids.

- 7.4 Such amendments, clarifications etc. shall be binding on bidders and will be given due consideration by the Bidders while they submit their bids and shall invariably enclose such documents as a part of the bid.

C. PREPARATION OF BIDS

8.0 Language of Bids

- 8.1 The Bid prepared by the Bidder and all correspondence and documents relating to the Bid, exchanged by the Bidder and the Owner, shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages. Failure to comply with this may disqualify a bid. For purposes of interpretation of the bid, the English translation shall govern.

8.2 Bid Format

Bidders have to make the Bid in the formats furnished with this Document. Verbatim without adding any printed/typewritten text of their own.

9.0 Local Conditions:

- 9.1 It will be imperative on each Bidder to fully inform himself of all local conditions and factors, which may have any effect on the execution of the Contract covered under these documents and specifications. The Owner shall not entertain any request for clarifications from the bidders, regarding such local conditions.
- 9.2 It must be understood and agreed that such factors have properly been investigated and considered while submitting the proposals. No claim for financial adjustment to the Contract awarded under these specifications and documents will be entertained by the owner. Neither any change in the time schedule of the Contract nor any financial adjustments arising thereof shall be permitted by the Owner, which are based on the lack of such clear information or its effect on the cost of the works to the Bidder.

10.0 Documents comprising the Bid:

- 10.1 The Bidder shall complete the Bid form inclusive of Price Schedules; Technical Data Requirements etc. furnished in the Bidding Documents, indicating, for the services to be rendered, a brief description of services, quantity and price.
- 10.2 The Bidder shall also submit documentary evidence to establish that the Bidder meets the Qualification Requirements as detailed in Clause 2.0 above and Special Conditions of Contract (including Clause 11 of I TB).
- 10.3 All Tender Documents/ formats are to be returned completed and filled in all respects and signed by wherever the Company Authorized Signatory specified.
- 10.3 The Bid Guarantee shall be furnished in a separate cover in accordance with clause specific ITB.

11.0 Scope of the proposal

- 11.1 The Scope of the proposal shall be on the basis of a single Bidder's responsibility, completely covering all the equipment erection and other installation services specified under the accompanying Technical Specifications. It will include among others as specified therein the following: -
- a) Receipt of equipments and material from GETCO Haldarwa / Bharuch Transmission/ Construction store and transportation, storage, preservation and conservation of equipment at the Site.
 - b) Pre-assembly, if any, erection, testing and commissioning of all the equipments.

c) Reliability tests and performance and guarantee tests on completion of commissioning.

- 11.2 As specified in the Special Conditions of Contract, no deviation whatsoever to certain conditions of the bidding documents permitted by the Owner and therefore, the Bidders are advised that while making Bid Proposals and quoting prices these conditions may appropriately be taken into consideration. Bidders are required to furnish a certificate in this regard as per the format provided in Special Conditions of Contract in a separate sealed envelope containing Bid security, which shall accompany the Technical Bid. Any Bid not accompanied by such certificate shall be rejected by the Owner and shall not be opened.
- 11.3 Bids not covering the above cited entire scope of works may be treated as incomplete and hence rejected.
- 11.4 The Bidder shall complete all the schedules & annexure in the Bid Proposal Sheets, Technical Data Sheets and specified elsewhere. The Qualifying Data should be filled in the required schedule of Bid Proposal Sheets.

12.0 Bid Price:

- 12.1 The Bidder shall indicate percentage above/below of total bid price indicated in the appropriate price schedules, enclosed in bid proposal sheets for erection, and other services it proposes to furnish under the contract. The %(Percentage) above/below indicated shall be inclusive of GST applicable on required inputs and services.
- 12.2 The Bidder shall specifically note that the Tenders are invited on percentage rate increase/decrease based in relation to unit rates of tender price schedule.
- 12.3 If the Supplier/Contractor has opted for the Composition scheme of GST, the same must be clearly specified with valid Declaration & Certificate from Department. In the event of withdrawal/cessation of the Supplier from Composition scheme during the tenure of the contract, the rate (i.e. price) mentioned in the price bid shall be final and any additional GST will have to be borne by the tenderer himself. In no case additional amount towards GST or otherwise will be paid / reimbursed to supplier/contractor. Further Statutory Variation clause will not be applicable in case of Supplier /Contractor has opted for Composition Scheme under GST.

Also, please mention separate applicable HSN / SAC Code and rate of GST and Cess as applicable for each item of Goods/Service. If not specifically mentioned, then COMPANY will have the option to take the prices as exclusive of taxes and duties at maximum higher slab rates for the evaluation of the tenders.

The offered prices to be indicated in online mode of tender in the format given (i.e. Schedule-B). The price bid submitted in physical mode shall not be considered.

Every bidder shall inform their GSTIN No. of the registered place(s) wherefrom the bidder intends to supply the goods / services, meaning thereby the bidder has to supply the goods / services from the relevant declared / registered place of supply only.

13.0 Price Basis:

- 13.1 The Price shall be quoted on firm basis.

- 13.2 The Price quoted by the bidder shall remain fixed during the bidder's performance of the contract and shall not be subject to variation on any account saving for change in quantity. A bid submitted with an adjustable price quotation shall be treated as non-responsive and rejected.

14.0 Taxes and Duties: -

- 14.1 As regards the income Tax, surcharge on income tax and any other tax **excluding GST & welfare cess** at prevailing rate, the owner shall not bear any tax liability whatsoever. The bidder shall be liable and responsible for payment of such taxes as attracted under the provisions of the law.
- 14.2 Notwithstanding the tax liabilities as per the sub-clause 14.1 above the owner shall have the right to make deduction at source from the amounts payable to the contractor in respect of Income Tax (on the cost of items of supply included in the works contract) as may be mandatory in terms of the law. The owner shall not bear any liability in this regard but shall issue necessary certificate in respect of such deduction made.
- 14.3 In case any tax or duty is newly introduced by the Government applicable for this contract with effect from the next day of the date submission of the bid and if the contractor is required to pay additional tax or duty, then the owner shall reimburse the contractor the additional tax or duty so paid by the contractor against submission by the contractor of documentary evidence to the satisfaction of the owner. This provision will not be applicable to transaction between the contractor and his sub-contractors. Besides the said statutory variation, no other statutory variation shall be payable by the owner.
- 14.4 The owner's liability for all taxes and duties under the contract shall be limited to those indicated by the Bidder in the Bid Proposal Sheets, subject to the statutory variations and variations as per Clause No. 14.3.
- If the cost to the Contractor during the performance of the 'Contract' shall be increased or reduced by reasons of the making, passing or promulgation of any law after the date of submission of bid or by any order, regulation or bye-law having the force of law the amount of such increase or reduction shall be added to or deducted from the "Contract Price" as the case may be for direct transactions between contractor & owner, and not for bought out items. It is the Bidders responsibility to furnish details of taxes, duties, levies etc. applicable as on the date of submission of the bid.
- 14.5 No claim for any increase towards the statutory variation regarding enhancement of existing tax or duty or introduction of a new tax or duty applicable shall be entertained by the Owner during the extended period of contract, if any, provided the extension of the contract is required by causes attributable to the contractor.
- 14.6 The provision of statutory variation regarding enhancement of existing tax or duty or introduction of a new tax or duty will be applicable only to the direct transaction between the contractor and the owner.
- 14.7 Before quoting, the bidder may ascertain from the concerned tax authorities of Government of Gujarat the applicability of Tax **(GST)** etc in respect of this work and include the same in the quoted price. No separate claim in this regard will be entertained by the Owner, as it is the responsibility of the Bidder to pay all these taxes.
- 14.8 In addition, the conditions detailed under Special Conditions of Contract shall apply.

15.0 Time Schedule:

- 15.1 The basic consideration and the essence of the contract shall be strict adherence to the time schedule for performing the specified works.
- 15.2 The Owner's requirements of completion schedule for the Works are mentioned in the accompanying Special Conditions of Contract.
- 15.3 The completion schedule as stated in the special conditions of contract shall be one of the major factors in consideration of the bids.

16.0 Insurance:

The Bidder's insurance liabilities pertaining to the scope of Works are detailed out in Clauses titled Insurance, in General Terms and Conditions of Contract and in Erection Conditions of this Part-I. Bidder's attention is specifically invited to these clauses. Bid price shall include all the costs in fulfilling all the insurance liabilities under the Contract.

17.0 Erection Tools and Tackles:

The Bidder under a separate schedule, in his proposal shall include a list of all-special equipment tools & tackles etc. which he proposes to bring to site for the purpose of erection, handling, testing and commissioning including performance and guarantee tests of the equipment. If any such equipment is listed anywhere else in the proposal and not specially mentioned in the above schedule, it shall be deemed to have been included in the Bidder's proposed scope of supply.

18.0 Bid Security/EMD:

- 18.1: The bidder shall furnish, as a part of its bid EMD, bid security for an amount of one percent of estimated cost plus GST to be paid as under:
- a) In the form of crossed DD drawn in favor of Gujarat Energy Transmission Corporation Limited payable at Bharuch. Not accepted in Cash.
- 18.2 The bid security is required to protect the owner against the risk of Bidder's conduct, which would warrant the guarantee forfeiture, pursuant to relevant paras elsewhere The bid guarantee shall be made payable to the Owner without any condition whatsoever.
- 18.3 The Owner will reject any bid not secured in accordance with Para 18.1 above, as non-responsive. No exemptions are made in the furnishing of the security.
- 18.4 Unsuccessful Bidder's bid security/EMD will be returned/refunded on finalization of tender or three months from the date of submission of tender whichever is later.
- 18.5 The successful bidders, Bid Security will be discharged upon, furnishing the contract performance guarantee
- 18.6 The bid guarantee may be forfeited.
- a) If a Bidder withdraws its bid during the period of bid validity specified by the bidder on the bid Form:
- b) If a bidder refuses to accept the contract or fails to commence the works (including supplies within thirty days of letter of award of contract)

19.0 Format of Bid:

- 19.1 The Bidder shall submit bid in hard copy duly signed on each page.
- 19.2 All copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder on each page or a person or persons duly authorized by the Bidder to sign the Contract. The letter of authorization shall be indicated by

written power-of-attorney accompanying the bid. All pages of the bid, except for un-amended printed literature, shall be initiated by the person or persons signing the bid.

- 19.3 The Bidders must submit the qualifying data as required in Instructions to Bidders in separate envelope sealed and enclosed in the envelope submitting proposals, super scribed as under:

Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture etc at 66kV Mota Borasara-2 S/S under construction Division Bharuch

- 19.4 The online bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initiated by the person or persons signing the bid.

- 19.5 **Bids shall be submitted as under:**

Cover-I Not require (to be submitted through online form only)

Cover-II Not require (to be submitted through online form only)

Cover-III Not require (to be submitted through online form only)

(Cover I, II and III will be collectively called Technical Bid)

The price bid is not to be submitted with the physical documents.

21.0 Contract Quality assurance:

- 21.1 The Bidder shall include in his proposal the Quality Assurance Programme containing the overall quality management and procedures which he proposes to follow in the performance of the Works during various phases as detailed in relevant clause of the General Technical Conditions.

- 21.2 At the time of Award of Contract, the detailed Quality Assurance Programme to be followed for the execution of the Contract will be mutually discussed and agreed and such agreed Programme shall form a part of the Contract.

- 21.3 The Bidder shall clearly specify the list of sub-vendors from whom the bought out items are being supplied wherever specifically indicated in the tender document shall supply only from those vendors. Such details shall be accompanied by their list of previous supplies made performance reports etc. However, in case of orders are placed, specific approval shall be obtained from the owner for the vendor-supplied materials.

22.0 Signature of Bids:

- 22.1 The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

- 22.2 Bid by a partnership must be furnished with full names of all partners and be signed with the partnership name; followed by the signature(s) and designation(s) or the authorized partner(s) or other authorized representative(s).

- 22.3 Bids by Corporation/Company must be signed with the legal name of the Corporation/Company by the President/Managing Director or by the Secretary or other person or persons authorized to bid on behalf of such Corporation/Company in the matter.

- 22.4 A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his Principal will be rejected.

- 22.5 If it is found that two or more persons who are connected with one another either financially or as a principal and agent have bid under different names without

disclosing their connection then such bids will be liable for rejection. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid.

22.6 The Bidder's name stated on the proposal shall be the exact legal name of the firm.

22.7 Bids not conforming to the above requirements of signing may be disqualified and EMD forfeited.

23.0 The original Bid and accompanying documents shall be submitted by the Bidder at the date, time and place specified.

The Bid shall be submitted by online mode only at tender.nprocure.com no any RPAD or speed post services accepted by the SE (TR) GETCO Bharuch. The Bids received after the Due Date and Time of opening are liable to be rejected. Telegraphic/Telex/Fax/e-mail Bids shall not be entertained.

~~23.2 The Bidders shall seal the copy of the bid in an inner and an outer envelope.~~

23.3 a. Addressed to the Owner at the following address:

The Superintending Engineer (TR),
GETCO, Transmission Circle,
P. O. Maktampur, Bharuch- 392012

~~b. Bear the name of package bid enquiry number, name of the work and the words.
"DO NOT OPEN BEFORE"~~

24.0 Deadline for submission of bids:

24.1 The Owner may, at its discretion, extend this deadline for the submission of bids by amending the Bidding Document in which case all rights and obligations on the Owner and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

25.0 Late Bids

25.1 Any bid received by the Owner after the time and date fixed or extended for submission of bids prescribed by the Owner, will be rejected and not considered for evaluation.

26.0 Modification and withdrawal of bids:

26.1 The Bidder may modify or withdraw its bid after the bid's submission provided that written notice of the modification or withdrawal is received by the Owner prior to the deadline prescribed for submission of bids.

26.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of clause 23.0. The envelope should clearly indicate that the modification is for the Technical bid. No bid modifications notice by Telex/Grams/Fax shall be entertained by the Owner.

26.3 No bid shall be modified in any manner, whatsoever subsequent to the deadline for submission of bids.

26.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal/modification of a bid during this interval may result in the Bidder's forfeiture of its bid security.

E. BID OPENING AND EVALUATION

27.0 Opening of bids by owner:

- 27.1 The Owner will open the technical bids in the presence of Bidder's representatives who choose to attend on the date and time mentioned for opening of bids in the Invitation to Bid or in case any extension has been given thereto, on the extended bid opening date and time notified to all the Bidders who have purchased the bidding document. The Bidder's representatives who are present shall sign a register evidencing their attendance.
- 27.2 The Bidder's names, Technical modifications, Bid withdrawal and such other details as the Owner, at his discretion may consider appropriate, will be announced in the Technical Bid Opening.
- 27.3 The price bids (On line) of all the "Techno-Commercial" Responsive Bidders shall be opened in the presence of representatives (up to two per firm) of such bidders who choose to be present. The date & time of opening the Price Bid shall be intimated to all such qualified bidders by Fax/Telex, at least one week in advance besides inviting final price bid if found appropriate after evaluation of Technical bids.
- 27.4 The Bidder's name, lumpsum Bid Price, all discounts if any, modifications in the Price Bid and any such other details as the Owner, at his discretion, may consider appropriate, will be announced/ furnished in the Price Bid (On line) Opening.
- 27.5 No electronic recording/transmitting devices will be permitted during Bid opening.

28.0 Purpose of evaluation of bids:

- 28.1 The Bids received/accepted/opened will be evaluated by the Owner to ascertain the technical responsiveness of the bid for the complete scope of the proposal, as covered under these specifications and documents. All technically responsive bids shall then be examined to determine the LOWEST EVALUATED COMMERCIALY AND TECHNICALLY RESPONSIVE BIDS.

29.0 Policy for bids under consideration:

- 29.1 Bids shall be deemed to be under consideration immediately after opening of Technical Bid and until such time official intimation of award/rejection is made by the Owner to the Bidders. While the Bids are under consideration, Bidders and/or their representatives and other interested parties are advised to refrain from contacting by any means, the owner and/or his employees/representatives on the matters related to Bids under consideration.

29.2 Clarification of bids:

To assist in the examination evaluation and comparison of Bids the owner may on his own ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

30.0 Preliminary Examination:

- 30.1 The Owner will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

30.2 Arithmetical errors will be rectified on the following basis:

If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between the total bid amount and the sum of total costs, the latter shall prevail and the

total bid amount will be corrected accordingly. If there is a discrepancy between words and figures, the amount advantageous to the Owner will prevail. If the Bidder does not accept the correction of the errors as above, his Bid will be rejected and the amount of Bid Security will be forfeited. The Bidder should ensure that the prices furnished in various price schedules are consistent with each other. In the case of any inconsistency in the prices furnished in the specified prices schedules to be identified in Bid Form for this purpose, the Owner shall be entitled to consider the highest price for the purpose of evaluation and for the purpose of award of Contract use the lowest of the prices in these schedules.

- 30.3 Prior to the detailed evaluation, the Owner will determine the substantial responsiveness of each bid to the Bidding Document. For purpose of these Clauses, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Document without material deviations. A material deviation is one which affects in any way the prices, quality, quantity or delivery period of the equipment, completion of works or which limits in any way the responsibilities or liabilities of the Bidder of any right of the Owner as required in these specifications and documents. The Owner's determination of a bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence.
- 30.4 A bid determined as not substantially responsive will be rejected by the Owner and may not subsequently be made responsive by the Bidder by correction of non-conformity.
- 30.5 The Owner may waive any minor informality or non-conformity or irregularity in a bid which does not attribute to material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

31.0 Evaluation of Price Bids:

31.1 Definitions and Meanings:

For the purpose of the evaluation and comparison of bids, the following meanings and definition will apply: -

- a) 'Bid Price' shall mean the price quoted by each Bidder in his proposal for the complete scope of works.

31.2 Calculation of differential Price & Cost Compensation for Deviations.

The Differential Price to be added to the Bid Price of each bid during evaluation and comparison shall be derived as under:

Differential Price (DP) = $n_1F_1 + n_2F_2 + \dots + n_nF_n$, where $F_1, F_2, \dots, F_n$ are the various factors in Indian Rupees per unit of parameter differential or deficiency in the equipment and services offered as stipulated in these specifications: $n_1, n_2, \dots, n_n$ are the respective parameter differential or deficiency in the corresponding units to be determined from the Bidder's proposal. The above factors and corresponding units of parameter differential are derived from the Technical Specifications, Data sheets and/or Special Conditions of Contract.

Deviations from the Bidding Documents in so far as practicable will be converted to a Rupee value (D) and from the Bidding Document while evaluating the bids. In determining the Rupee value of the deviations the Owner will use parameters consistent with those specified in the specifications and documents and or other information as necessary and available to the Owner.

31.3 Comparison of Bids

The bids shall be compared on the basis of lump sum prices (i.e., for erection services to be rendered as quoted by the Bidder) for the entire scope of the proposal as defined in the Bidding Document.

For comparison purposes all the evaluated bid prices shall be in Indian Rupees as under:

$W = Q + DP + D$, Where

W = Total Comparison Price

Q = Bid Price quoted by the bidder in Indian Rupees (Value Of erection cost including other components if any.)

DP = Different price in Indian Rupees calculated as above

D = Cost compensation for deviations calculated as above.

All evaluated bid prices of all the bidders shall be compared among themselves to determine the lowest evaluated bid and, as a result of this comparison, the lowest bid will be selected for the award of the Contract.

AWARD OF CONTRACT

32.0 Award Criteria

32.1 The owner will award the contract to the successful Bidder, whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, providing further that the Bidder is determined to be qualified to perform the contract satisfactorily. The Owner shall be the sole judge in this regard.

32.2 Further, the Owner reserves the right to award separate contracts to two or more parties in line with the terms and conditions specified in the accompanying Technical Specifications.

33.0 Owner's right to accept any bid and to reject any or all bids:

33.1 The Owner reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at time prior to award of contract, any without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Owner's action.

34.0 Notification of award:

34.1 Prior to the expiration of the period of bid validity and extended validity period, if any, the Owner will notify the successful Bidder in writing by registered letter or e mail or FAX, to be confirmed in writing by registered letter, that his bid has been accepted.

34.2 The notification of award will attribute the formation of the Contract.

34.3 Upon the successful Bidder's furnishing of performance guarantee pursuant to relevant clause 38 .0, the Owner will promptly notify each unsuccessful Bidder and will discharge his bid security, pursuant to Clause 20.0.

35.0 Signing of contract:

35.1 At the same time as the Owner notifies the successful Bidder that his bid has been accepted, the Owner will send the Bidder the detailed of Award, incorporating all agreements between the parties.

- 35.2 Within 7 days of receipt of the detailed of Award, the successful bidder shall sign the same with date and return it to the Owner.
- 35.3 The Bidder will prepare the Contract Agreement as per the Performa prescribed and the same will be signed within 15 (Fifteen) days of notification of Award.
- 35.4 The contractor will have to give indemnity bond for material on Non-judicial Stamp paper of value Rs. 300/- to GETCO as per attached format. The cost of stamp paper will be borne by the contractor.
- 35.5 The contractor will have to give safety cum indemnity bond on Non-Judicial Stamp paper of value Rs. 300/- to GETCO against any possible claim of compensation for damage to contractor's staff or any of third party during the execution of work. The cost of stamp paper will be borne by the contractor.
- 35.6 Also the successful bidder will have to execute Agreement on stamp paper of value Rs.300/- at our Transmission Circle, GETCO, Bharuch before commencement of works as per GETCO's prescribed Proforma .The cost of stamp paper will be borne by the contractor.

36.0 Contract Performance Guarantee:

- 36.1 As a contract performance security, the successful bidder, to whom the work is awarded, shall be required to furnish a performance guarantee in form of Bank guarantee from a Public Sector Indian bank/Scheduled, Commercial Bank in the form to be furnished. The guarantee amount shall be equal to ten percent (10%) of the Contract price and it shall guarantee the faithful performance of the Contract in accordance with the terms and conditions specified in these documents and specifications. The guarantee shall be valid up to 90 days after the end of Warranty Period.
- 36.2 The Performance Guarantee shall cover additionally the following guarantees to the Owner:
- a) The successful Bidder guarantees the successful and satisfactory operation of the equipment furnished and erected under the Contract, as per the specifications and documents.
 - b) The successful Bidder further guarantees that the equipment provided by him/his sub-vendors and installed by him shall be free from all defects in design, material and workmanship and shall upon written notice from the Owner fully remedy free of expenses to the Owner such defects as developed under the normal use of the said equipment within the period of guarantee specified in the relevant clause of the General Terms and Conditions in the Part-I/Special Conditions of Contract.
- 36.3 The Contract Performance Guarantee is intended to secure the performance of the entire contract. However, it is not to be trued as limiting the damages under clause entitled "Equipment Performance Guarantee" in Technical Specifications, Part-II and damages stipulated in other clauses in the Bid documents.
- 36.4 The performance guarantee will be discharged without any interest at the end of guarantee period, unless otherwise specified in Special Conditions of Contract.

GENERAL TERMS & CONDITIONS OF CONTRACT

A. INTRODUCTION

1.0 DEFINITION OF TERMS

- 1.1 The 'Contract' means the agreement entered into between the Owner and the Contractor as per the Contract Agreement signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.2 'Owner' shall mean the Superintending Engineer (TR.) CIRCLE GETCO, Bharuch or any of its subsidiaries and shall include its legal representatives, successors and assigns.
- 1.3 'Contractor' shall mean the Bidder whose bid is accepted by the Owner for the award of the Works and shall include such successful Bidder's legal representatives, successors and permitted assigns.
- 1.4 'Engineer' shall mean the officer appointed in writing by the Owner to act as Engineer from time to time for the purpose of the Contract.
- 1.5 The terms 'Equipment', 'Stores' and 'Materials' shall mean and include equipment, stores and materials to be provided by the Contractor under the Contract.
- 1.6 'Works' shall mean and include the furnishing of equipment, labour and services, as per the Specifications and complete erection, testing and putting into satisfactory operation including all transportation, handling, unloading and storage at the Site as defined in the Contract.
- 1.7 'Specifications' shall mean the Specifications and Bidding Document forming a part of the Contract and such other schedules and drawings as may be mutually agreed upon.
- 1.8 'Site' shall mean and include the land and other places on, into or through which the works and the related facilities are to be erected or installed and any adjacent land, paths, street or reservoir which may be allocated or used by the Owner or Contractor in the performance of the Contract.
- 1.9 The term 'Contract Price' shall mean the lump-sum price quoted by the Contractor in his bid with additions and/or deletions as may be agreed and incorporated in the Letter of Award and the contract agreement for the entire scope of the works.
- 1.10 The term 'Erection Portion' of the Contract price shall mean the value of field activities of the works including erection, testing and putting into satisfactory operation including successful completion of performance and guarantee tests to be performed at Site by the Contractor including cost of insurances.
- 1.11 Site Engineer 'Inspector' shall mean the owner's Engineers or any person nominated by the time to inspect the equipment; stores or Works under the Contract and/or the duly authorized representative of the Owner.
- 1.12 'Notice of Award of Contract'/'Letter of Award' shall mean the official notice issued by the Owner notifying the Contractor that his bid has been accepted.
- 1.13 'Order' shall mean the official letter issued by the Owner informing the acceptance of the bid.
- 1.14 'Date of Contract' shall mean the date on which letter of commencement of work issued by the respective sub division deputy engineer.
- 1.15 'Month' shall mean the calendar month. 'Day' or 'Days' unless herein otherwise expressly defined shall mean calendar day or days of 24 hours each.

A 'Week' shall mean continuous period of seven (7) days.
- 1.16 'Writing' shall include any manuscript, type written or printed statement, under or over signature and/or seal as the case may be.

- 1.20 When the words 'Approved', 'Subject to Approval', 'Satisfactory', 'Equal to', 'Proper', 'Requested', 'As Directed', 'Where Directed', 'When Directed', 'Determined by', 'Accepted', 'Permitted', or words and phrases of like importance are used the approval, judgment, direction etc. is understood to be a function of the Owner/Engineer.
- 1.17 Test on completion shall mean such tests as prescribed in the Contract to be performed by the Contractor before the work is taken over by the Owner.
- 1.18 'Performance and Guarantee Tests', shall mean all operational checks and tests required to determine and demonstrate capacity, efficiency, and operating characteristics as specified in the Contract Documents.
- 1.19 The term 'Final Acceptance'/'Taking Over' shall mean the Owner's written acceptance of the Works performed under the Contract, after successful commissioning/completion of Performance and Guarantee Tests, as specified in the accompanying Technical Specifications or otherwise agreed in the Contract.
- 1.20 'Latent Defects' shall mean such defects caused by faulty designs, material or work-man- ship which cannot be detected during inspection, testing etc, based on the technology available for carrying out such tests.
- 1.21 'Codes' shall mean the following including the latest amendments and/or replacements, if any :
- a) Indian Electricity Act, 1905 and Rules and Regulations made there under.
 - b) Electricity Act 2003 and Rules & Regulations made there under.
 - c) Indian Factory Act, 1948 and Rules and Regulations made there under.
 - d) Indian Explosives Act, 1884 and Rules and Regulations made there under.
 - e) Indian Petroleum Act, 1934 and Rules and Regulations made there under.
 - f) A.S.M.E. Test Codes.
 - g) A.I.E.E. Test Codes.
 - h) American Society of Materials Testing Codes.
 - i) Standards of the Indian Standards Institution.
 - j) Other Internationally approved standards and/or rules and regulations touching the subject matter of the Contract.
- 1.22 Words imparting the singular only shall also include the plural and vice -versa where the context so requires.
- 1.23 Words imparting 'Person' shall include firms, companies, corporations and associations or bodies of individuals, whether incorporated or not.

2.0 APPLICATION

These General Conditions shall apply to the extent that they are not super ceded by provisions in other parts of the Contract.

3.0 CONTRACT DOCUMENTS

- 3.1 The term Contract Documents shall mean and include the following which shall be deemed to form an integral part of the Contract:

- a) Invitation to Bid including letter forwarding the Bidding Documents, Instructions to Bidders, General Terms and Conditions of Contract, the Special Conditions of Contract. and all other documents included under Part-I, Part-II and Part-III.
 - b) Specifications of the erection of the equipments and other technical services to be provided under the Contract as brought out in the accompanying Technical Specifications.
 - c) Contractor's Bid Proposal and the documents attached there to including the letters of clarifications thereto between the Contractor and the Owner prior to the Award of Contract except to the extent of repugnancy.
 - d) Letter of Award and any agreed variations of the conditions of the documents and special terms and conditions of Contract, if any.
- 3.2 In the event of any conflict between the above mentioned documents the matter shall be referred to the Engineer whose decision shall be considered as final and binding upon the parties.

4.0 USE OF CONTRACT DOCUMENTS AND INFORMATION

- 4.1 The Contractor shall not, without the Owner's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Owner in connection therewith, to any person other than a person employed by the Contractor in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for the purpose of such performance.
- 4.2 The Contractor shall not, without the Owner's prior written consent, make use of any document or information enumerated in various Contract documents except for the purpose of performing the Contract.
- 4.3 The Contractor shall not communicate or use in advertising, publicity, sales releases or in any other medium, photographs or other reproduction of the Works under this Contract, or descriptions of the site, dimensions, quantity, quality or other information, concerning the works unless prior written permission has been obtained from the Owner.
- 4.4 Any document, other than the Contract itself, enumerated in various Contract documents shall remain the property of the Owner and shall be returned (in all copies) to the Owner on completion of the Contractor's performance under the Contract if so required by the Owner.

5.0 TRANSMISSION OF THE CONTRACT

- 5.1 Notwithstanding anything stated elsewhere in the bid documents, the Contract to be entered into will be treated as a single Contract. Award shall be placed on the successful Bidder as follows:

For providing services like inland transportation, insurance for delivery at site, unloading, storage, handling at site, installation, testing and commissioning including performance testing in respect of all the equipment material equipment/materials given by the owner after observing standard store procedures for transport from owner's stores, insurance, unloading storage handling at site installation testing & commissioning.

- 5.2 In case erection Contract, or where the Owner hands over his equipment to the Contractor for executing, then the Contractor shall at the time of taking delivery of the equipment/dispatch documents be required to execute an Indemnity Bond in favour of the Owner in the form acceptable to the Superintending Engineer (TR.)

GETCO Bharuch for keeping the equipment in safe custody and to utilize the same exclusively for the purpose of the said Contract. Samples of proforma for the Indemnity Bond will be furnished during award of Contract.

5.3 The Contract shall in all respects be tried and governed according to Indian Laws.

5.4 It is clearly understood that the total consideration for the Contract(s) has been broken up into various components only for the convenience of payment under the Contract(s) and for the measurement of deviations or modifications under the Contract(s).

6.0 JURISDICTION OF CONTRACT

6.1 The laws applicable to the Contract shall be the laws in force in India. The Courts of Bharuch shall have exclusive jurisdiction in all matters arising under this Contract.

7.0 EXECUTION OF CONTRACT:

7.1 The Owner, after the issue of the Letter of Award to the Contractor, will send one copy of the final agreement to the Contractor for his scrutiny and approval.

7.2 The Agreement, unless otherwise agreed to, shall be signed within 15 days of the acceptance of the Letter of Award, at the office the Owner at Bharuch on a date and time to be mutually agreed. The Contractor shall provide for signing of the Contract, Performance Guarantee, appropriate power of attorney and other requisite materials. In case the Contract is to be signed beyond the stipulated time, the Bid Guarantee submitted with the Proposal will have to be extended accordingly.

7.3 The Agreement will be signed in copies to be specified and the Contractor shall be provided with one signed original and the rest will be retained by the Owner.

7.4 Subsequent to signing of the Contract, the Contractor at his own cost shall provide the Owner with copies of agreement within fifteen (15) days after the signing of the Contractor.

8.0 ENFORCEMENT OF TERMS

8.1 The failure of either party to enforce at any time any of the provisions of this Contract or any rights in respect thereto or to exercise any option therein provided, shall in no way be tried to be a waiver of such provisions, rights or options or in anyway to affect the validity of the Contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other right it may have under the Contract.

9.0 COMPLETION OF CONTRACT

9.1 Unless otherwise terminated under the provisions of any other relevant clause, this Contract shall be deemed to have been completed on the expiry of the guarantee period as provided for under the clause entitled 'Guarantee' in this section of the Volume-I.

B. GUARANTEES & LIABILITIES

11.0 TIME - THE ESSENCE OF CONTRACT

11.1 The time and the date of completion of the Contract as stipulated in the Contract by the Owner without or with modifications, if any, and so incorporated in the Letter of Award, shall be deemed to be the essence of the Contract. The Contractor shall so organize his resources and perform his work as to complete it not later than the date agreed to.

11.2 The Contractor shall submit a detailed bar chart within the time frame agreed consisting of adequate number of activities covering various key phases of the

work such as design, procurement, manufacturing, shipment and field erection activities within seven (7) days of the date of LOI.

- 11.3 The above bar chart shall be compatible with the Owner's computer environment and furnished to the Owner on such media as may be desired by the Owner.

12.0 EFFECTIVENESS OF CONTRACT

The Contract shall be considered as having come into force from the date of the commencement given by the respective Transmission sub division unless otherwise provided in LOI.

13.0 PENALTY FOR DELAY

- 13.1 If the Contractor fails to successfully complete the commissioning within the time fixed under the Contract, the Contractor shall pay to the Owner as penalty a sum specified for each specified period of delay. The details of such penalty are brought out in the accompanying Special Conditions of Contract (SCC).
- 13.2 The total amount of penalty for delay under the Contract will be subject to a maximum of 10% of the Contract prices **plus GST** detailed in the Special Conditions of Contract (SCC).

14.0 GUARANTEE

- 14.1 In the event of any emergency where in the judgment of the Engineer, delay would cause serious loss or damages, repairs or adjustment may be made by the Engineer or a third party chosen by the Engineer without advance notice to the Contractor and the cost of such work shall be paid by the Contractor. In the event such action is taken by the Engineer, the Contractor will be notified promptly and he shall assist wherever possible in making necessary corrections. This shall not relieve the Contractor of his liabilities under the terms and conditions of the Contract.
- 14.2 If it becomes necessary for the Contractor to rectify or renew any defective portions of the works the provision of this clause shall apply to portion of the works so rectified or corrected until the expiry of six (6) months from the date of such rectification or correction. If any defects are not rectified within a reasonable time, the Engineer may proceed to do the work at the Contractor's risk and cost but without prejudice to any other rights which the Owner may have against the Contractor in respect of such defects.
- 14.3 The rectification or correction of the work will be carried out free of cost by the Contractor. If any rectification or correction is carried out on his behalf at the site, the Contractor shall bear the cost of such rectification or correction.
- 14.4 The acceptance of the works by the Engineer shall in no way relieve the Contractor of his obligations under this clause.

15.0 TAXES, PERMITS & LICENCES

The Contractor shall be liable and pay all **non-Indian** taxes, duties, levies lawfully assessed against the Owner or the Contractor in pursuance of the Contract. In addition, the Contractor shall be responsible for payment of all Indian duties, levies and taxes lawfully assessed against the Contractor for his personal income & property only.

16.0 DEFENCE OF SUITS

If any action in court is brought against the Owner or Engineer or an officer or agent of the Owner, for the failure, omission or neglect on the part of the Contractor to perform any acts, matters, covenants or things under the Contract, or for damage or injury caused by the alleged omission or negligence on the part

of the Contractor, his agents, representatives or his Sub-Contractors, or in connection with any claim based on lawful demands of Sub-Contractors, workmen, suppliers or employees, the Contractor shall in all such cases indemnify and keep the Owner, and the Engineer and/or his representative, harmless from all losses, damages, expenses or decrees arising of such action.

17.0 LIMITATION OF LIABILITIES

The final payment by the Owner in pursuance of the Contract shall mean the release of the Contractor from all his liabilities under the Contract. Such final payment shall be made only at the end of the Guarantee/Warranty period or after finalization of material account and final bill and till such time as the Contractual liabilities and responsibilities of the Contractor, shall prevail. All other payments made under the Contract shall be treated as on-account payments.

18.0 ENGINEER'S DECISION

19.0 In respect of all matters which are left to the decision of the Engineer including the granting or with-holding of the certificates, the Engineer shall, if required to do so by the Contractor, give in writing a decision thereon.

19.1 If, in the opinion of the Contractor, a decision made by the Engineer is not in accordance with the meaning and intent of the Contract, the Contractor may file with the Engineer, within fifteen (15) days after receipt of the decision, a written objection to the decision.

Failure to file an objection within the allotted time will be considered as an acceptance of the Engineer's decision and the decision shall become final and binding.

19.2 The Engineer's decision and the filing of the written objection thereto shall be a condition precedent to the right to request arbitration. It is the intent of the Agreement that there shall be no delay in the execution of the works and the decision of the Engineer as rendered shall be promptly observed.

20.0 POWER TO VARY OR OMIT WORK

20.1 No alterations, amendments, omissions, suspensions or variations of the Works (hereinafter referred to as 'variation') under the Contract as detailed in the Contract Documents, shall be made by the Contractor except as directed in writing by the Engineer, but the Engineer shall have full powers subject to the provisions hereinafter contained, from time to time during the execution of the Contract, by notice in writing to instruct the Contractor to make such variation without prejudice to the Contract. The Contractor shall carry out such variation and be bound by the same conditions as far as applicable as though the said variations occurred in the Contract Documents. If any suggested variations would, in the opinion of the Contractor, if carried out, prevent him from fulfilling any of his obligations or guarantees under the Contract, he shall notify the Engineer thereof in writing and the Engineer shall decide forthwith whether or not, the same shall be carried out and if the Engineer confirms his instructions, the Contractor's obligations and guarantees shall be modified to such an extent as may be mutually agreed. Any agreed difference in cost occasioned by any such variation shall be added to or deducted from the Contract Price as the case may be.

20.2 In the event of Engineer requiring any variation, a reasonable and proper notice shall be given to the Contractor to enable him to work his arrangement accordingly, and in cases where goods or materials are already prepared or any design, drawings or pattern made or work done as per the contract requires to be altered, a reasonable and agreed sum in respect thereof shall be paid to the Contractor.

- 20.3 In any case in which the Contractor has received instructions from the Engineer as to the requirement of carrying out the alterations or additional or substituted work which either then or later on, will in the opinion of the Contractor, involve a claim for additional payment, the Contractor shall immediately and in no case later than thirty (30) days, after receipt of the instructions aforesaid and before carrying out the instructions, advise the Engineer to that effect. But the Engineer shall not become liable for payment of any charges in respect of any such variations, unless the instructions for the performance of the same shall be confirmed in writing by the Engineer.
- 20.4 If any variation in the Works results in reduction of Contract Price, the parties shall agree, in writing, so to the extent of any change in the price, before the Contractor proceeds with the change.
- 20.5 In all the above cases, in the event of a disagreement as to the reasonableness of the said sum, the decision of the Engineer shall prevail.
- 20.6 Notwithstanding anything stated above in this clause, the Engineer shall have the full power to instruct the Contractor, in writing, during the execution of the Contract to vary the quantities of the items or groups of items in accordance with the provisions of clause entitled 'Change of Quantity' in section GCC of this Volume-I. The Contractor shall carry out such variations and be bound by the same conditions as though the said variations occurred in the Contract Documents. However, the Contract Price shall be adjusted at the rates and the prices provided for the original quantities in the Contract.

21.0 CHANGE OF QUANTITY

- 21.1 During the execution of the Contract, the Owner reserves the right to increase or decrease the quantities of items under the Contract but without any change in unit price or other terms & conditions. Such variations unless otherwise specified in the accompanying Special Conditions of Contract and/or Technical Specifications, shall not be subjected to any limitation for the individual items but the total variations in all such items under the Contract shall be limited to a percentage of the Contract price as specified in the Special Conditions of Contract.
- 21.2 The Contract price shall accordingly be adjusted based on the unit rates available in the Contract for the change in quantities as above.

22.0 COOPERATION WITH OTHER CONTRACTORS AND CONSULTING ENGINEERS

The Contractor shall agree to cooperate with the Owner's other Contractors and Consulting Engineers and freely exchange with them such technical information as is necessary to obtain the most efficient and economical design and to avoid unnecessary duplication of efforts. The Engineer shall be provided with three copies of all correspondence addressed by the Contractor to other Contractors and Consulting Engineers of the Owner in respect of such exchange of technical information, wherever needed.

23.0 NO WAIVER OF RIGHTS

Neither the inspection by the Owner or the Engineer or any of their officials, employees, or agents nor any order by the Owner or the Engineer for payment of money or any payment for or acceptance of, the whole or any part of the Works by the Owner or the Engineer, nor any extension of time, nor any possession taken by the Engineer shall operate as a waiver of any provision of the Contract, or of any power herein reserved to the Owner or any right to damages herein provided nor shall any waiver of any breach in the Contract be held to be a waiver of any other or subsequent breach.

24.0 CERTIFICATE NOT TO AFFECT RIGHT OF OWNER AND LIABILITY OF THE CONTRACTOR.

No interim payment certificate of the Engineer, nor any sum paid on account by the Owner, nor any extension of time for execution of the Works granted by the Engineer shall affect or prejudice the rights of the Owner against the Contractor or relieve the Contractor of his obligation for the due performance of the Contract, or be interpreted as approval of the Works done or of the equipment furnished and no certificate shall create liability for the Owner to pay for alterations, amendments, variations or additional works not ordered, in writing, by the Engineer or discharge the liability of the Contractor for the payment of damages whether due, ascertained, or certified or not or any sum against the payment of which he is bound to indemnify the Owner, nor shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of the Owner against the Contractor.

25.0 PROGRESS REPORTS

During the various stages of the work in pursuance of the Contract, the Contractor shall at his own cost submit periodic progress reports as may be reasonably required by the Engineer with such materials as, charts, net-works, photographs, test certificates, etc. Such progress reports shall be in the form and size as may be required by the Engineer.

26.0 TAKING OVER

Upon successful completion of all the tests to be performed at Site on equipment furnished and erected by the Contractor, the Engineer shall issue to the Contractor a Taking Over Certificate as a proof of the final acceptance of the equipment. Such certificate shall not unreasonably be withheld nor will the Engineer delay the issuance thereof on account of minor omissions or defects which do not affect the commercial operation and/or cause any serious risk to the equipment. Such certificate shall not relieve the Contractor of any of his obligations which otherwise survive, by the terms and conditions of the Contract after issue of such certificate.

27.0 PAYMENT

27.1 The payment to the Contractor for the performance of the works under the Contract will be made by the Owner as per the guidelines and conditions specified herein. All payments made during the Contract shall be on account payments only. The final payment will be made on completion of all Works and on fulfillment by the Contractor of all his liabilities under the Contract.

27.2 Currency of Payment

All payments under the Contract shall be in Indian Rupees only.

27.3 Terms.

Payment terms will be as prescribed in the special conditions of contract and on fulfillment of conditions specified thereof.

28.0 Payment Schedule

28.1 Application for Payment

28.2 The Contractor shall submit application for the payment in the prescribed Performa of the Owner. Performa for application for payment will be as prescribed.

29.1 Each such application shall state the amount claimed and shall set forth in detail, in the order of the Payment Schedule, particulars of the Works including the Works executed at Site and of the equipment shipped/brought on to the site pursuant to the Contract up to the date mentioned in the application and for the period covered since the last preceding certificate, if any.

- 29.2 Every interim payment certificate shall certify the Contract value of the Works executed upto the date mentioned in the application for the payment certificate, provided that no sum shall be included in any interim payment certificate in respect of the works that, according to the decision of the Engineer, does not comply with the Contract.
- 29.3 Mode of Payment
- 29.4 Payment due on dispatch of equipment shall be made by the Owner through Owner's Bank or directly to the Contractor as per the payment schedule.
- 29.5 The payment of test charges, if any, payment, taxes and duties (whenever admissible) inland transportation (including port handling), insurance and the erection portion of the Works shall be made direct to the Contractor by the Owner.
- 29.6 All payments under the Contract shall be made as stipulated in the Special Conditions of Contract after signing the Contract Agreement. The payments linked with the dispatch of materials shall only be made after production of all dispatch documents as specified in the relevant Contract conditions which will interalia include the Material Inspection Clearance Certificate issued by the Owner.

Progressive payments linked with erection shall only be made after the issue of certificates by the Engineer, one for the quantum of work completed and the other for the successful completion of quality check points involved in the quantum of work billed.

30.0 DEDUCTIONS FROM CONTRACT PRICE

All costs, damages or expenses that the Owner may have paid, for which under the Contract the Contractor is liable, or any other retention award will be claimed by the Owner. The Owner to the Contractor shall bill all such claims regularly as and when they fall due. Such bills shall be supported by appropriate and certified vouchers or explanations, to enable the Contractor to properly identify such claims. Such claims shall be paid by the Contractor within thirty (30) days of the receipt of the corresponding bills and if not paid by the Contractor within the said period, the Owner may then deduct the amount, from any money due or becoming due by him to the Contractor under the Contract or may be recovered by sections of Law or otherwise.

D. RISK DISTRIBUTION

31.0 INSURANCE

- 31.1 The Contractor at his cost shall arrange, secure and maintain all insurance as may be pertinent to the Works and obligatory in terms of law to protect his interest and interests of the Owner against all perils detailed herein. The form and the limit of such insurance as defined herein together with the under-writer in each case shall be acceptable to the Owner. However, irrespective of such acceptance, the responsibility to maintain adequate insurance coverage at all time during the period of Contract shall be of Contractor alone. The Contractor's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. The insurance covers to be taken by the Contractor shall be in the joint name of the Owner and the Contractor. The Contractor shall, however, be authorized to deal directly with Insurance Company or Companies and shall be responsible in regard to maintenance of all insurance covers. Further the insurance should be in freely convertible currency.
- 31.2 Any loss or damage to the equipment during handling, transportation, storage, erection, putting into satisfactory operation and all activities to be performed till the successful completion of commissioning of the equipment shall be to the account of the Contractor. The Contractor shall be responsible for preference of all claims and make good the damages or loss by way of repairs and/or replacement

of the equipment, damaged or lost. The transfer of title shall not in any way relieve the Contractor of the above responsibilities during the period of Contract. The Contractor shall provide the Owner with copy of all insurance policies and documents taken out by him in pursuance of the Contract. Such copies of documents shall be submitted to the Owner immediately after such insurance coverage. The Contractor shall also inform the Owner in writing at least sixty (60) days in advance regarding the expiry/cancellation and/or change in any of such documents and ensure revalidation, renewal etc., as may be necessary well in time.

31.3 The perils required to be covered under the insurance shall include, but not be limited to fire and allied risks, miscellaneous accidents (erection risks) workman compensation risks, loss or damage in transit, theft, pilferage, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kinds, etc. The scope of such insurance shall be adequate to cover the replacement/reinstatement cost of the equipment for all risks up to and including delivery of goods and other costs till the equipment is delivered at Site. The insurance policies to be taken should be on replacement value basis and/or incorporating escalation clause. Notwithstanding the extent of insurance cover and the amount of claim available from the underwriters, the Contractor shall be liable to make good the full replacement/rectification value of all equipment/materials and to ensure their availability as per project requirements.

31.4 All costs on account of insurance liabilities covered under the Contract will be on Contractor's account and will be included in Contract Price, However, the Owner may from time to time, during the pendency of the Contract, ask the Contractor in writing to limit the insurance coverage, risks and in such a case, the parties to the Contract will agree for a mutual settlement, for reduction in Contract price to the extent of reduced premia amount. The Contractor, while arranging the insurance shall ensure to obtain all discounts on premia, which may be available for higher volume or for reason of financing arrangement of the project.

31.5 The clause entitled 'Insurance' under the section ECC of this Volume-I, covers the additional insurance requirements for the portion of the works to be performed at the Site.

31.6 Special Conditions of Contract details out the various insurance liabilities.

32.0 LIABILITY FOR ACCIDENTS AND DAMAGES

Under the Contract, the Contractor shall be responsible for loss or damage to the plant until the successful completion of commissioning as defined elsewhere in the Bid document.

33.0 DELAYS BY OWNER OR HIS AUTHORISED AGENTS

34.1 In case the Contractor's performance is delayed due to any act of omission on the part of the Owner or his authorized agents, then the Contractor shall be given due extension of time for the completion of the Works, to the extent such omission on the part of the Owner has caused delay in the Contractor's performance of the Contract.

Regarding reasonableness or otherwise of the extension of time, the decision of the Engineer shall be final.

35.2 In addition, the Contractor shall be entitled to claim demonstrable and reasonable compensation if such delays have resulted in any increase in cost. The Owner shall examine the justification for such a request for claim and if satisfied, the extent of compensation shall be mutually agreed depending upon the circumstances at the time of such an occurrence.

36.0 FORCE MAJEURE

- 36.1 Force majeure is herein defined as any cause which is beyond the control of the Contractor or the Owner as the case may be, which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affects the performance of the Contract, such as:
- a. Natural phenomena, including but not limited to floods, droughts, earthquakes and epidemics:
 - b. Acts of any Government, domestic or foreign, including but not limited to war, declared or undeclared, priorities, guarantees, embargoes.

Provided either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such causes.

- 36.2 The Contractor or the Owner shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/or defined above

The date of completion will, subject to hereinafter provided, be extended by a reasonable time even though such cause may occur after Contractor's performance of obligation has been delayed due to other causes.

37.0 SUSPENSION OF WORK

- 37.1 The Owner reserves the right to suspend and reinstate execution of the whole or any part of the Works without invalidating the provisions of the Contract. Orders for suspension or reinstatement of the Works will be issued by the Engineer to the Contractor in writing. The time for completion of the works will be extended for a period equal to duration of the suspension.
- 37.2 Any necessary and demonstrable cost incurred by the Contractor as a result of such suspension of the works will be paid by the Owner, provided such costs are substantiated to the satisfaction of the Engineer. The Owner shall not be responsible for any liabilities if suspension or delay is due to some default on the part of the Contractor or his Sub-Contractor.

38.0 CONTRACTOR'S DEFAULT

- 38.1 If the Contractor shall neglect to execute the works with due diligence and expedition or shall refuse or neglect to comply with any reasonable order given to him, in writing by the Engineer in connection with the works or shall contravene the provisions of the Contract, the Owner may give notice in writing to the Contractor to make good the failure, neglect or contravention complained of. Should the Contractor fail to comply with the notice within thirty (30) days from the date of serving the notice, then and in such case the Owner shall be at liberty to employ other workmen and forthwith execute such part of the works as the Contractor may have neglected to do or if the Owner shall think fit, without prejudice to any other right he may have under the Contract to take the work wholly or in part out of the Contractor's hands and re-contract with any other person or persons to complete the works or any part thereof and in that event the Owner shall have free use of all Contractor's equipment that may have been at the time on the Site in connection with the works without being responsible to the Contractor for fair wear and tear thereof and to the exclusion of any right of the Contractor over the same, and the Owner shall be entitled to retain and apply any balance which may otherwise be due on the Contract by him to the Contractor, or such part thereof as may be necessary, to the payment of the cost of executing the said part of the Works or of completing the Works as the case may be. If the cost of completing of works or executing part thereof as aforesaid shall exceed the balance due to the Contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay which the Contractor shall have to pay if the completion of works is delayed.

- 38.2 In addition, such action by the Owner as aforesaid shall not relieve the Contractor of his liability to pay liquidated damages for delay in completion of Works as defined in Clause 14.0 of this Section.
- 38.3 Such action by the Owner as aforesaid the termination of the Contract under this clause shall not entitle the Contractor to reduce the value of the Contract Performance Guarantee nor the time thereof. The Contract Performance Guarantee shall be valid for the full value and for the full period of the Contract including guarantee period.

39.0 TERMINATION OF CONTRACT ON OWNER'S INITIATIVE

- 39.1 The Owner reserves the right to terminate the Contract either in part or in full due to reasons other than those mentioned under clause entitled 'Contractor's Default'. The Owner shall in such an event give fifteen (15) days' notice in writing to the Contractor of his decision to do so.
- 39.2 The Contractor upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and Contracts to the extent they are related to the work terminated and terms satisfactory to the Owner, stop all further sub-contracting or purchasing activity related to the work terminated, and assist Owner in maintenance, protection, and disposition of the works acquired under the Contract by the Owner.

In the event of such a termination the Contractor shall be paid compensation, equitable and reasonable, dictated by the circumstances prevalent at the time of termination.

- 39.3 If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partners dies then unless the Owner is satisfied that the legal representatives of the individual Contractor or of the proprietor of the propriety concern and in the case of partnership, the surviving partners, are capable of carrying out and completing the Contract the Owner shall be entitled to cancel the Contract as to its incompleted part without being in any way liable to payment of any compensation to the estate of deceased Contractor and/or to the surviving partners of the Contractor's firm on account of the cancellation of the Contract. The decision of the Owner that the legal representatives of the deceased Contractor or surviving partners of the Contractor's firm cannot carry out and complete the Contract shall be final and binding on the parties. In the event of such cancellation the Owner shall not hold the estate of the deceased Contractor and/or the surviving partners of the estate of the deceased Contractor and/or the surviving partners of the Contractor's firm liable to damages for not completing the Contract.

40.0 FRUSTRATION OF CONTRACT

- 40.1 In the event of frustration of the Contract because of supervening impossibility in terms of Section 56 of the Indian Contract Act, parties shall be absolved of their responsibility to perform the balance portion of the Contract, subject to provisions contained in sub-clause 45.3 below.
- 40.2 In the event of non-availability or suspension of funds for any reasons, whatsoever (except for reason of willful or flagrant breach by the Owner) and/or Contractor then the works under the Contract shall be suspended.

Furthermore, if the Owner is unable to make satisfactory alternative arrangements for financing to the Contractor in accordance with the terms of the Contract within three months of the event, the parties hereto shall be relieved from carrying out further obligations under the Contract treating it as frustration of the Contract.

- 40.3 In the event referred to in sub-clauses 45.1 & 45.2 above the parties shall mutually discuss to arrive at reasonable settlement on all issues including amounts due to either party for the work already done on quantum merit_ basis, which shall be determined by mutual agreement between the parties.

41.0 GRAFTS AND COMMISSIONS ETC.

Any graft, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner(s), agent(s), officer(s), director(s), employee(s) or servant(s) or any one on his or their behalf in relation to the obtaining or to the execution of this or any other Contract with the Owner, shall in addition to any criminal liability which it may incur, subject the Contractor to the cancellation of this and all other Contracts and also to payment of any loss or damage to the Owner resulting from any cancellation. The Owner shall then be entitled to deduct the amount so payable from any money otherwise due to Contractor under the Contract.

RESOLUTION OF DISPUTES

42.0 SETTLEMENT OF DISPUTES

- 42.1 Any dispute(s) or difference(s) arising out of or in connection with the Contract shall, to the extent possible, be settled amicably between the parties.
- 42.2 If any dispute or difference of any kind, whatsoever, shall arise between the Owner and the Contractor, arising out of the Contract for the performance of the Works whether during the progress of the Works or after its completion or whether before or after the termination, abandonment or breach of the Contract, it shall, in the first place, be referred to and settled by the Engineer, who, within a period of thirty (30) days after being requested by either party to do so, shall give written notice of his decision to the Owner and the Contractor.
- 42.3 Save as hereinafter provided, such decision in respect of every matters so referred shall be final and binding upon the parties until the completion of the Works and shall forthwith be given effect to by the Contractor who shall proceed with the Works with all due diligence, whether he or the Owner requires arbitration as hereinafter provided or not.
- 42.4 If after the Engineer has given written notice of his decision to the parties, no claim to arbitration has been communicated to him by either party within thirty (30) days from the receipt of such notice, the said decision shall become final and binding on the parties.
- 42.5 In the event of the Engineer failing to notify his decision as aforesaid within thirty (30) days after being requested as aforesaid, or in the event of either the Owner or the Contractor being dissatisfied with any such decision, or within thirty (30) days after the expiry of the first mentioned period of thirty days, as the case may be, either party may require that the matters in dispute be referred to arbitration as hereinafter provided.

43.0 ARBITRATION

- 43.1 All disputes or differences in respect of which the decision, if any, of the Engineer has not become final or binding as aforesaid shall be settled by arbitration in the manner hereinafter provided.
- 43.1.1 The arbitration shall be conducted by three arbitrators, one each to be nominated by the Contractor and the Owner and the third to be appointed as an umpire by both the arbitrators in accordance with the Indian Arbitration Act. If either of the parties fails to appoint its arbitrator within sixty (60) days after receipt of a notice from the other party invoking the Arbitration clause, the arbitrator

appointed by the party invoking the arbitration clause shall become the sole arbitrator to conduct the arbitration.

43.1.2 The arbitration shall be conducted in accordance with the provisions of the Indian Arbitration Act, 1940 or any statutory modification thereof. The venue of arbitration shall be Bharuch.

43.2 The decision of the majority of the arbitrators shall be final and binding upon the parties.

The arbitrators may, from time to time with the consent of all the parties enlarge the time for making the award. In the event of any of the aforesaid arbitrators dying, neglecting, resigning or being unable to act for any reason, it will be lawful for the party concerned to nominate another arbitrator in place of the outgoing arbitrator.

43.3 The arbitrator shall have full powers to review and/or revise any decision, opinion, direction, certification or valuation of the Engineer in accordance with the Contract, and neither party shall be limited in the proceedings before such arbitrators to the evidence or arguments put before the Engineer for the purpose of obtaining the said decision.

43.4 No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him as being called as a witness or giving evidence before the arbitrators on any matter whatsoever relevant to the dispute or difference referred to the arbitrators as aforesaid.

43.5 During settlement of disputes and arbitration proceedings, both parties shall be obliged to carry out their respective obligations under the Contract.

44.0 RECONCILIATION OF ACCOUNTS

The Contractor shall prepare and submit **every month**, a statement covering payments claimed and the payments received vis-a-vis the works executed, for reconciliation of accounts with the Owner. The Contractor shall also prepare and submit a detailed account of Owner Issue materials received and utilized by him for reconciliation purpose in a format to be discussed & finalized with the Owner before the award of Contract.

Signature of Contractor

Superintending Engineer (TR)

GETCO, CO, Bharuch

ERECTION CONDITIONS OF CONTRACT

1.0 GENERAL

- 1.1 The following shall supplement the conditions already contained in other parts of these specifications & document and shall govern the portion of the work of this Contract to be performed at Site.
- 1.2 The Contractor upon signing of the Contract shall, nominate a responsible officer as his representative at Site suitably designated for the purpose of overall responsibility and coordination of the works to be performed at Site. Such person shall function from the Site office of the Contractor during the pendency of Contract.

2.0 REGULATION OF LOCAL AUTHORITIES AND STATUTES

- 2.1 The Contractor shall comply with all the rules and regulations of local authorities during the performance of his field activities. He shall also comply with the Minimum Wages Act, 1948 and the Payment of Wages Act (both of the Government of India) and the rules made thereunder in respect of any employee or workman employed or engaged by him or his Sub-Contractor. He shall abide by labour laws and others as specified in the special conditions of contract.
- 2.2 All registration and statutory inspection fees, if any, in respect of his work pursuant to this Contract shall be to the account of the Contractor. Should any such inspection or registration need to be re-arranged due to the fault of the Contractor or his Sub Contractor, the additional fees to such inspection and/or registration also shall be borne by the Contractor.

3.0 OWNER'S LIEN ON EQUIPMENT

The Owner shall have lien on all equipment brought to the Site for the purpose of erection, testing and commissioning of the equipment to be supplied & erected under the Contract. The Owner shall continue to hold the lien on all such equipment throughout the period of Contract. No material brought to the Site shall be removed from the Site by the Contractor and/or his Sub-Contractors without the prior written approval of the Engineer.

4.0 ACCESS TO SITE AND WORKS ON SITE

- 4.1 Suitable access to and possession of the Site shall be afforded to the Contractor by the Owner in reasonable time.
- 4.2 The works so far as it is carried out on the Owner's premises, shall be carried out at such time as the Owner may approve and the Owner shall give the Contractor reasonable facilities for carrying out the works.
- 4.3 In the execution of the works, no person other than the Contractor or his duly appointed representative, Sub- Contractor and workmen, shall be allowed to do work on the Site, except by the special permission, in writing of the Engineer or his representative.

5.0 CONTRACTOR'S SITE ESTABLISHMENT

The Contractor shall at all times keep posted an authorized representative for the purpose of the Contract. Any written order or instruction of the Engineer or his duly authorized representative, shall be communicated to the said authorized resident representative of the Contractor and the representative shall be available at a stated address for this purpose.

6.0 CO-OPERATION WITH OTHER CONTRACTORS

- 6.1 The Contractor shall co-operate with all other Contractors or tradesmen of the Owner, who may be performing other works on behalf of the Owner and the workmen who may be employed by the Owner and doing work in the vicinity of the Works under the Contract. The Contractor shall also so arrange to perform his work as to minimize, to the maximum extent possible, interference with the work of other Contractors and their workmen. Any injury or damage that may be sustained by the employees of the other Contractors and the Owner, due to the Contractor's work shall promptly be made good at the Contractor's own expense.

7.0 DISCIPLINE OF WORKMEN

The Contractor shall adhere to the disciplinary procedure set by the Engineer in respect of his employees and workmen at Site. The Engineer shall be at liberty to object to the presence of any representative or employee of the Contractor at the Site, if in the opinion of the Engineer such employee has misconduct himself or is incompetent or negligent or otherwise undesirable and then the Contractor shall remove such a person objected to and provide in his place a competent replacement.

8.0 CONTRACTOR'S FIELD OPERATION

- 8.1 The Contractor shall keep the Engineer informed in advance regarding his field activity plans and schedules for carrying-out each part of the works. Any review of such plan or schedule or method of work by the Engineer shall not relieve the Contractor of any of his responsibilities towards the field activities. Such reviews shall also not be considered as an assumption of any risk or liability by the Engineer or the Owner or any of his representatives and no claim of the Contractor will be entertained because of the failure or inefficiency of any such plan or schedule or method of work reviewed. The Contractor shall be solely responsible for the safety, adequacy and efficiency of plant and equipment and his erection methods.
- 8.2 The Contractor shall have the complete responsibility for the conditions of the Work-site including the safety of all persons employed by him or his Sub-Contractor and all the properties under his custody during the performance of the work. This requirement shall apply continuously till the completion of the Contract and shall not be limited to normal working hours.

9.0 PROGRESS REPORT

- 9.1 The Contractor shall furnish three (3) copies each to the Engineer of progress including if any, photographs of the work done at Site.
- 9.2 The monthly progress report detailing-out the progress achieved on all erection activities shall highlight comparison to the schedules. The report shall also indicate the reasons for the variance between the scheduled and actual progress and the action proposed for corrective measures, wherever necessary.

10.0 MAN-POWER REPORT

- 10.1 The Contractor shall submit to the Engineer, on the first day of every month, a man hours schedule for the month, detailing the man hours scheduled for the month, skill-wise and area-wise.

11.0 PROTECTION OF WORK

The Contractor shall have total responsibility for protecting his works till it is finally taken over by the Engineer. No claim will be entertained by the Owner or by the Engineer for any damage or loss to the Contractor's works and the Contractor shall be responsible for complete restoration of the damaged works to original conditions to comply with the specification and drawings.

12.0 EMPLOYMENT OF LABOUR

- 12.1 The Contractor will be expected to employ on the work only his regular skilled employees with experience of his particular work. No person below the age of eighteen years shall be employed.
- 12.2 All traveling expenses including provisions of necessary transport to and from Site, lodging, allowances and other payments to the Contractor's employees shall be the sole responsibility of the Contractor.
- 12.3 In case the Owner becomes liable to pay any wages or dues to Labour or any Government agency under any of the provisions of the Minimum Wages Act, Workmen Compensation Act, Contract Labour Regulation Abolition Act or any other law due to act of omission of the Contractor, the Owner may make such payment and shall recover the same from the Contractor's bills.

13.0 FACILITIES TO BE PROVIDED BY THE OWNER

13.1 Space

Land for Contractor's Store, Workshop etc.

- a) The Engineer shall at his discretion and for the duration of execution of the Contract make available at site, land for Transmission of Contractor's field office, workshop, stores, etc. required for execution of the Contract. Any such temporary Transmission shall be done by the Contractor at his cost.
- b) On completion of work the Contractor shall hand over the land duly cleaned to the Engineer. Until and unless the Contractor has handed over the vacant possession of land allotted to him for the above purpose, the payment of his final bill shall not be made.

13.2 Electricity:

Power supply:

Where power supply is available with the Owner for Transmission purpose the same will be provided at the job site at one point of the distribution system as may be decided by Engineer. Electricity furnished will be 440 volts, 3 phase, 50 cycles and 230 volts, 1 phase, 50 cycles. Each Contractor shall provide and install all necessary transformers, switchgears, wiring fixtures, bulbs and other temporary equipment for further distribution and utilization of energy for power and lighting and shall remove the same on completion of the work. Should, however, electricity be used in the Contractor's labour/staff colony, the power so consumed shall be charged at the prevailing tariff rate of the GUVNL as prevalent for that area at the time of award of work; the supply may be withdrawn if the power is used for purposes other than for the work of the project and the Contractor shall not be entitled to any claim whatsoever on account of any such action taken by the Engineer. For this purpose, contractor shall have to apply to DISCOM for separate temporary connection on his name.

14.0 FACILITIES TO BE PROVIDED BY THE CONTRACTOR

14.1 Tools, tackles and scaffoldings

The Contractor shall provide all the Transmission equipments; tools, tackles and scaffoldings required for pre-assembly, erection, testing and commissioning of the equipment covered under the Contract. He shall submit a list of all such materials to the Engineer before the commencement of work at Site. These tools and tackles shall not be removed from the Site without the written permission of the Engineer.

14.2 First-aid

- 14.3 The Contractor shall provide necessary first-aid facilities for all his employees, representatives and workmen working at the Site. Enough number of Contractor's personnel shall be trained in administering first-aid.

14.4 Cleanliness

- 14.4.1 The Contractor shall be responsible for keeping the entire area allotted to him clean and free from rubbish, debris etc. during the period of Contract. The Contractor shall employ enough number of personnel to keep the work area clean. Materials and stores shall be so arranged to permit easy cleaning of the area. In areas where equipment might drip oil and cause damage to the floor surface, a suitable protective cover of a flame resistant, oil proof sheet shall be provided to protect the floor from such damage.

15.0 LINES AND GRADES

All the works shall be performed to the lines, grades and elevations indicated on the drawings. The Contractor shall be responsible to locate and lay-out the works. Basic horizontal and vertical control points will be established and marked by the Engineer at site at suitable points. These points shall be used as datum for the works under the Contract. The Contractor shall inform the Engineer well in advance of the times and places at which he wishes to do work in the area allotted to him so that suitable datum points may be established and checked by the Engineer to enable the Contractor to proceed with his works. Any work done without being properly located may be removed and/or dismantled by the Engineer at Contractor's expense.

16.0 FIRE PROTECTION

- 16.1 The work procedures that are to be used during the erection shall be those, which minimize fire hazards to the extent practicable. Combustible materials, combustible waste and rubbish shall be collected and removed from the Site at least once each day. Fuels, oils and volatile or inflammable materials shall be stored away from the Transmission and equipment and materials storage areas.
- 16.2 All the Contractor's supervisory personnel and select number of workers shall be trained for fire fighting. Enough of such trained personnel must be available at the Site during the entire period of the Contract.

17.0 SECURITY

The Contractor shall have total responsibility for all equipment and materials in his custody/stores, loose, semi-assembled and/or erected by him at Site. The Contractor shall make suitable security arrangements ensure the protection of all materials, equipment and works from theft, fire, pilferage and any other damages and loss.

18.0 PRE-COMMISSIONING TRIALS AND INITIAL OPERATIONS

The pre-commissioning trials and initial operations of the equipment erected by the Contractor shall be carried out in presence of contractor and is deemed considered as part of the work completion. If it is anticipated that the above test may prolong for a long time, the Contractor's workmen required for the above test shall always be present at Site during such tests and trials.

19.0 MATERIALS HANDLING AND STORAGE

- 19.1 All the equipment furnished under the Contract and arriving at Site shall be promptly received, unloaded, transported and stored in the storage spaces by the Contractor.

- 19.2 Contractor shall be responsible for examining all the shipment and notify the Engineer immediately of any damages, storage, discrepancy etc, for the purpose of Engineer's information only. The Contractor shall submit to the Engineer every week a report detailing all the receipts during the week. However, the Contractor shall be solely responsible for any shortages or damages in transit, handling and / or in storage and erection of the equipment at Site. Any demurrage, wharf age and other such charges claimed by the transporters, railways etc, shall be to the account of the Contractor. For shortages of any materials issued by the GETCO for the work, recovery shall be made from you, on the basis of prices of the materials (prevailing on the date of settlement of materials account) plus 15% supervision charges plus **GST** as applicable.
- 19.3 The Contractor shall maintain an accurate and exhaustive record detailing out the list of all equipment materials received by him for the purpose of erection and keep such record open for the inspection of the Engineer in-charge.
- 19.4 All equipment shall be handled very carefully to prevent any damage or loss. The equipment stored shall be properly protected to prevent damage either to the equipment or to the floor where they are stored. The equipment from the store shall be moved to the actual location at the appropriate time so as to avoid damage of such equipment at Site.
- 19.5 All electrical panels, control gears, motors and such other devices shall be properly dried by heating before they are installed and energized. Motor bearings, slip ring, commutators and other exposed parts shall be protected against moisture ingress and corrosion during storage and periodically inspected.
- 19.6 All the electrical equipment such as motors, generators, etc. shall be tested for insulation resistance at least once in three months from the date of receipt till the date of commissioning and a record of such measured insulation values maintained by the Contractor. Such records shall be opened for inspection by the Engineer.
- 19.7 The consumable and other supplies likely to deteriorate due to storage must be thoroughly protected and stored in a suitable manner to prevent damage or deterioration in quality by storage.
- 19.8 All the materials stored in the open or dusty location must be covered with suitable weatherproof and flame proof covering material wherever applicable.
- 19.9 If the materials belonging to the Contractor are stored in areas other than those earmarked for him, the Engineer will have the right to get it moved to the area earmarked for the Contractor at the Contractor's cost.
- 19.10 The Contractor shall be responsible for making suitable indoor storage facilities to store all equipment, which require indoor storage. Normally, all the electrical equipment such as motors, control gears, generators, exciters and consumables like electrodes, lubricants etc. shall be stored in the closed storage space. The Engineer, in addition, may direct the Contractor to move certain other materials, which in his opinion will require indoor storage, to indoor storage areas, which the Contractor shall strictly comply with.

20.0 TRANSMISSION MANAGEMENT

- 20.1 The field activities of the Contractors working at Site, will be coordinated by the Engineer and the Engineer's decision shall be final in resolving any disputes or conflicts between the Contractor and other Contractors and the tradesmen of the Owner regarding scheduling and coordination of work. Such decision by the Engineer shall not be a cause for extra compensation or extension of time for the Contractor.

- 20.2 The Engineer shall hold weekly meetings of the Contractor at Site, at a time and place to be designated by the Engineer. The Contractor shall attend such meetings and take notes of discussions during the meeting and the decision of the Engineer and shall strictly adhere to those decisions in performing his works. In addition to the above weekly meeting, the Engineer may call for other meetings either with individual Contractors or with selected number of Contractors and in such a case the Contractors if called, will also attend such meetings.
- 20.3 Time is the essence of the Contract and the Contractor shall be responsible for performance of his works in accordance with the specified Transmission schedule. If at any time, the Contractor is falling behind the schedule, he shall take necessary action to make good for such delays by increasing his work force or by working overtime or otherwise accelerate the progress of the work to comply with the schedule and shall communicate such actions in writing to the Engineer, satisfying that his action will compensate for the delay. The Contractor shall not be allowed any extra compensation for such action.
- 20.4 The Engineer shall, however, not be responsible for provision of additional labour and/or materials or supply or any other services to the Contractor except for the coordination work between various Contractors if any at site.

21.0 FIELD OFFICE RECORDS

The Contractor shall maintain up to date copies of all drawings, specifications and other Contract Documents and any other supplementary data complete with all the latest revisions thereto. The Contractor shall also maintain in addition the continuous record of all changes to the above Contract Documents, drawings, specifications, and supplementary data, etc. effected at the field and on completion of his total assignment under the Contract shall incorporate all such changes on the drawings and other Engineering data to indicate as installed conditions of the equipment furnished and erected under the Contract. Such drawings and Engineering data shall be submitted to the Engineer in required number of copies.

22.0 CONTRACTOR'S MATERIALS BROUGHT TO SITE

- 22.1 The Contractor shall bring to Site all equipment, components, parts, materials, including Transmission equipment, tools and tackles for the purpose of the works under intimation to the Engineer. All such goods shall, from the time of their being brought vest in the Owner, but may be used for the purpose of the works only and shall not on any account be removed or taken away by the Contractor without the written permission of the Engineer. The Contractor shall nevertheless be solely liable and responsible for any loss or destruction thereof and damage thereto.
- 22.2 The Owner shall have a lien on such goods for any sum or sums which may at any time be due or owing to him by the Contractor, under, in respect of or by reasons of the Contract. After giving a fifteen (15) days' notice in writing of his intention to do so, the Owner shall be at liberty to sell and dispose off any such goods, in such manner as he shall think fit and to apply the proceeds in or towards the satisfaction of such sum or sums due as aforesaid.
- 22.3 After the completion of the Works, the Contractor shall remove from the Site under the direction of the Engineer the materials such as Transmission equipment, erection tools and tackles, scaffolding etc. with the written permission of the Engineer.

23.0 PROTECTION OF PROPERTY AND CONTRACTOR'S LIABILITY

- 23.1 The Contractor shall be responsible for any damage resulting from his operations. He shall also be responsible for protection of all persons including members of

public and employees of the Owner and the employees of other Contractors and Sub-Contractors and all public and private property.

24 INSURANCE

24.1 In addition to the conditions covered under the Clause entitled 'Insurance' in General Terms and Conditions of Contract of this Volume-I, the following provisions will also apply to the portion of works to be done beyond the Contractor's own or his Sub-Contractor's manufacturing Works.

24.2 Workmen's Compensation Insurance

This insurance shall protect the Contractor against all claims applicable under the Workmen's Compensation Act, 1948 (Government of India). This policy shall also cover the Contractor against claims for injury, disability, disease or death of his or his Sub-Contractor's employee, which for any reason are not covered under the Workmen's Compensation Act, 1948. The liabilities shall not be less than:

Workmen's Compensation : As per statutory Provisions

Employee's Liability : As per statutory Provisions

24.3 Comprehensive General Liability Insurance

The insurance shall protect the Contractor against all claims arising from injuries, disabilities, disease or death of members of public or damage to property of others, due to any act of omission on the part of the Contractor, his agents, his employees, his representatives and Sub-Contractors or from riots, strikes and civil commotion.

2.4.4 The hazards to be covered will pertain to all the works and areas where the Contractor, his Sub-Contractors, his agents and his employees have to perform work pursuant to the Contract.

24.5 The above are only illustrative list of insurance covers normally required and it will be the responsibility of the Contractors to maintain all necessary insurance coverage to the extent both in time and amount to take care of all his liabilities either direct or indirect, in pursuance of the Contract.

25.0 UNFAVOURABLE WORKING CONDITIONS

The Contractor shall confine all his field operations to those works, which can be performed without subjecting the equipment and materials to adverse effects during inclement weather conditions, like monsoon, storms etc. and during other unfavorable Transmission conditions. No field activities shall be performed by the Contractor under conditions, which might adversely affect the quality and efficiency thereof, unless special precautions or measures are taken by the Contractor in a proper and satisfactory manner in the performance of such Works and with the concurrence of the Engineer. Such unfavorable Transmission conditions will in no way relieve the Contractor of his responsibility to perform the Works as per the schedule.

26.0 PROTECTION OF MONUMENTS AND REFERENCE POINTS

The Contractor shall ensure that any finds such as relic, antiquity, coins, fossils, etc. which he may come across during the course of performance of his Works either during excavation or elsewhere, are properly protected and handed over to the Engineer. Similarly, the Contractor shall ensure that the bench marks, reference points, etc which are marked either with the help of Engineer or by the Engineer shall not be disturbed in any way during the performance of his Works. If any work is to be performed which disturbs such reference the same shall be done only after these are transferred to other suitable locations under the

direction of the Engineer. The Contractor shall provide all necessary materials and assistance for such relocation of reference points etc.

27.0 WORK & SAFETY REGULATIONS

- 27.1 The Contractor shall ensure proper safety of all the workmen, materials, plant and equipment belonging to him or to GETCO or to others, working at the Site. The Contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislations and the Engineer, as he may deem necessary.
- 27.4 All equipment used in Transmission and erection by Contractor shall meet Indian/International Standards and where such standards do not exist, the Contractor shall ensure these to be absolutely safe. All equipment shall be strictly operated and maintained by the Contractor in accordance with manufacturer's Operation Manual and safety instructions and as per Guidelines/rules of GETCO in this regard.
- 27.5 Periodical examinations and all tests for all lifting/hoisting equipment & tackles shall be carried-out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated Laws/Rules in force from time to time. A register of such examinations and tests shall be properly maintained by the Contractor and will be promptly produced as and when desired by the Engineer or by the person authorized by him.
- 27.6 The Contractor shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need.
- 27.8 The Contractor shall provide safe working conditions to all workmen and employees at the Site including safe means of access, railings, stairs, ladders, scaffoldings etc. The scaffoldings shall be erected under the control and supervision of an experienced and competent person. For erection, good and standard quality of material only shall be used by the Contractor.
- 27.9 The Contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the Owner or other Contractors under any circumstances, whatsoever, unless expressly permitted in writing by GETCO to handle such fuses, wiring or electrical equipment
- 27.10 Before the Contractor connects any electrical appliances to any plug or socket belonging to the other Contractor or Owner, he shall:
- (a). Satisfy the Engineer that the appliance is in good working condition;
 - (b) Inform the Engineer of the maximum current rating, voltage and phases of the appliances;
 - (c) Obtain permission of the Engineer detailing the sockets to which the appliances may be connected.
- 27.11 The Engineer will not grant permission to connect until he is satisfied that;
- a. The appliance is in good condition and is fitted with suitable plug;
 - b. The appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.
- 27.12 No electric cable in use by the Contractor/Owner will be disturbed without prior permission. No weight of any description will be imposed on any cable and no ladder or similar equipment will rest against or attached to it.
- 27.13 No repair work shall be carried out on any live equipment. The equipment must be declared safe by the Engineer and a permit to work shall be issued by the Engineer before any repair work is carried out by the Contractor. While working on electric

lines/equipment, whether live or dead, suitable type and sufficient quantity of tools will have to be provided by the Contractor to electricians/workmen/officers.

- 27.14 In case any accident occurs during the Transmission/ erection or other associated activities undertaken by the Contractor thereby causing any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the Contractor to promptly inform the same to the Engineer in prescribed form and also to all the authorities envisaged under the applicable laws.
- 27.15 The Engineer shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipment. In such cases, the Contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove shortcomings promptly. The Contractor after stopping the specific work can, if felt necessary, appeal against the order of stoppage of work to the Engineer within 3 days of such stoppage of work and decision of the Engineer in this respect shall be conclusive and binding on the Contractor.
- 27.16 The Contractor shall not be entitled for any damages/compensation for stoppage of work due to safety reasons as provided in para 27.15 above and the period of such stoppage of work will not be taken as an extension of time for completion of work and will not be the ground for waiver of levy of liquidated damages.
- 27.17 It is mandatory for the Contractor to observe during the execution of the works, requirements of Safety Rules which would generally include but not limited to following:-
- a) Each employee shall be provided with initial indoctrination regarding safety by the Contractor, so as to enable him to conduct his work in a safe manner.
 - b) No employee shall be given a new assignment of work unfamiliar to him without proper introduction as to the hazards incident thereto, both to himself and his fellow employees.
 - c) Employees must not leave naked fires unattended. Smoking shall not be permitted around fire prone areas and adequate firefighting equipment shall be provided at crucial location.
 - d) There shall be a suitable arrangement at every work site for rendering prompt and sufficient first aid to the injured.
 - j) Requirements of ventilation in underwater working to licensed and experienced divers, use of gum boots for working in slushy or in inundated conditions are essential requirements to be fulfilled.
- 27.18 The Contractor shall follow and comply with all GETCO Safety Rules, relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservations. In case of any discrepancy between statutory requirement and GETCO Safety Rules referred above, the latter shall be binding on the Contractor unless the statutory provisions are more stringent.
- a. Fatal injury or accident: Rs 1, 00,000/-These are applicable Causing death per person plus **GST** for death
 - b. Major injuries or accident causing :Rs. 20,000/-Injury to any person. 25% or more permanent disablement per person plus **GST**, whosoever to Workmen or employees

Permanent disablement shall have same meaning as indicated in Workmen's Compensation Act. The compensation mentioned above shall be in addition to the compensation payable to the workmen/employees under the relevant provisions of the Workmen's Compensation Act and rules framed there under or any other applicable laws as applicable from time to time. In case the Owner is made to pay such

compensation then the Contractor is liable to reimburse the Owner such amount in addition to the compensation indicated above.

28.0 CODE REQUIREMENTS

The erection requirements and procedures to be followed during the installation of the equipment shall be in accordance with the relevant Codes and accepted good engineering practice, the Engineer's drawings and other applicable Indian recognized codes and laws and regulation of the Government of India.

Signature of Contractor

Superintending Engineer(TR)

GETCO, CO, Bharuch

SPECIAL CONDITIONS OF CONTRACT

1.0 General Particulars:

This part of the Bid Document relates to certain specific/special terms and conditions particular to the Contract. The provisions herein are to be read and understood in conjunction with the relevant provisions elsewhere in the Instructions to Bidders (ITB), the General Conditions of Contract (GCC) and Erection Conditions of Contract (ECC). The intent of provisions herein are specific to this contract and are, in general, supplementary to related provisions under ITB, GCC and ECC. However, in certain provisions which are contrary to those in ITB, GCC and ECC, the provisions in these Special Conditions of Contract will prevail.

2.0 Tender Fee:

The tender fee specified in notice inviting tender is payable by Demand Draft (DD) drawn at Bharuch on any Scheduled Bank in **favour of GETCO Bharuch** on any Scheduled Bank in Bharuch. The same will be furnished in Cover-1 of Bid along with EMD (Bid Security).

3.0 Earnest Money Deposit (EMD):

3.1(a) The estimated cost of Tender is more than Rs. 100 lacs, the EMD is payable as under:

- 50 % of EMD by online mode in favour of Gujarat Energy Transmission Corporation Ltd. on any Scheduled Bank in Bharuch and Balance 50% by Bank Guarantee from any Nationalized Bank in the format provided herein.

(b) The estimated cost of tender is less than Rs.100 Lacs, the EMD is payable as under:

- 100 % of EMD by online mode in favour of Gujarat Energy Transmission Corporation Ltd. on any Scheduled Bank in Bharuch

The estimated cost for this Tender along with EMD is mentioned on tender notice.

3.2 Payment by Cheque/Cooperative Bank Guarantee/ Company Guarantee is not permissible.

4.0 Declaration by Bidder:

The Bidder shall sign the Declaration enclosed to this SCC and not furnishing the same will make the Bid invalid.

5.0 Qualifying Criteria:

5.1 TECHNICAL CRITERIA:

Experience as per qualifying requirement.

5.2 FINANCIAL CRITERIA:

The financial turnover of bidder (Financial year) shall not be less than Rs. 10 lacs during last 3 (three) Financial years.

Registration of appropriate class with GETCO and validity of the registration should be furnished along with the technical bid. Latest Bank solvency certificate of 20% of the tender value is required to be furnished by the tenderer along with the technical bid.

6.0 Additional Documents:

Apart from various documents to be furnished along with the Bid as required in the GCC and ECC, the following documents/details are to be furnished by the Bidder:

1. GST Registration No. Date/ issuing authority.
2. Details of Partners/Directors of the Firm/Company.
3. Experience Record and details of orders pending / executed for various utilities
4. Last three years Audited Accounts/IT returns
5. Electrical contractor's license with latest validation.
6. PF registration along with proof of challan etc.
7. Solvency certificate from Bank (up to 20 % of Bid value).
8. PAN

7.0 Price Inclusions (including Taxes & Duties):

- 7.1 The prices quoted shall be all inclusive of freight, octroi, transportation, loading, unloading & stacking at site of equipment materials received from Transmission store GETCO Bharuch after observing all store formalities of GETCO.
- 7.2 No extra payment toward any type of templates and erection tools /materials will be made.

7.3 GOOD & SERVICE TAX (GST):

The F.O.R. Destination prices are excluding GST and Cess as applicable which will be paid extra on a given taxable goods and/or services within the original contractual delivery period. The amount and% of GST and Cess as applicable should clearly be indicated separately. (GST/Cess means all applicable Tax/Cess under GST Laws. GST Laws means IGST Act, GST (Compensation to the State for Loss of Revenue) Act, CGST Act, UTGST Act and SGST Act, 2017 and all related ancillary legislations).

You shall have to submit a C.A Certificate duly authorized Signatory of successful bidder, certifying that you have not claimed Refund of any applicable GST and Cess, charged to COMPANY or shall not claim any such Refund, on a future date, from the concerned Authorities and if, any Refund, in respect of such GST and Cess, is claimed by you, it will be immediately passed on to the COMPANY, without COMPANY making any specific Claim, for the same, either from the Department or from you.

The offers having price INCLUSIVE OF GST and Cess is likely to be rejected if the rate of GST and Cess is not mentioned clearly unless the bidder has opted for Composition Scheme under GST Act, which should be clearly indicated in the price bid. COMPANY may at its discretion consider such offer with presumption of highest applicable rate of VAT/GST/Cess prevailing when the price quoted is inclusive of GST and Cess.

If the Supplier/Contractor has opted for the Composition scheme of GST, the same must be clearly specified with valid Declaration & Certificate from Department. In the event of withdrawal/cessation of the Supplier from Composition scheme during the tenure of the contract, the rate mentioned in the price bid shall be final and any additional GST will have to be borne by the tenderer. In no case additional amount towards tax or otherwise will be paid / reimbursed to supplier/contractor. Further Statutory Variation clause will not be applicable in case of Supplier / Contractor has opted for Composition Scheme under GST.

- i. Contractor has to submit the GST Registration certificate.
- ii. Contractor has to submit invoice/Challan as documentary proof with each RA bill & Final Bill and in which it shall be specifically mention the nature of service & code SAC code under which the amount of service tax GST payable by contractor and payable by GETCO (if any) without fail.
- iii. GETCO will withheld the GST amount of contractor and it shall be reimbursed on production of documents evidences of payment made by contractor
- iv. The Contractor has to submit invoice to GETCO indicating following.
 - Name, address and GST registration no. of the service provider

- Name and address of person receiving the service i.e. GETCO
- Description and value of taxable service provided
- The total GST payable thereon with bifurcation of GST payable by service provider and service receiver.
- Rate and amount of taxes i.e. CGST/ SGST/ IGST/UGST
- Place of supply along with the name of State, in case of a supply in the course of inter-State trade or commerce i.e. Out of Gujarat Supply
- Applicable SAC Code
- Contractor has to also supply tax invoice as described under GST rules and Regulation indicating GSTIN

v. Contractor has to provide Tax invoice in a standard format as per CGST act, CGST rules 2017 and GST invoicing rules containing all details as provided in Act and rules. Contractor / Supplier has to mention GST no. of GETCO i.e. 24AABCG4029R2ZC in the invoice invariably & failure of which payment will not be made.

Supplier/Contractor should charge GST in Invoice at the rate as agreed to / mentioned in acceptance of tender only and any deviation in the same shall not be accepted. Further, any additional liability of GST (later on due to wrong mentioning of GST rate, mis-interpretation of HSN/SAC Code, etc.) over and above as charged in the invoice shall be borne by the Supplier/Contractor. However, any refund received by the supplier / contractor on account of GST charged from the company; such refund shall have to be passed on to the company, along with interest if any. Such refund along with interest needs to be passed on suo-moto by the supplier / contractor.

Further, the Company has a right to recover the amount of GST along with penal interest at the rate of 15% per annum if GST charged is not paid / short paid to the government or fail to upload the details or uploads inaccurate particulars on GSTIN portal by the Supplier / Contractor within the stipulated time limit.

In case, Govt. revises the rate of GST rate / Code during the tenure of the contract, the provision of GUVNL's statutory variation clause shall apply.

Also, please mention separate applicable HSN / SAC Code and rate of GST and Cess as applicable for each item of Goods/Service. If not specifically mentioned, then COMPANY will have the option to take the prices as exclusive of taxes and duties at maximum higher slab rates for the evaluation of the tenders.

Every bidder shall inform their GSTIN No. of the registered place(s) where from the bidder intends to supply the goods /services, meaning thereby the bidder has to supply the goods / services from the relevant declared / registered place of supply only

INPUT TAX CREDIT BENEFIT

In the event of any statutory increase in the rate of Input Tax Credit and / or due to inclusion of any other additional item of their inputs / input services under the ambit of the Input Tax Credit provisions under the GST Act, subsequent to the date of submission of the offer, the same should be passed on to COMPANY and you should inform such changes to COMPANY from time to time.

TDS UNDER GST:

Tax deduction at Source (TDS) under GST at the prevailing rate will be deducted from bills in accordance with the provision of Section 51 of the CGST Act, 2017 and to that effect a certificate will be issued to the party.

Goods and Service Tax Compliances (GST):

The GST at the applicable rates will be levied on the total of Schedule-B. GST on the work executed will be subject to CGST Act, SGST Act, IGST Act, UTGST Act its rules, regulations and notifications, circulars issued and in force time to time by Government and M/s. GETCO. Contractors are required to clarify the product and services related HSN codes and SAC codes respectively.

GETCO reserve right of re-classify, in case of mis-classification of goods and/or service (HSN/SAC codes) Sec. 171 of CGST/SGST Act contains provisions related to anti-profiteering. On the basis of same on introduction of GST, the Vendor should pass on the tax benefit/savings, if any, on account of tax credits or lowering of tax rates to us by way of adjustment in the contract price. Non-compliance of the same may lead to levy of penalty by Government.

Contractor required to submit the invoice as per the standard formats/contents of GST laws including invoice ruling. GST will be reimbursed subject to proper/valid matching of transactions/invoices on GSTN (GST network).

The contractor is abiding by the all rules and regulations of corporation and amendments, which may publish subsequently for compliance by field offices with respect to GST Laws.

7.4 Statutory Variations:

Any statutory increase or decrease in the taxes and duties including GST and Cess as applicable or in the event of introduction of new tax/cess or cessation of existing tax/cess subsequent to suppliers offer if it takes place within the original contractual delivery date will be to COMPANY's account subject to the claim being supported by documentary evidence.

However, if any decrease takes place after the contractual delivery date, the advantage will have to be passed on to COMPANY. Statutory Variation clause will not be applicable in case of Supplier / Contractor has opted for Composition Scheme under GST.

7.5 Income Tax

Income tax at source at the prevailing rate will be deducted from bills in accordance with the provision of Income-Tax Laws and to that effect a certificate will be issued to the contractor.

7.6 Welfare Cess

- As per the Welfare Cess Act, the welfare cess @ 1% is applicable on supply and erection items for supply, erection, testing & commissioning of substation, transmission lines, EPC/Turnkey projects and civil works.
- Contractor shall get registered under Welfare Cess Act before commencement of work. Office of the Factory Inspector is authorized at present as a registering authority.
- The welfare cess@1% is considered in the price schedules so, the bidders are requested to quote accordingly.
- GETCO shall pay the welfare cess by way of reimbursing to contractors on production of documentary evidence of payment.
- The contracts for which supply or part supply of material are in the scope of GETCO, then contractors shall deposit welfare cess on estimated cost of supplied items to GETCO on progressive basis of utilization. As this part of welfare cess is on GETCO account, the same shall be reimbursed to the contractor on receipt of request letter along with documentary evidence of payment. For calculation of welfare cess on supply part, valuation as per MR shall be taken and informed to the contractor for payment. This will be over and above the A/T value.

- In case of EPC contracts covering supply, erection, testing & commissioning, the supply portion shall also be considered for calculation of welfare cess.
- If GETCO purchases material on its own without any reference to the estimate contract and gives/hand over the material to the contractor for erection, testing & commissioning, then welfare cess on procurement cost of the equipment of material shall also be applicable. Procedure same as narrated above.
- Periodically, the evidence regarding filing of return and maintaining record as per the Act by the contractor shall be verified by GETCO.

The modality of payment/ reimbursement of welfare cess will be as under.

- On receipt of A/T, the contractor / bidder will get them registered under Welfare Cess Act and submit the documentary evidence to the concern office.
- Before release of payment of first R.A.Bill, the contractor has to submit the documentary evidence of registration. Only thereafter, the bill will be processed for payment.
- Before release of payment of subsequent R.A.Bills, the contractor has to submit the documentary evidence of payment of welfare cess of previous R.A.Bill.
- Before release of payment of final bill, the contractor has to submit documentary evidence of payment of welfare cess of previous R.A.Bill as well as of this final bill.
- If the R.A.Bill happens to be first and final bill, then before release of payment, contractor has to submit documentary evidence of registration under Welfare Cess Act and evidence of payment of welfare cess.
- The welfare cess shall be reimbursed to the contractor on submission of copy of documentary evidence of payment by observing due formalities.

8.0 SECURITY DEPOSIT

8.1 The successful bidder has pay security deposit within 10 days of receipt of LOI.

8.2 The successful bidder will be required to pay an amount equivalent to 5 % of the value of the order as a Security Deposit for satisfactory execution of the contract. Such Security Deposit will be payable either in DD payable at Bharuch /Bank guarantees from following Banks will be acceptable.

8.3 If the Contractor defaults in execution of the orders placed or if COMPANY suffers any financial loss due to this, then COMPANY will be forfeited Security Deposit, EMD plus GST as applicable from other orders of the same firm or by encasing the Bank Guarantee

(A) Guarantees issued by the following Banks will be accepted as SD/EMD on permanent basis.

1. All Nationalized Banks

(B) Guarantees issued by following Banks will be accepted as SD/EMD for the period up to March- 31, 2027 or the issuance of new Government Resolution on the same subject whichever is earlier. The validity cut-off date in GR is with respect to date of issue of Bank Guarantee irrespective of date of termination of Bank Guarantee.

1. Axis Bank
2. AU Small finance bank
3. Bandhan bank
4. City union bank
5. CSB bank
6. DBS Bank India limited
7. DCB Bank
8. Dhanlaxmi Bank
9. Equitas Small Finance Bank
10. FEDERAL Bank
11. HDFC Bank
12. HSBC Bank
13. ICICI Bank
14. IDBI bank

15. IDFC First bank
16. Indusland Bank
17. Jammu & Kashmir Bank
18. Jana Small Finance Bank
19. Karnataka bank
20. Karur Vysya bank
21. Kotak Mahindra Bank
22. RBL Bank
23. South Indian Bank
24. Standard Chartered Bank
25. Tamilnadu Mercantile Bank
26. Ujjivan small finance bank
27. Yes Bank
28. Ahmedabad Mercantile Co-Op. Bank
29. Nutan Nagrik sahkari Bank ltd.
30. Rajkot Nagrik sahkari Bank ltd.
31. Saraswat Co-operative bank
32. SBPP Co op bank
33. SVC Co-operative Bank Ltd.
34. The Cosmo Co op Bank
35. The Gujarat State co-operative bank
36. Surat District Co-op bank
37. Surat people's Co-op. bank
38. Baroda Central Co-Operative Bank
39. Panchmahal Dist Co-Op Bank
40. Kalupur commercial Bank
41. Rajkot commercial Co-op Bank
42. Banaskatha Mercantile Co-Op Bank
43. Gujarat Gramin bank

8.4 No interest will be allowed on amount of Security deposit.

8.5 The Security Deposit- total shall be kept deposited up to completion of work finalization of final bill. The same shall be return on receipt of N.O.C. by the concerned **DE after observing GETCO's procedure.**

8.6 This security deposit is for the performance of contract and the same is liable to be forfeited by the GETCO in event of non-fulfillment of the term and conditions of this contract by the contractor.

8.7 Corporate Guarantees are not admissible.

8.8 The 'Signing of Contract ' and ' Contract Agreements' will be done as per prevalent GETCO Terms and Conditions.

9.0 GUARANTEE PERIOD:

Total work executed shall be covered under guarantee period against any defect in poor workmanship etc. for a period of one year from the date of commissioning.

10.0 PENALTY FOR DELAY:

10.1 The tenderer should note that the completion time allowed for carrying out the work should be strictly observed. Any delay that may take place in supply and erection beyond Contractual cutoff date stated as per stipulated delivery period shall be subject to the penalty at the rate of ½ % of the contract value per week **plus GST** of delayed work or part thereof, with a ceiling of 10 % of the total contract value **plus GST**.

10.2 The penalty will be deducted from bills payable either against this contract or from any Bank Guarantee or any other amount payable under any other contract with the GETCO.

10.3 If the contractor fails to complete the job in stipulated time period/leaves the site with incomplete work, GETCO will get the remaining work executed at the risk & cost of contractor.

11.0 COMPLETION PERIOD

11.1 Overall period for this Contract will be 90 days from the date of commencement.

11.2 No mobilization period, idling or stoppage period will be allowed during this period of the Contract.

11.3 The completion date will be deemed to be the date on which all works on the Contract are demonstrated to be complete to the satisfaction of the GETCO/Engineer and is complete in all respects as per the terms and conditions of this Contract.

12.0 Presentation of Bills for s/s work

12.1 Monthly RA bills for 90% value of the supplied tower material and work executed including cost of material consumed is to be prepared in triplicate and submitted to Site Engineers in-charge of the work, for necessary payment. These bills shall be serially numbered with suffix SE-I.

12.2 Balance 10% payment shall be released only after finalization of material account and passing of final bill. The contractor has to submit the final bill along with the material consumption statement and other required data of the work carried out within 3 months from the date of completion of work. These bills shall be serially numbered with suffix SE-I.

12.3 All the bills in accordance with the above clauses must be submitted with the following information:

- a) Item wise work done during billing period.
- b) Item wise cumulative work done.
- c) Account for material consumed and balance stock.

12.4 For non-submission or part submission of above information, an additional 5% amount of the respective RA bill shall be withheld and shall only be released at the time of final bill.

12.A Presentation of Bills for line work

12.A.1 Bills for 90% value of the erection work carried out during each calendar month as per above Clause shall be submitted in triplicate to Deputy Engineer (Const), In charge of the works at the end of that particular month, who will in turn process the same and forward to Executive Engineer (Const), In charge of the works, for necessary payment. These bills shall be serially numbered with Suffix-E-1.

12.A.2 Bills for 10% value of the erection work done as per above clause shall be submitted to Deputy Engineer (Const), in charge of the works, who will in turn process them and forward them to Executive Engineer (Const). I/C of the work for necessary payment. These bills shall be serially numbered with Suffix-E-2.

12.A.3 The Contractor has to submit the final bill along with all required data of works carried out within 3 months from the date of commissioning of the line. The concern Dy.Engr /Ex.Engr (Const) must record and process the final bill along with complete material account. The material account shall include the credit of dismantled materials.

12.A.4 All the bills (in accordance with above Clauses) must be submitted with following informations:

- a. Item wise work done during billing period i.e., respective month.
- b. Item wise cumulative work done.
- c. Account for tower materials & bolts-nuts, accessories consumed and balance stock.
- d. Account of line materials consumed, wastages and balance stock.

For non-submission OR part submission of above information an additional 5% amount of the respective RA. Bill will be withheld and released only after passing of final bill.

13.0 Terms of Payment

The payment for work done shall be made as under only after execution of the contract documents/furnishing of Security Deposit and on execution of substation erection work in scope of work order.

13.1 For erection works of s/s.

- (i) 90% payment of amount claimed covering various activity such as structure, equipment erection, earthing installation, control wiring, battery charging etc. works against R.A. bills duly certified by EIC within 60 days from the date of R.A. bill.
- (ii) Balance 10% of erection value shall be paid against completion of work only after settlement of material account statement of items used, erected and successful commissioning of transmission line the same amount will be release in final bill only and payment will be made only after passing of final bill.

13.A For erection works of line

13.A.1 Payment shall be made as under:

Up to 90% of the total value of the erection work done will be paid against monthly running account bills to be submitted to the Engineer-in-Charge of the Construction Division concerned.

Balance 10% payment due will be made at the end of 12 months from the date of handing over of the line or 18 months after completion of the line to the satisfaction of the Superintending Engineer (Trans), Bharuch at his absolute discretion whichever is earlier only after passing of final bill.

- 13.A.2 The payment of above balance 10% amount due will be made only after a material account statement of items received and used or returned to stores is settled and passing of final bill. The contractor must settle final bill within 3 Months from the completion date. Any discrepancy in the quantities will have to be made good by the contractor or deduction of its cost as per The GETCO's ledger value or market value whichever is higher, plus 15% supervision charges will be made while settling the balance payment. This value of materials shall be prevailing on the date of submission of the final material account to the GETCO.

13.2 PAYMENT TERMS UNDER MSME ACT:

- (1) You have to update your MSME detail on GETCO's website by following link <https://getco.co.in/msme/> (and intimate to concern bill submitting office with copy to this office).
- (2) The payment will be made within 45 days from the *date of acceptance or the **date of as deemed acceptance of goods or services i.e After submission of all required documents as per at terms & time to time circular issued by GETCO's corporate office as well as statutory requirement to process the bill.

***Date of acceptance means-**

- (a) The day of actual delivery of goods or the rendering services or
- (b) Where any objection is made in writing by the buyer regarding acceptance of goods Or services, the day on which such objection is removed by the supplier.

**** Date of deemed acceptance” means-**

where no objection is made in writing by the buyer regarding acceptance of goods or services within fifteen days to the delivery of the goods or the rendering of services, the day of the actual delivery of goods or the rendering or services.

14.0 TAKING DELIVERY AND INSURANCE:

- 14.1 The contractor has to take delivery from Transmission store of S/S equipment and materials and keep in safe custody and transport to the respective sites and will be fully responsible for any damage to or loss of all materials at any stage during transportation or erection or taking over of the S/S by GETCO.
- 14.2 The Contractor has to open site store and ensure for safe custody of all the stored materials at his own cost.
- 14.3 The Contractor shall have total responsibility for the entire materials stored, loose, semi assembled and/or erected by him at site in his custody. The Contractor shall make suitable security arrangements at his own cost to ensure the protection of all materials, equipment and works from theft, fire pilferage and any other damages and loss. It shall be the responsibility of the contractor to arrange for security till the works are finally taken over by the GETCO.

- 14.4 **STORAGE-CUM-ERECTION INSURANCE:** The contractor shall take suitable storage-cum-erection insurance cover at his cost to the extent of 100 % cost of S/S materials, which are required to complete the work. Bidder shall have to take the comprehensive Marine cum erection (MCE) insurance policy against any loss, damage, theft, pilferage, fire etc. for the complete period of storage, erection and commissioning up to the time of taking over of the work by GETCO. **However, if the work is not completed within the stipulated time limit as mentioned into work order, the MCE shall be extended by the contractor up to the work completion and taking over of the line or S/S by GETCO. Moreover, the charge for extension of insurance shall be borne by contractor if the delay is attributed to the contractor. The charge for extension of insurance shall be reimbursed by GETCO to the contractor on production of proof for extension of MCE if the delay is attributed on the part of GETCO**

The Contractor shall deal directly and pursue the claim with the Insurance Company and shall be responsible in regard to maintenance of all insurance coverage as well as for settlement of claim. The proof of insurance policy taken by the successful Contractor shall be furnished/submitted to Engineer-In-Charge of GETCO.

No material shall be issued to bidder/erection agency in absence of such insurance policy. The risk shall be covered for lifting of materials from store to final handing over to GETCO. Further, in absence of the above insurance policy, R.A. Bill payment will be withheld.

The approximate amount of the material required whose insurance is to be taken to complete the scope of work is **Rs. 1272 LAKHS**

- 14.5 In the event of any damage, theft, loss, pilferage, fire etc., Contractor will be responsible to lodge, pursue and settle all the claims with the Insurance Company for all items, materials and the GETCO shall be kept informed about it. Contractor shall replace the lost / damaged materials / items promptly irrespective of the settlement of the claims by underwriter and ensure that the work progress is as per agreed schedule. The loss, if any, such replacement will have to be borne by the Contractor and GETCO will not entertain any claim / representation in this regard. However, it will be contractor's responsibility to insure the entire project till the S/S is taken over by the GETCO.

15.0 LABOUR LAWS:

- 15.0.1 Persons below the age of 18 years shall not be employed for the work. No female worker shall be employed in the night shift between 07.00 p.m. and 06.00 a.m. next day.

15.0.2 Contractor shall maintain a valid labour license under the contract Labour (Regulation and abolition) Act for employing necessary manpower required by him. In the absence of such license, the contract shall be liable to be terminated without assigning any reason thereof.

15.0.3 The Contractor shall at his own expenses comply with all labour laws and keep the GETCO indemnified in respect thereof. Some of the major liabilities under various labour and industrial laws which the Contractor shall comply with, are as under:

- i) Payment of contribution by way of Employer's Contribution towards provident Fund, Family Pension Scheme, Deposit Linked Insurance Scheme, Administrative charges, etc. at the rates made applicable from time to time by the Government of Gujarat / Government of India or other Statutory Authority.
- ii) Payment of deposit in respect of each contract labour at the rate of Rs. 30/- or later prevailing rate with the Office of Commissioner of Labour as per the Contract Labour (Regulation and Abolition) Act.
- iii) License fee as prescribed under the Contract Labour (Regulation and Abolition) Act and Rules framed there under depending upon the number of workmen.
- iv) Paid leave facility and wages as per the provision of the Factories Act at the rate of one day for every 20 days of working.
- v) Identity cards as prescribed under the Factories Act with photo affixed thereto, for identification.
- vi) Payment of retrenchment compensation, Notice Pay and other liabilities as per Industrial Dispute Act. Any payment to the Contractor's employee arising out of any claim of disputes under the Industrial Disputes Act 1947 or any other Labour Laws.
- vii) Payment of compensation in case of accidental injury.
- viii) Provision of crèche if the female laborers employed are more than 30.
- ix) Maternity Leave as per the provisions of the Maternity Benefit Act.

The above are some of the major liabilities of the Contractor in addition to other liabilities prescribed under the various labour laws, in force from time to time, from Statutory Authorities like State Government/ Government of India, which the Contractor shall have to comply with.

15.1 PROVIDENT FUND AND FAMILY PENSION SCHEME:

The Contractor shall submit along with his bills (month wise) a statement regarding deduction against employees Provident Fund and Family Pension Scheme in respect of each concerned employee. Provident Fund and Family pension Scheme at the rate of 18% (or at the rate made applicable by the Government from time to time of the wages. The Contractor's contribution and his workers contribution towards Provident Fund and Family Pension Scheme shall be deposited by the Contractor with Regional Provident Fund Commissioner, Ahmedabad.

15.2 DEPOSIT LINKED INSURANCE SCHEME

The contractor shall have to deposit ½ % of the wages in respect of employees who is a member of the Provident Fund, as the contribution to the Deposit Linked Insurance Scheme with Regional Provident Fund Commissioner, Ahmedabad.

15.3 ADMINISTRATIVE CHARGES:

Administrative charges for maintaining Provident Fund Account shall be deposited by the Contractor with Regional Provident Fund Commissioner, Ahmedabad at the rates applicable.

15.4 PAID LEAVE FACILITY:

Paid Leave Facility at the rate of one day for every twenty days worked by the Contract Labour, shall be provided by the Contractor to his workers. He shall

maintain Leave Records, Leave Cards, for individual labourer, which shall be duly verified, approved and certified by the authorized Officer of the GETCO.

15.5 WORKMAN'S COMPENSATION FUND AND EMPLOYER'S LIABILITY INSURANCE:

The contractor shall cover all his employees under workmen's compensation fund and under the liability insurance. The purchaser shall not be responsible for any payments of compensation to the workers/supervisor of the contractor for fatal or non-fatal accidents during the pendency of the contract.

15.6 The contractor shall employ adequate number of experienced skilled at site for daily supervision and for maintenance of various registers and records required under the law and contract. No payment for supervision shall be admissible.

15.7 CONTRACTOR TO INDEMNIFY THE GETCO:

The Contractor shall Indemnify the GETCO and every member officer and employees of the GETCO also, Engineer-in-Charge and his staff against all actions, proceedings, claims, demands, costs and expenses whatsoever, arising out of or in connection with the matters referred herein above elsewhere and against all actions, proceedings, claims, demands, costs and expenses which may be made against the GETCO or Government for or in respect of performance of his obligation under the contract documents. The GETCO shall not be liable for intervention of authority Government for or in respect of performance of his obligation under the contract documents. The GETCO shall not be liable for or in respect of or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or his Sub-Contractor and the contractor shall indemnify and keep indemnified the GETCO against all claims, demands, proceedings, cost, charges and expenses whatsoever in respect thereof or in relation thereto.

15.8 WORKMEN'S COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

Insurance shall be affected for all the Contractor's employee engages in the performance of this contract. If any of the work is sublet, the Contractor shall require the Sub-Contractor to provide workmen's employer's liability insurance for the latter's employees, such employees shall be covered under the Contractor's Insurance.

15.9 WAGES TO BE PAID & TIME OF PAYMENT ETC. BY THE CONTRACTOR

- a) The Contractor shall pay minimum wages per day to his Labours/ Workers as per rates fixed under the minimum wages act. The wages of every Contract Labour employed by him under this contract shall also be paid by him before the expiry of 7th day of the last day of the month in respect of the wages are payable (i.e. wages of a month have to be paid by him in the first week of the next month). Any default will result in cancellation of contract forthwith or else the contractor shall be punishable to the extent of Rs. 100/- per each day or as per the prevailing rules of labour laws.
- b) The Contractor shall give his Telephone Number and Address to the GETCO, so that, in case of labour trouble etc. the Contractor can be contacted. The Contractor shall arrange to have his office outside the factory work premises and the Contractor shall arrange to have his office outside the factory work premises and the Contractor shall keep himself present throughout the working hours.

15.10 REGISTRATION WITH PROVIDENT FUND OFFICE

- I) The separate P.F. code issued from P.F. commissioner is required to be taken by contractor.
- ii) If the contractor does not possess separate P.F. code number of RPFC, his tender will not be considered for acceptance.
- iii) The contractor should mention separate P.F. code number allotted by PPFC, along with the tender.

15.11 Termination of Contract:

In case of contractor fails to deliver the stocks or any consignment thereof within contractual period of delivery or in case the stores are found not in accordance with prescribed specification and/or the approved sample, the GETCO shall exercise its discretionary power either:

15.11.1 To recover, from the contractor as agreed, by way of penalty clause above, or

15.11.2 To purchase from elsewhere after giving due notice to the contractor on account and at the risk of the contractor for such stores not so delivered or other similar description without canceling the contract in respect of the consignment not yet due for delivery or

15.12 To cancel the contract.

In the event of the risk purchase of stores of similar description, the opinion of the GETCO shall be final. In the event of action taken under clause (A) or (B) above, the contractor shall be liable to pay for any loss which the GETCO may sustain on that account, but the contractor shall not be entitled to have any saving on such purchases made against default.

The decision of the GETCO shall be final as regards to the acceptability of stores supplied by the contractor and the GETCO shall not be required to give any reason in writing or otherwise at any time for rejection of the stores.

15.12.1 MATCHING OF END COST:

In case the GETCO decides to award contract on matching end-cost basis, the bidder has to reduce all the quoted rates proportionately. The reduction on overall basis will not be accepted (i.e. all unit rates of erection schedule shall be reduced proportionately by difference in percentage). The confirmation for matching end cost shall be given within 7 (seven) days from the letter from GETCO.

16.0 VENDOR REGISTRATION:

REGISTRATION AS A CONTRACTOR:

Registration with GETCO is pre requisite for participating in tender. It is required to furnish documents of registration along with offer in Technical bid and the details at appropriate place in confirmation of details of bidder shall be given by the contractor

17.0 Placing Vendors/Contractors for Purchase/Works in a Stop deal/Banned for business dealing/blacklisting:

1.1. Stop deal / banned for business dealing / blacklist means debarment of parties from participating in the tendering process.

1.1.1. Firm will mean Bidder / Licensor / Tenderer / Consultant / Vendor / Contractor.

1.1.2. Reasons for Putting a Firm on Stop deal / banned for business dealing / blacklisting, is to protect the GUVNL and its subsidiary Companies from dealing with undesirable firm.

1.2. The list of indicative reasons for placing the firm in a Stop deal / banned for business dealing / blacklist are as Under.

A Firm will be placed in a Stop deal / banned for business dealing / blacklist, if the Firm-

1.2.1. Has submitted fake, false or forged documents / certificates,

1.2.2. Has revised / withdrawn price bid after opening of Techno - commercial bid, until and unless it is sought for,

1.2.3. Has tampered with the stipulated tendering procedure.

- 1.2.4. Has refused to accept letter of Acceptance / purchase Order / Work Order after the same is issued by the Company within the validity period and as per agreed terms and conditions,
- 1.2.5. Has committed breach of contract or has failed to perform a contract or has abandoned the contract,
- 1.2.6. Has failed to provide suitable expertise for the work as per per-scheduled program.
- 1.2.7. Has failed to submit all the necessary tests reports / documents within time schedule/ as per company's time limit, as mentioned in the LOI, if the letter of Acceptance (LOA) is placed subject to submission of type reports / documents to the firm.
- 1.2.8. Has indulged in construction and erection of defective works.
- 1.2.9. Has supplied inferior quality / defective materials and refused to replace with stipulated time frame, as specified by the company,
- 1.2.10. Has substituted materials in lieu of materials supplied by the company or has not returned or has short returned or has unauthorisely disposed of materials / documents / drawings / tools or plants or equipment supplied by the Company,
- 1.2.11. Has involved in malpractices such as bribery, corruption, fraud, canvassing and pilferage,
- 1.2.12. Has unauthorisely obtained official company information or copies of documents, in relation the tender / Contract.
- 1.2.13. Has failed to follow the stipulated mode of communication, if specified by the tendering authority / purchaser.
- 1.2.14. Has parted with, leaked or provided confidential / proprietary information of the Company given to the firm only for its use (in discharge of its obligation against an order) to any third party without prior consent of the Company,
- 1.2.15. Any other ground for which in opinion of the company makes it undesirable to Deal with the Firm, and
- 1.2.16. In case the State Government directs the Company to place a firm in stop dealing / banned for business dealing / banned for business dealing / blacklisting.
- 1.3. Every bidder should at the time of submission of bid, give a declaration that bidder and / or proprietor / partner / Director of the firm has not been placed on stop dealing / banned for business dealing / blacklisting by GUVNL and It's any subsidiary Companies **as per Revised ANNEXURE-14**

18.0 CERTIFICATE

Sub.: **Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture etc at 66 KV Mota Borasara-2 SS under construction Division Bharuch**

In connection with above subject, I / we confirm the following:

a) I/ we, the undersigned, have read and understand the Tender No. **TCBRH/26-27/2613** For **Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture etc at 66KV Mota Borasara-2 SS under construction Division Bharuch** complete with all the tender Terms and Conditions.

b) The price in the bid is firm prices in line with Tender Specifications and shall stand valid till completion of the Contract, if awarded.

c) I/We declare that our bid is strictly in line with Tender Specifications and there is no deviation. Further, I / we also agree that additional conditions / deviations, if any found in bid, the offer shall be out rightly rejected without assigning any reason thereof.

Signature of Authorized representative
of Company / Agency

NAME: _____

STATUS: _____

Name of BIDDER

19. The GETCO reserves the rights of interchanging and dismissing any person employed for the work if there is complaint against his misbehavior, misconduct or disloyalty towards job.

20. Terms and conditions regarding industrial laws and other related matters shall be complied by the contractor in all respect.

21. The contractor shall ensure that all persons have provided safety tools, shoes, hamlets etc. as may be required for safety point of view and all his persons shall follow the instructions issued by the GETCO from time to time in concern with the safety and security as the work to be carried out.

CONFIRMATION OF DETAILS OF BIDDER

Bidders are required to furnish following information & should place on top of technical bid specifying YES / NO

- | | | |
|-----|--|----------|
| 1) | Whether the Bid is on percentage basis as called for. | Yes / No |
| 2) | Whether rebate furnished is in percentage basis as called for. | Yes / No |
| 3) | Whether the Bid is submitted by RPAD/Speed post. | Yes / No |
| 4) | Whether all pages of Bid Specifications are sealed and signed by the Bidder. | Yes / No |
| 5) | a) Whether the Bidder is registered with GETCO | Yes / No |
| | b) In case of "Yes", please furnish following details: | |
| | i) Registration Letter No. & date. | |
| | ii) Class of Registration | |
| | iii) Validity | |
| | c) Whether Bidder is having PF Code No. | Yes / No |
| 6) | a) Whether EMD paid. (DD / BG) | Yes / No |
| | b) In case "Yes", furnish details | |
| 7) | Whether following documents as specified are submitted. | |
| | a) Human Resources detail. | Yes / No |
| | b) Availability of tools, equipments etc. | Yes / No |
| | c) Details of orders executed / on hand | Yes / No |
| | d) Financial capability. | Yes / No |
| | e) Experience as specified. | Yes / No |
| | f) Latest Income-tax certificate | Yes / No |
| | g) Company's Articles Of Association | Yes / No |
| | h) Details Of Partners / Directors | Yes / No |
| | i) B.R./P.A. Authorizing Person | Yes / No |
| | j) Power of Attorney of Consortium Members | Yes / No |
| 8) | GST [IN PERCENTAGE]
Please quote your GST Registration No. & Date. | Yes/ No |
| 9) | PENALTY TERMS AGREE | Yes/ No |
| 10) | SECURITY TERMS AGREE | Yes/ No |
| 11) | PAYMENT TERMS AGREE | Yes/ No |
| 12) | Completion Period Agreed | Yes/ No |
| 13) | TELEPHONE NOS. & FAX NO. & e-mail ID | |
| 14) | AUTHORISED PERSON OF THE FIRM: | |
| 15) | NAME OF THE PROPRIETOR, PARTNERS, DIRECTORS | |

[AS THE CASE MAY BE], ALONG WITH ADDRESS, TELEPHONE, FAX NO. etc.

**Signature of Authorized Representative
of Company/Agency**

NAME: _____

STATUS: _____

Name of tendering company

PART - II

TECHNICAL PARTICULARS FOR ERECTION OF EQUIPMENT AT SUB-STATION

3.1 SCOPE:

- 3.1.1 The scope for erection works covered under this section consist of :
- i) Taking delivery of equipments and other material from the Board's stores, checking them, transporting to site's stores and keeping in safe custody by contractor.
 - ii) To take suitable storage-cum-erection insurance of equipments/materials issued by the Board.
 - iii) Distribution of all materials to erection site at 66kv Sub Station.
 - iv) Structure/Equipment erection including fixing of attachments, accessories and tack-welding of structures.,
 - v) Stringing of ACSR/AAAC Panther conductor bus with fixing of insulators, Hardware, dampers, spacers etc.
 - vi) Workmanship guarantee of all the activities carried out from (i) to (v).
- 3.1.2 The successful Contractor shall carry out all addition/alteration required to complete the transformer for commissioning.
- 3.1.3 The Board will supply equipments, structure materials, bolts-nuts, structure accessories/attachments, insulators, insulator-hard wares, conductor, accessories, ground wire, ground wire accessories, Control cable etc. required for erection of equipments and other associated works.
- 3.1.4 All works shall be carried out in accordance with the revised and latest Provisions under Indian Electricity Act and Rules made hereunder.
- 3.1.5 The contractor at his own cost shall arrange all the erection tools required during execution of work. The Contractor solely is responsible for any damage and / or loss of his erection tools.
- 3.1.6 The Contractor shall be fully responsible for completing all the above works till the complete transformer is taken over by the Board, and thereafter up till guarantee period.
- 3.1.7 The methods of erection are not dealt with in detail but are left to the Contractor who shall exercise his own judgment with regards to actual handling of equipments & materials and in deciding upon the best methods to be adopted for all the erection activities.
- 3.1.8 The successful bidder shall carryout all the erection works in accordance with structural drawings, and other erection drawings etc. provided by the Board.

3.2 LAYOUT OF SUB STATION

- 3.2.1 The proposed layout of the substation is available with concerned field office. The bidders are presumed to have acquainted themselves with the site before submitting their offer.
- 3.2.2 The successful bidder has to collect from concerned field office the detailed layout drawing along with the following drawings for the substation duly approved by the Board immediately on receipt of the Order. He shall also arrange visit of

proposed site jointly with Board's representative for important marks coming across the scope of works under the contract. Structural drawings of 66 KV Structures listed at Schedule -B

3.3

TECHNICAL INSTRUCTIONS TO THE BIDDER

- 3.3.1. The works shall be carried out strictly as per the erection manuals and shall fully comply with the relevant Indian Standard. The IE rules and Acts in force from time to time shall also be applicable during pendency of the contract.

3.4. **ERECTION AND COMMISSIONING TOOLS & TACKLES.**

- 3.4.1 The contractor shall provide all tools/tackles, jigs and fixtures, winches, alignment tools, welding sets, , breaker handling devices, all consumable items and Transmission equipment as required to install the equipments and to complete the work in all respects and shall necessarily include (but not limited to) bolts, nuts, rivets, welding rods, shims, wedges, packing sheets, packing compounds, oil installation and protection of individual equipment in storage and during erection.

- 3.4.2 This shall also cover proper alignment, tack welding tagging, laying marking of and connection of cables, fabrication supply and installation of all support structures for installation of various electrical equipment and cables

- 3.4.3 Provision of cable glands, ferrules, and cable lugs tags sealing kit (for HT cables) shall also be arranged by the contractor.

- 3.4.4. Erection of various equipment shall be done strictly as per manufacturer's instructions

- 3.4.6 All additional iron framework erected to put the equipment in operational condition shall be provided with two coats of primer and two topcoats of finish paint.

- 3.4.7 Special care shall be taken to make the enclosed equipment protected against entry of rats, lizard, and creeping reptiles, which may create electrical short circuits.

3.5.0. **COMPLETION OF ERECTION (GENERAL)**

- 3.5.1. Equipment shall be considered to have been completely erected when the following activities have been completed.

- 3.5.2 Moving of all equipments to the respective foundations

- 3.5.3. Fixing of anchor bolts or tack welding as required.

- 3.5.4 Leveling and alignment of equipment.

- 3.5.5 Assembling of all accessories such as relays, CTs, PTs, meters instruments etc. as described in the job specifications.

- 3.5.6. Drying of equipment as required and testing of oil for dielectric strength.

- 3.5.7 Filtration and filling of oil as required.

- 3.5.8. Cable laying, termination with continuity checks.

- 3.5.9. Applying of finishing coat of paint wherever required.

- 3.5.10. Mounting of lighting fixtures & connections.

3.511. Testing of all system with operation of all protection system.

3.60 ERECTION OF SWITCHYARD STRUCTURES.

- 3.6.1. Erection of switchyard structure shall mean erection of gantry column, beams, equipment support structure and lighting mast, VHF masts, watch and ward observation posts if any.
- 3.6.2. The foundation work of switchyard structure is not in the scope of this tender. The foundation with concreted anchor bolts shall be made available by GETCO well in time to enable the contractor of this work to get a clear working front.
- 3.6.3. The switchyard structure shall be made available to the contractor in the knocked down condition either at site or from any other store of GETCO in the radius of 100 KMs. Small parts like cleat, plate fasteners step bolts and other accessories (if any) shall also be supplied as above separately
- 3.6.4. Before commencement of the erection work, the contractor shall check cast foundations and anchor bolts for their individual and mutual distances and also for the correctness of concreted bolts in terms of number and verticality. In case of any disagreement with the lay out drawing, the matter may be referred to Engineer in charge for remedial measures who in turn will arrange such remedial measures. However, the contractor shall also render necessary assistance in the matter.
- 3.6.5. The erection of structure shall be done strictly as per the approved set of structural drawings to be given by the GETCO. The erected column for bringing the structure in alignment or bringing the structure in plumb shall be allowed.
- 3.6.6. The erection of column/beams shall be done in phased manner on already erected column. The elevation faces of the beam should be first fastened to the column one by one and thereafter plan bracings should provide one by one to complete the beam geocentric Pre-stressing of beam member for alignment should be avoided. In case of difficulty in fabricated material or otherwise, the Engineer in charge should be contacted for remedial measures who in turn will take necessary action. However, the contractor shall also render necessary assistance in this work to Engineer in charge for speedy completion of work. The load points rings bracing shall also be provided as per drawings.
- 3.6.7. The Cross-connected beams should be perfectly at right angle and matching with respective faces of the column. No column or beam shall be erected with missing members.
- 3.6.8. The method of erection is not being dealt with in detail here. However, while making the rigging arrangement, it should be ensured that no column beam or part thereof is damaged due to misjudgment. All the members, plates, cleats, bolts, butts and other accessories should be fitted to the column, beam support structure as per the approved drawing.
- 3.6.9. After the erection of beam and column, the bolt nuts should be properly tightened and center punched. The thread protruding bolt should be dented in the contact surface of nut at 3 point 120 degrees apart to eliminate loosening of bolt due to vibration. The stringing of bus bar conductor be done only after getting certificate from Engr. in charge that all bolts & nuts are provided as per approved drawings and tightened.
- 3.6.10. The equipment support structure should also be erected like gantry column. They should well be in plumb with all members fitted as per approved drawings and bolt nuts properly tightened. The contractor shall also take care to see that the alignment of foundation of equipment support structure is well done. The

equipment support structures shall be erected as per the approved drawings.

3.7 GANTRY STRINGING (BUS BAR STRINGING)

- 3.7.1 After the erection of gantry structure and equipment support structure is over, the contractor shall take up bus bar and line gantry structure stringing.
- 3.7.2. The configuration of bus contractor shall obtain type of conductor to be used from the purchaser well in advance. The sag and tension of the bus bar conductor and line conductor shall be coordinated with the help of EIC so that a mutual distances of the strung conductor and the ground clearance of the strung conductor does not cross the limit set out in the electricity rules and acts.
- 3.7..4. The method of handling the conductor accessories is not dealt in details, however, contractor can himself get informed about the same and see that conductor and other material is handed over properly and is string scratch free to the extent possible. No joint or use of repair sleeve will be permitted in the bus bar and line gantry stringing. While stringing between twin and quadruple bundle conductor, care shall be taken to keep tension in all sub conductors equally. Adjustment in the sag shall be carried out by sag adjustment plate if provided in the tension insulator strings.
- 3.7.5 All the insulator strings to be used on the structure shall be properly cleaned with the cloth. Compression dead end joints of the conductor shall be made after proper marking. There should not be any difference in the position of dead end compression joints amongst the sub conductors of a twin or quadruple bundle conductors. All the tension insulator string shall be double tension type. The pilot insulator string or a guide insulator string shall be single suspension type. The corona control ring space clamp and other accessories if any on insulator stringing shall also erected as per the drawing.
- 3.7.6. The earth wire to shield the conductors from lightning stroke shall be provided along the column in each bay of the switchyard and across, as per the switchyard layout and sectional view drawing and as per the instruction of Engineer in charge. the earth wire shall be fitted with all accessories like suspension clamp, tension clamp cross by clips, copper earth bold etc. completed. No mid span joint shall be permitted in the switchyard earth wire stringing.
- 3.7.7. After the bus bar and line gantry stringing work is over, the contractor shall provide droppers for the equipment connection to bus bar or line conductors by using prescribed clamps and connectors the configuration of dropper shall be obtained by contractor from the GETCO as per requirement. The dropper is to be provided with ACSR Panther conductor.

3.8 ERECTON OF SECONDARY EQUIPMENTS.

3. 8.1. The secondary equipments like PI, CT, CVT, PT, LA (Surge arrestors) wave trap etc. shall be procured by the contractor from the site store centre or other store centers of the GETCO and transported to the site at the cost of contractor. The contractor shall also do loading and unloading of the equipment.
- 3.8.2 After the arrival of equipment at site, packing shall be gently removed without causing any damage to the equipment. The equipment shall be checked for its correctness of dimension, make etc. as per the approved drawing. The equipment then shall be cleaned by a piece of cloth and made ready for erection.
- 3.8.3. The equipment shall be mounted on the ready pedestal (of masonry) or steel structure as the case may be and checked the same for its verticality. Transmission of masonry pedestal is not in the scope of this work.
- 3.8.4 In case of CT, PT and CVT, the junction box or terminal box of the equipment

shall be opened, cleaned and all their connections should be checked.

- 3.8.5 The arcing horns or corona control rings shall be provided as per the approved drawing. Similarly all fittings etc. shall also be provided as per the approved drawings
- 3.8.6 The electrical connection of the equipments through jumpers or through 4" aluminum pipe shall be carried out along with the cable connection of respective equipment to the marshalling kiosk or to the control relay panels. The connection of high voltage terminal of equipment shall not be resorted to, unless secondary connection or cabling work to control equipment is over. Testing of equipment shall also be done to ensure the correct wiring sequence of the equipment and continuity before energizing equipment by EHV
- 3.8.7. Polarity of the equipment to be connected on HV side should be checked prior to erection. The oil level (if any) of the equipment should be checked for its totality. If level is found to be inadequate, topping filling of oil should be resorted. The GETCO will supply the quantity of oil required.
- 3.8.8 Fuse, links, etc provided in the secondary box of the equipment shall be checked for their position and continuity and any lacuna observed will be set right before taking the equipment for commercial use.

3.9 **ERECTION OF CIRCUIT BREAKER :**

- 3.9.1 The circuit breaker shall be taken delivery from the site/other stores of GETCO and transported to the work place well in time on loading/unloading. The crates containing the insulators and important parts and accessories shall be opened carefully keeping them in their proper position. Insulator parts and other accessories shall be thoroughly cleaned for any deposits of dust or other particles.
- 3.10. The breaker shall be brought on the pedestal of masonry or steel frame as the case may be) in upright position without any inclination. The main parts of the equipment's shall be assembled as per approved drawing to be submitted by GETCO. The GETCO arrange Service of commissioning engineer of circuit breaker manufacturer. However, the contractor will not remain contented with the instruction and guidelines given by the commissioning engineer and shall also use his own judgment in better erection of commissioning practice of circuit breaker.
- 3.11 After the placement of circuit breaker in position the kiosk of the breaker shall be thoroughly inspected and any lacuna found shall be reported to the EIC of the work. The HT terminal connection shall be done only after the terminals of the equipment kiosk are made to the marshalling kiosk and or to the control/relay panels. Polarity of the equipment's shall also be ensured before physical erection.
- 3.11.1 The method of erection of breaker is not dealt with in details; however, it is recommended that breaker poles shall be erected only by using telescopic crane or other suitable mechanical arrangement. The rigging should be tool proof.
- 3.12 The operating mechanism in the breaker Kiosk and contacts as well as the power supply circuits (AC/DC) shall be properly checked for its operation worthines. All piping for gas/air shall be laid as per the approved drawing. The air receiver or compressor shall be positioned as per the relevant drawing. Minor fittings and fabrication or grouting work required to place these articles or accessories shall be done by the contractor without any extra cost to the purchaser. In case of breakers with spring mechanism the trials of the mechanism by actuating should be done to ensure its' line worthiness.
- 3.12.1 EHV side of the breaker should be aligned to a incoming and outgoing bus conductor. While erecting the breaker, the operating mechanism without the

porcelain insulator should be laid perfectly to avoid any mal functioning of the breaker.

- 3.12.2 Earthing points of the breaker as well as attached Kiosk shall be connected to earth grid by means of risers already available nearby the equipment. Any other erection checks and pre-cautions indicated in the Manual furnished by the respective supplier of the equipment shall be studied well by the contractor and the provisions there of shall be implemented as far as possible.

3.13. ERECTION OF POWER TRANSFORMER

- 3.13.1 The purchaser laid readily on the rails and plinth shall make a power transformer of appropriate capacity available. However, the contractor using proper tools shall do minor adjustment or shifting requirement for proper alignment of the equipment and tackles jacks taking due care.
- 3.13.2 Bushing of HV, LV, and IV side shall be picked up from the site or other store of the purchaser and shall be made open by removing the casing/covers and packing whatsoever may be. The bushing shall be cleaned by the cloth. The bushing shall be handled very carefully and preferably should be opened and erected in presence of the Engineer in charge or his authorized representative. Before taking up the erection work of bushing and accessories, conservator tank and the transformer tank should be thoroughly cleaned from outside to remove all dust and other material deposited on it.
- 3.13.3. For fixing the bushing, the opening provided on the transformer tank/turret shall be removed and bushing should be connected to it. The current transformer and other accessories in the turret should be carefully handled while erecting bushings.
- 3.13.4 The radiators should be mounted on the pedestals already available at site. The proper leveling and alignment of the radiator should be done. Any minor nature of civil or foundation work, if required should be done by the contractor at his cost. However, if already provided pedestal are totally misaligned and it is not possible to erect radiators upon it with slight modifications, the matter should be brought to the notice of Engineer in charge who will take appropriate action to remove the anomaly. As a matter of fact, the contractor may, before taking up the erection work on hand, satisfy himself that the alignments of pedestal provided for various radiator and piping headers are as per the approved drawing from the respective supplier of transformer and remedial measures should be taken much ahead of actual erection work.
- 3.13.5 The Kiosk of the equipment shall be inspected for its internal wiring fuse, link temperature indicator, de-humid fire power connection, control circuits etc. If any deviation compared to the approved drawing is observed, the matter should be brought to the notice of Engineer in charge and if it is of trivial nature, corrective measures should be taken by the contractor himself. All the piping or wiring from various measuring points to the Kiosk should be checked for its trueness and continuity.
- 3.13.6 Buchholz relay will be erected on the transformer tank as per the standard practice.
- 3.13.7 After the erection of various accessories indicated above, filling of oil under vacuum should be started. If required random sampling and testing of oil being filled in should be carried out. The oil level in the conservator tank, condenser bushing etc. should be checked for its desired mark. After the oil filling work is over, final filtration of oil to obtain desirable low PPM should be done. Filter machine of 1000 GPH capacity having one pass facility of reputed make approved by Engineer in charge for filling and filtration work shall be brought by the contractor himself.

3.13.8 Internal testing on the transformer and its accessories for operation worthiness shall be done following oil filtration work. However, the commissioning of the transformer either from LV or HV side should be done only after the installation of control panels in the control room, its connections to the transformer and complete unit testing of transformer. The commissioning work should be done as per the instruction of Engineer in charge or his authorized representative.

3.14.0 **ERECTION OF ISOLATORS.**

3.14.1 Isolators of the switchyard shall be with or without earth blade type centre breaks type etc. The isolators shall be procured by the contractor from the site stores of the GETCO and transported to the work site. All the spare parts shall be properly unpacked cleaned and made ready for erection.

3.14.2 Before erection, the contractor shall obtain copies of approved drawing of respective equipments. The isolators shall be erected on the ready galvanized structures. However, foundation for them will be available readily the respective points in the switchyard.

3.14.3 The contractor shall check the erected support structure for their alignment vertically and tightness of fasteners before mounting the isolators parts on them. The contractor shall also verify the mounting arrangement for the operating mechanism on this structure and suitable for the same. In case of any shortcoming the matter may be reported to engineer in charge. Any modification of trivial nature for the structure of fixtures shall be carried out free of cost.

3.14.4 The parts of the isolators, fixed and moving contacts earthing rode etc. shall be handled very carefully to avoid breakage or distortions. The erection shall be carried out using mechanized erection tools. The polarity of the isolator polls shall be properly identified and also the direction of the opening should be pre-determined. It should be ensured that in the entire switchyard the isolator open and close uniformly (direction point)

3.14.5 The operating mechanism for the line contacts shall be thoroughly checked for their accessories as per approved drawing and it should be ensured that all the connection fuses links dehumidifiers lighting sockets electric motors are in their proper position. Any deviation from the approved drawing should be got sat right with the help of engineer in charge. Position. Any deviation from the approved drawing should be got set right with the help of Engineer-in-Charge.

3.14.6 While erecting the isolator, it should be ensured that it should be properly aligned with respect to bus conductors or line conductors bus provided In the switchyard: The erected Isolator shall be within the plumb. The operating mechanism rods, pole and rotating insulators shall be checked for their proper function. The testing of the wiring to the kiosk should also be done to ensure its operation worthiness. The final commissioning of the isolator should be done only after connection to control panel is affected. However, prior to that it should be ensured that the physical movement of the fixed and moving contacts and reach of them is within the prescribed limit.

3.15.0 **ERECTION OF CONTROL AND RELAY PANELS.**

3.15.1 The contractor shall procure the control and relay. panel from site store or any other stores of the GETCO and transport the same to the erection site. The cases containing the panel shall be unpacked carefully and shall be nicely cleaned. In case any of external damage is observed, same shall be brought to the notice of Engineer In-charge. The panel shall be unpacked in upside up position. After an external visual inspection, the panel door shall be **opened and checked for the circuit connection**, terminal connector, dehumidifier, power connection etc.

- 3.15.2 A front side of the panel shall be checked for any damage to the meter indicator, hooter, semaphore indicators
- 3.15.3 Any lacuna in the equipments, circuits, fittings, dimensions etc. observed shall be brought to the notice of Engineer in charge who will try to impose remedial measures
- 3.15.4 The relay panel should also be checked for type, of schemes adopted for protection, internal connection, fascia indicator etc. Any difference observed should be brought to the notice of Engineer in charge who will take necessary action.
- 3.15.5 The panel shall be erected along cut outs provided in the slab concrete, in the order, it is decided, by Engineer in charge or which is approved by authorized drawing.
- 3.15.6 The size and number of cores of cables be brought from the equipment to control panel, control panel to relay panel and back to equipment shall be pre-determined by study.
- 3.15.7 After the erection of control panel and relay, panel, all the equipments, accessories indicators etc. along with the internal wiring and other accessories provided with the kiosk of the panels.

3.16.0 LAYING OF CONTROL CABLES AND TERMINATIONS THEREOF

- 3.16.1 Laying and termination of control Cable work shall generally includes following:
- a) Control and power cable from individual equipments kiosk to the field kiosk.
 - b) Laying and termination of Control and L.T power cable from field -kiosk to control room equipment (i.e. LT switchgear, DC battery and **control panel/relay panel**.)
 - c) Laying and termination of Cable from the transformer kiosk to transformer panel and upto AC/DC supply source.
 - d) Laying & termination of Control cables from control panel to relay panel and vice a versa.
 - e) Laying & Termination of cable from DC/AC source, battery room L/T switch gear room to control/relay panel.
 - g) Laying & termination of cable from 11KV/400 V Distribution transformer to LT switch gear room.
 - h) Laying & termination of cables from Station transformer to distribution transformer in the switchyard as well as in the residential. quarter area.
 - I) Laying & termination of LT power cable from station transformer to fire protection system kiosk (If required).
- 3.16.2 GETCO will provide the cable schedule for the various control schemes, protection schemes and metering scheme as well as communication, scheme etc.
- 3.16.3 'The contractor shall transport the required size of control and power cable from the purchaser's site store to any other stores from where the same allotted and transport it to its site store.

- 3.16.4 The control cables shall be terminated using correct type of lugs and further prodded with ferules giving the identification number of various cores of the cable. Correct type of tools for termination shall be used to secure a rigid connection of the cable tray along with the cable trenches. Normally mild steel, racks and cable trays are provided in the cable trench. However, the purchaser may at its own discretion prefer to utilize fiber reinforced polypropylene (FRP) cable racks and trays. In such an event, the racks and trays, will be supplied by the Purchaser to the contractor in a knocked down condition. The contractor shall assemble the rack and provide trays on them as per the approved drawing given by the purchaser. If FRP trays and racks are to be utilized, the contractor will have to take extra care while laying the cable through different layer and racks to avoid any displacement or distortion of the FRP racks. However, if the laying of pre-fabricated FRP racks and trays fall in the scope of FRP rack/tray supplier, the contractor shall co-ordinate and synchronize his cable laying activities with respective supplier of FRP rack/trays.
- 3.16.5 Utmost care shall be taken by the contractor to prevent damage to outer insulation and the armors of the cables. No joint to the cable shall be permitted, unless situation so warrants and Engineer in charge permits the same.
- 3.16.6 After laying, all the 'power and control cable shall be properly identified giving the serial either a number and details of end connections.

3.17.0 ERECTION OF BATTERY AND BATTERY CHARGER

- 3.17.1 The contractor shall procure the material required for installation of batteries sets and battery charger from the site store or any other stores of the Purchaser and transport this material to the work site.
- 3.17.2 All the container/packing of the battery and battery charger shall be opened carefully to prevent any damage to the equipment. The equipment shall be cleaned to remove any dust or other un-warranted deposition. The battery rack shall be placed in such a fashion that rows of battery cell can be conveniently connected to each other. The contractor shall obtain the drawing of arrangement of battery racks and its connection to floats charger and boost charger with reference to the floor space. The battery cells shall be filled with requisite amount of electrolyte with proper specific gravity and up to the mark of maximum-level indicated on the battery cells. All the cells shall be connected in the series to obtain total voltage of the 224V AC. However, individual cell shall also be checked for their voltage across terminal before series connection.
- 3.17.3 The battery rack shall be provided with bottom insulating material to prevent any leakage of current to the earth. Similarly, individual battery cell shall be provided with insulation supports to wooden rack to prevent any body leakage. The purchaser shall supply wooden racks and acid distilled water etc.
- 3.17.4 The connection of the battery shall be done through a cable, and same shall be terminated in the LV room (AC/DC) before commissioning of the battery and battery charger. The entire battery room shall be completely cleaned. Similarly racks and battery cells shall also be cleaned for any deposits of electrolyte and other particles.
- 3.17.5 A connection of boost charger shall be secured from the AC supply provided in the LT switchgear room.
- 3.17.6 All the accessories supplied for measuring the specific gravity and testing

etc. provided by the supplier shall be return to the Engineer in charge or shall be placed at proper place in the battery room under intimation to Engineer in charge.

3.17.7 Load test on the commissioned battery sets shall be taken as per the instruction of the Engineer in charge and performance of the battery cells float boost charger shall be observed for few hours. Test load then shall be removed and battery shall be ultimately connected to the LV room for its onwads utilization in control indication and protection circuits.

3.17.8 The following checks are recommended for battery

- (i) Checking of completion of civil/ventilation requirement of battery room.
- (ii) Checking of adequacy of charger output/requirement with respect to current required for battery charging as per the manual.
- (iii) Checking for availability of safety devices, water and first aid box.
- (iv) Checking the polarity of connections between battery and charger.
- (v) Visual inspection test for level and leakages.
- (vi) Checking of layout as per approved drawing.
- (vii) Checking of IR value from positive to earth and negative to earth.
- (viii) Checking of voltage per cell and total voltage between positive negative and earth to positive/negative,
- (ix) Checking of tightness of connectors on each cell.
- (x) Checking of capacity test and hourly measurement of specific gravity and voltage for each cell.
- (xi) Charging-discharging cycle as per standard practice, and as per instruction of Engineer-in-charge.

3.17.9 The following checks are recommended for battery charger.

- (i) IR test
- (ii) Checking for charging mode of batteries, constant current and constant voltage mode.
- (iii) Load test on charges by running of DC drives (if there and by liquid resistance system).
- (iv) Checking of thickness of earthling connections.
- (v) Check for functional operation of charger, auto manual change over from float to boost to float etc.
- (vi) Check for AC ripple in boost and float made after charging.
- (vii) Check and polarity of cables connected to battery

3.18.0. EARTHING ARRANGEMENTS: (TECHNICAL TERMS & CONDITIONS)

Standard Guidelines & Recommendations for Earthing System for EHV Sub-station issued vide Circular R & M/3 dtd.5.11.12 & CE(TR) Circular 36 dtd. 23.9.08 to be followed.

The General notes for Earthing system & drawings for earthing the equipments (including welding joints) are compiled in Drg. No. GETCO/E/STD/P-012 sheet 1 to 24 (available in SOR booklet).

3.18.1 The earthing work shall include laying of the earth mat in the switchyard as per the approved drawing making special earth pits for outdoor equipments and control room equipments, providing risers from the earth mat up to the equipment structure plinth, driving earth electrode in the soil as per the approved drawing and connecting it by welding covering maximum area to the earth mat.

- 3.18.2 All the materials required for laying earth mat and driving the earth electrode as well as shall be supplied by the contractor which includes earth mat MS spikes/ bars for electrodes etc.
- 3.18.3 The other materials like Maintenance free treated earth electrodes, backfill compound, form boxes etc shall also be supplied by the contractor.
- 3.18.4 The pits for laying earth mat includes excavation and back filling shall be made as per design in the entire switchyard and buried at the depth as per approved design. The earth electrodes shall be driven into the soil, cable trench by driven making the holes etc. as per the approved drawing. The connection of electrode to the earth mat shall be done as per the drawing enclosed.
- 3.18.5 The junctions of earth mat (along and across) shall be done with full double welding. At the joints bending whichever require painting anti corrosive leakage bituminous compound provided by the Contractor. The welding shall be capable of withstanding the thermal stresses developed due to high fault current passing through the grid. The connection of risers to the earth grid shall be secured as per the instructions of Site Engineer. After the laying of earth mat is over, the same shall be covered by the excavated earth. All the consumables such as welding electrodes, bolt nuts, blare bituminous compound layers, the contractor at his own cost shall procure test link etc. The welding machine shall also be arranged by the contractor. The metered power supply shall be made available to the contractor as per the prevailing rates, terms and conditions of supply of the Board. The contractor at his own cost shall do the fabrication of earth mats as per the site requirement. All the surplus steel materials shall be retained to the purchaser after the work is over.
- 3.18.6 The individual earth pit as per the appended drawing shall be prepared. The minimum depth of the pit excavation shall be 2.5 mtr. The earthing pipe shall project 150 mm above the ground. The earthing leads for connecting the earth electrode and earth mat to the equipments shall be done as shown in the drawing. Earthing strip lying by digging 600 mm depth and 450 mm wide trench by joint with providing 2 Nos. G.I bolt nuts and welding and apply the blue bituminous compound anti corrosive and as per instruction of Engineer-in-charge. The earthing flat where required to be connected on structure or equipment shall be fastened with not less than two G.I bolts & done as per aesthetic view and bend in right angle properly with equipment. After making the pit and providing the layers of backfill compound as shown in the drawing the pit shall be watered and back filling should also be done along with the watering. The excess earth after the filling of the earth pit shall be removed from the site and shall be stacked away as per the instruction of engineer in charge. The top of the electrode shall be covered and the cast iron cover shall be provided on the top of the chamber by the Contractor. The resistance of the earth pit should be measured before and after earth filling work to ensure its power worthiness. If the earth resistance is not less than prescribed value, remedial measures shall be taken as per the instruction of engineer in charge at no extra labour cost to the Board. All the readings of the earth pit resistance taken shall be recorded in the register and counter signed by the representatives of the contractor and the Board.
- 3.18.7 The installation of earth pit done as per drawings in pits the tentative quantity of backfill compound shall be 2 bags.
- 3.18.8 The earth pit shall be serially numbered as per the instructions of engineer in charge on 125 mm x 125 mm 1.6 mm thick mild steel plate with red letters in white background. Numbered plate shall be fitted on 70 cm galvanized angle of 25 x 25 x 3 mm with GI bolt & nuts. The Contractor shall supply the materials required for this. Item includes drilling of the holes, fixing of bolt nuts and painting and lettering shall be done by the contractor.

3.19 **GENERAL :**

- 3.19.1 The Contractor shall ensure that at the end of each sub-activity the Surplus materials are immediately removed from the work-site and the surplus excavated earth is spreader around to avoid loss or injury to the public/equipments.
- 3.19.2 The Contractor has to return all surplus materials after reconciliation of material account in good and useable condition. The contractor shall settle the final bill including signature on all relevant papers required for passing of final bill, excess/saving statement and time limit extension proposal. If any within three months from the date of charging/commissioning or taking over by the Board of the Sub Station.
- 3.19.3. Most of all equipments should be erected in presence of the concerned engineer from OEM/GETCO engineer.
- 3.19.4. After complete erection and operation, contractor's supervisor should attend the site whenever called from GETCO for further testing commissioning of equipments/panels etc.

3.20 **Erection:**

1. All erection work is to be carried out as per the manual of OEM (Original equipment manufacturer) and instruction of engineer-in-charge.
2. All equipment erection charges are inclusive of shifting dragging handling of the respective equipment up to S/s erection site from its S/s site store.
3. Contractor has to ensure safe shifting dragging erection of all equipments to comply with labour laws I.E. rules etc.
4. All erection charges are inclusive of fixing of clamp connectors, all necessary accessories to the respective equipment.
5. Transformer erection charges cover shifting dragging, handling etc. for its bushings radiators conservator tank and allied accessories.
6. All erection work includes erection insurance to be arranged by the contractor at his cost.
7. All the required tools and tackles like conductor, earth wire compression, jointing machine, cutting machine, welding set etc, are to be arranged by the contractor at his cost.
8. For electrical lighting work prevailing SOR of Electrical work of R&B of GOG is to be followed.

3.21 **Dismantling:**

- 3.21.1 To ensure safety & Technical parameters in safe guard during dismantling, in person of concerned Engineer in charge. Also to stack the materials at safe place in proper stacking manner.

Signature of Contractor

Superintending-Engineer (TR)

GETCO, CO, Bharuch

MAINTENANCE FREE TREATED EARTHPIT

The bidder shall have to do the entire work of earth pits required for equipment earthing and for the pits at the corners of earth mat.

STANDARDS

The product and the equipment covered by this specification shall, unless otherwise specified be in line with the requirement of any of the latest applicable standards and will apply in order of priority as listed below: -

- a) Indian Standards
- b) IEEE 80
- c) ANSI (American National Standards)
- d) BS (British Standards)

EARTH PITS

All the Earth pit shall be with special Ground electrodes supplied by Reputed Manufacturer. These special electrodes are provided with Ground enhancement material.

A. EARTHING PRODUCT COMPONENT SPECS

- The Earthing System should be based on use of Copper Bonded Earth Rods/ pipe electrode /PIP electrode (for corrosion resistance) and Ground enhancement material (to reduce Soil Resistivity).
- It should be capable of providing any ohmic value as specified by the client, by inter-connection of ground rods to form a Grid.
- The system shall be totally maintenance free and require no periodic or scheduled maintenance for a period of at least 30 years.
- There shall be no requirement to add water or any other chemical any time after initial installation.
- There should be no requirement to have a inspection/maintenance chamber- The system shall provide constant low ohmic value for entire life cycle without any consideration for moisture or temperature conditions.
- The system shall be in use worldwide for period of at least 20 years.
- The manufacturer shall be a company of international repute engaged in the field of Facility Electrical protection work.

B. ELECTRODE:

(1) COPPER BONDED EARTH RODS

- The Earth Rods shall have a nominal (actual) dia of 20mm (Min) and length of 3 M.
- The Rods shall have a steel core with molecular bonding of 250 micron of copper as per international standards.
- A nickel layer is applied to steel core (and subsequently copper) by an electrolytic process forming a metallurgical bond between the three.
- The copper used shall be type DHP alloy No. 122 CDA and rated at 99.95% copper. The thickness of copper layer shall be uniform 250 micron.
- The Rods should be manufactured by a company of high repute to ensure quality of Copper Bonding.
- The Rods should have been subjected to long term study to verify the claims of corrosion resistivity made by the manufacturers

(2) PIPE or PIP (Pipe-In-Pipe) ELECTRODE

- It shall be capable to carry out the fault current as per GETCO standard considerations.
- It should have been subjected to long term study to verify the claims of corrosion resistivity made by the manufacturers.

C. GROUND ENHANCEMENT MATERIAL / BACK FILL / GROUNDING COMPOUND

- Ground Enhancement Material / Backfill /Grounding compound shall be permanent and maintenance free. (No re- charging with salts or any other chemicals) and shall maintain its earth resistance with time.
- Ground Enhancement Material / Backfill / Grounding compound shall confirm IEEE 80-2000 Clause No.14.5(d)

- It must set up firmly and not dissolve or decompose or otherwise pollute the soil or the local water table.
 - It shall be suitable for use in dry form or slurry form.
 - The Ground Enhancement Material/Backfill/Grounding compound shall not depend on the continuous presence of water to maintain its Conductivity.
 - Ground Enhancement Material / Backfill / Grounding compound in its set form shall have resistivity of not more than 0.12 ohm-m
 - The material should have been subjected to long term study to verify the claims made by manufacturers about its soil resistivity reducing qualities.
 - The material shall have been tested in a reputed laboratory for not containing any hazardous chemicals as per EPA Chapter-7.
 - The material shall be carbon based conductive concrete and shall not contain bentonite in any form.
- The bottom 300 mm of the bore hole shall be filled with good quality preferably black cotton soil. The balance length of the bore shall be filled entirely with the backfill compound in pure form without mixing with soil. The compound shall bond tightly with the electrode and become a solid mass.

D. CLAMP

- Each Earth rod/pipe must be provided with a suitable clamp to facilitate inter - connection of rods and connection to Equipment Earth Bar using appropriate copper/GI strip or conductor.

GUARANTEE

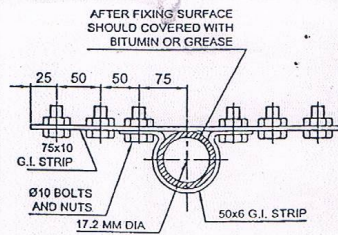
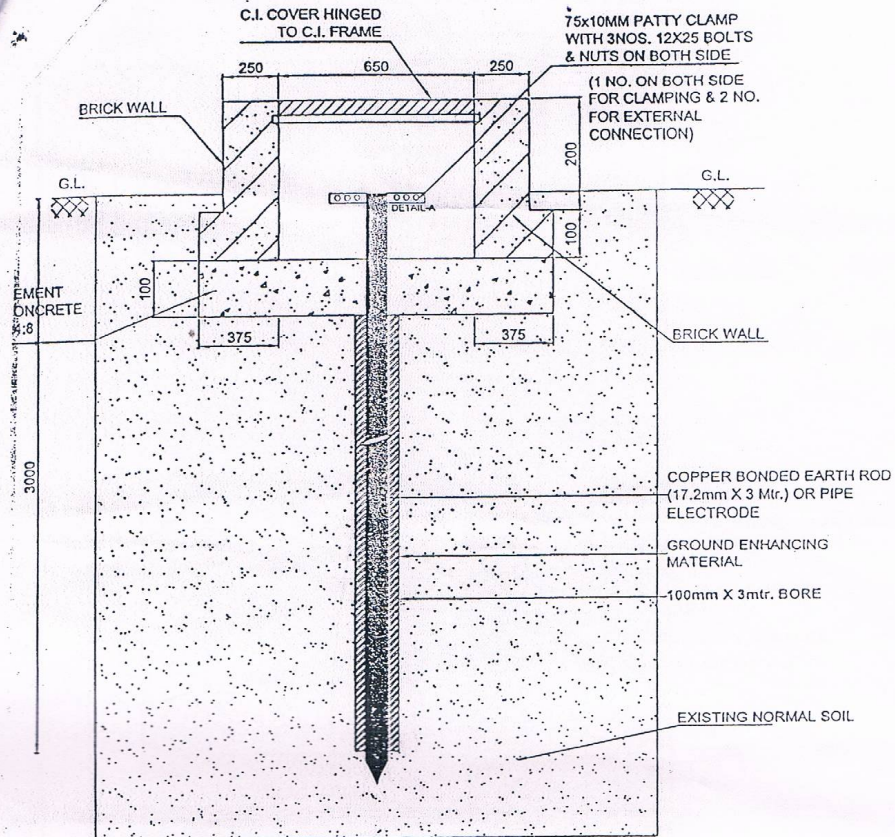
The product shall be guaranteed for trouble free operation for a period of 30 years from date of commission or arrival at site whichever is later. Any defect discovered during this period shall be rectified free of charge.

The pits shall be drawn with the help of a boring machine, an auger or any other means as required by site conditions and nature of ground strata.

Drawing No. GETCO/ E/ STD/P-021(1 of 2 & 2 of 2), DTD. 30.07.14 shall be used for reference.

Important Note:

Terms "CI Pipe Electrode" and "Treated Electrode" shall be replaced by "Maintenance free Treated Earth pit" wherever written in Earthling Philosophy as well as applicable equipment earthling drawings.



DETAIL-A for Cu-Bonded earth rod (For Pipe electrode it may be different)

Earth pit installation procedure for Normal Soil for Cu-bonded earth rod.

(Dia of augur hole for other cases may be different)

1. Augur a 100 mm dia hole to a depth up to 2850 mm
2. Drop the earth rod down the hole with lower end centred and driven in 150 mm.
3. Fill the hole using Ground Enhancement Material around the rod.
4. Allow it to dry to enable the compound to set before fixing clamp & connections.
5. Carry out the work for provision of CI cover with chamber as per drawing.

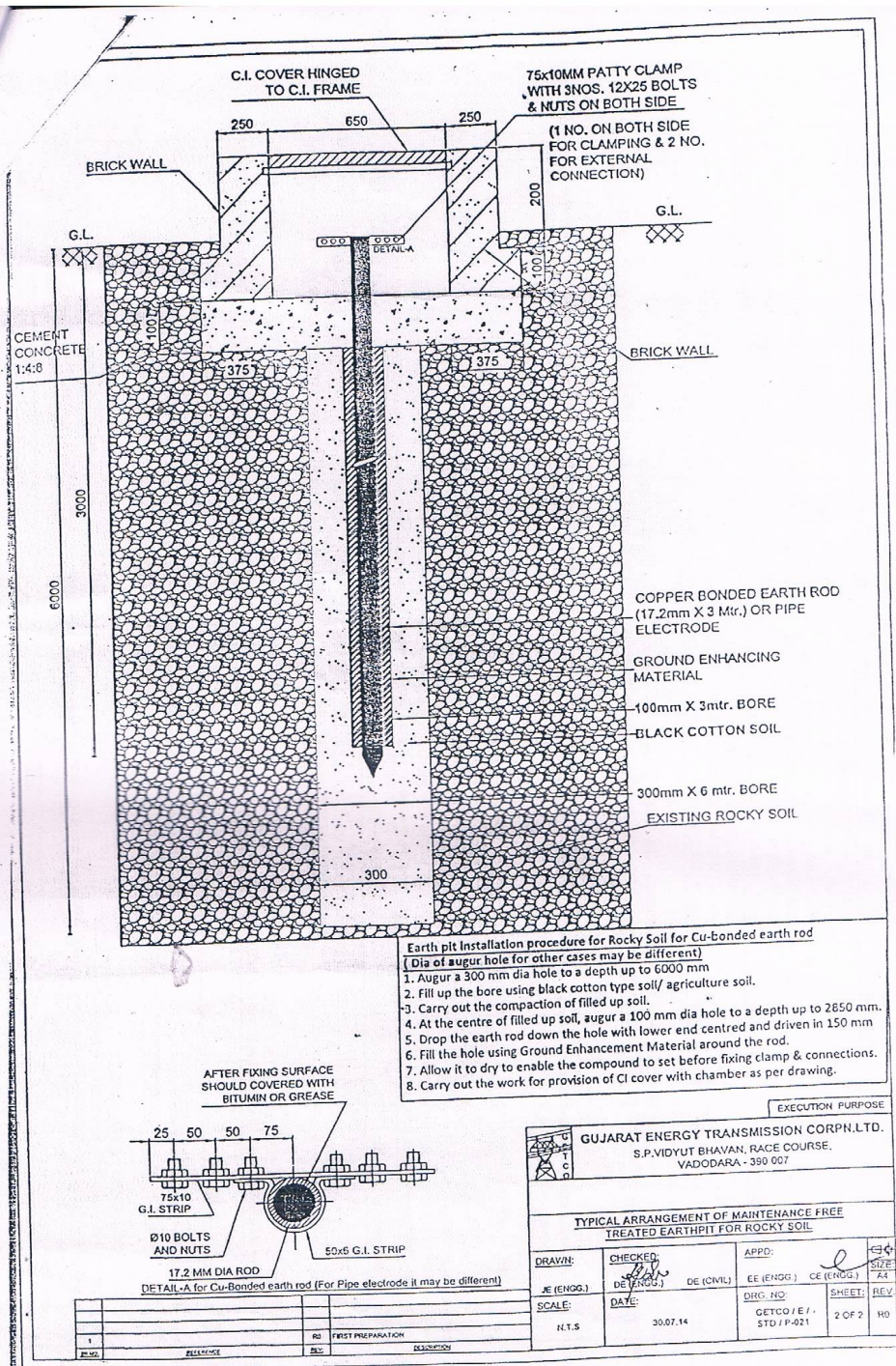
EXECUTION PURPOSE

GUJARAT ENERGY TRANSMISSION CORPN.LTD.
S.P.VIDYUT BHAVAN, RACE COURSE,
VADODARA - 390 007

**TYPICAL ARRANGEMENT OF MAINTENANCE FREE
TREATED EARTHPIT FOR NORMAL SOIL**

DRAWN:	CHECKED:	APPD:	SIZE:
JE (ENGG.)	DE (ENGG.)	EE (ENGG.)	CE (ENGG.)
SCALE:	DATE:	DRG. NO:	SHEET: REV:
N.T.S	30.07.14	GETCO/E/ STD/P-021	1 OF 2 R0

NO	REFERENCE	NO	FIRST PREPARATION	NO	DESCRIPTION
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					



TYPICAL LAP WELDING STANDARD DEISGN

4.19 **TESTING AND COMMISSIONING:**

- 4.19.1 The Contractor after completion of erection work will ensure that all works connected with line have been completed. These works shall be done correctly as per Indian Electricity Rules and Procedures. Any extra cost involved due to incompleteness of work or bad workmanship found out subsequently shall be set right forth with by the Contractor at his cost.
- 4.19.2 After the erection is completed in all respects, the line should be thoroughly patrolled and checked for continuity and clearances. The line should be meggered to check its insulation level. Afterwards a written confirmation should be given to the Engineer-in-Charge that the men, materials, tools and earthings (if any) are removed and the line is safe for charging. On charging the line, if it does not hold and trips, the contractor should arrange to patrol the line and find out the causes for the tripping and rectify the defect at no extra cost to the GETCO.

4.20 **HANDING OVER OF LINE DOCUMENTS:**

- 4.20.1 On completion of all erection activities, the contractor has to furnish following informations along with technical details to concerned Engineer-in-Charge of the work in triplicate duly bound: -
- a. Approved surveyed route with permanent marks, (To be obtained from the GETCO)
 - b. Approved copy of profiles with tower schedule, (To be obtained from the GETCO except for portion where any change is approved)
 - c. Location wise soil strata details of each pit excavated, type of foundation executed, volumes of excavation & concrete and RCC steel weights,
 - d. Details of revetment, retaining walls, etc., work done for protection of tower footing and their approved drawing copies,
 - e. Approved copies of stringing charts,
 - f. Value of tower footing resistance before & after providing earthing and type of earthing executed,
 - g. Details of spans and phase where mid span joint, repair sleeve used,
 - h. Location wise type and numbers of insulators, insulator hardwares, earthwire hardwares, conductor accessories, etc., provided,
 - i. Separate detail of each crossing like road, river, railway, power line, P&T Line, etc and details of clearance as per Indian Electricity Rules.

4.21 **GENERAL:**

- 4.21.1 The Contractor shall ensure that at the end of each sub-activity the surplus materials are immediately removed from the work-site to avoid loss and injury to the public.
- 4.21.2 The Contractor has to return all surplus materials after reconciliation of material account in good and useable condition and settle final bill including signature in all relevant papers required for passing of final bill within three month from the date of charging / commissioning of line.
- 4.21.3 The contractor has to return empty Conductor / Earth wire Drums if it is Steel Drum. For wooden Drums, contractor has not to return the empty Conductor/Earth wire Drums for the conductor/ E.W used for this line.
- 4.21.4 If contractor does not complete the work in specified time with GETCO's specification or leave the site with incomplete work, GETCO will get the remaining work executed at the risk and cost of contractor.
- 4.21.5 If at any time, before the security deposit is refunded to the contractor, it shall appear to the Executive Engineer or his subordinate in charge of the work that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality or that any materials or articles provided by him for the execution of the work are unsound or of an

inferior quality to that contracted for or are otherwise not in accordance with the contract, it shall be lawful for Engineer-in-charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials or articles complained of, may have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify or remove and reconstruct the work so specified in whole or any part, as the case may require or if so required shall remove the materials or articles so specified and provided other suitable materials or articles at his own charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in the written intimation aforesaid the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day, not exceeding ten days during which the failure so continue and in the event of any such failure as aforesaid the Engineer-in-charge may rectify or remove and re-execute the work or remove and replace the materials or articles complained of, as the case may be, at the risk and expense in all respects of contractor should the Engineer-in-charge consider that any such inferior work or materials as described above may be accepted, or made use of, it shall be within his discretion to accept the same as such reduced rates as he may fix thereof. Provided that in the case of any work of which visible check is not possible, if the Engineer-in - charge or his subordinate in charge of the work feels that such work has been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality, he shall take sample tests at random, cost of which shall have to be borne by the contractor and if after taking such test, part of such work is found to be defective in any respect or to have been executed with materials of inferior quality, then the contractor shall be paid for the whole work such amount as may be fixed by the office of the Engineer-in-charge on the basis of the lowest quality of work found by him in such samples tests.

- 4.21.6 If the contractor fails to complete the job in stipulated time period/leaves the site with incomplete work, GETCO will get the remaining work executed at the risk & cost of contractor.

4.22 **PROGRESS REPORT:**

- 4.22.1 Daily progress report in duplicate shall be regularly submitted to the Executive Engineer (Const.), with a copy to Supdt. Engineer (Trans). The Contractor shall also maintain register as per Schedule of Section E-IV.

4.23 **SITE VISIT:**

- 4.23.1 The Engineer-in-Charge of the works or his representative will be free to visit the contractor's works, their site stores and erection site and also verify the purchasers materials in the custody of the contractor, as and when required.

4.24 **WARRANTY:**

- 4.24.1 The erection work will be covered under warranty period against any defect arising from erection workmanship for a period of 18 months from the date of completion of line or 12 months from the date of handing over of the line to the satisfaction of Superintending Engineer (Trans), at his sole discretion, whichever is earlier.

4.25 **QUANTITIES:**

- 4.25.1 Quantities given in the Schedule-B are to be executed by the contractor at the rate accepted by the GETCO in the A/T. In case of any deviation/tower quantity /type of tower/ length of line, excavation/ concreting resulting in an increase in which event the field officer shall obtain prior approval of the competent authority of GETCO and excess quantity shall be paid only at accepted rate of the A/T.

Design / drawings for any other item to be executed, if required shall be prepared and submitted to the GETCO for approval by the successful contractor at no extra cost to the GETCO and in time to avoid delay in completion period. Payment for such Items executed shall be made on the basis of quantities of approved designs and rates accepted in the A/T.

Signature of Contractor

Superintending Engineer (TR)

GETCO, CO, Bharuch

Penalty Clause:

Penalty:

1. In case if any safety related fatal Elect. / Mech. accident occurred to any employee of agency or outsider due to negligence or non-compliance of GETCO safety norms then in addition to the compensation and liability as per statutory requirement, contractor / agency shall be penalized as under:

2.

Sr. No	Amount of Contract in Rs.	Penalty amount
1	Up to →1 Lac	Rs.5000/- plus GST as applicable
2	Above 1 Lac to → 10 Lacs	Rs.40000/- plus GST as applicable
3	10 to → 100 Lacs	Rs.100,000/- plus GST as applicable
4	> 100 Lacs	1.0 % plus GST as applicable

Reporting:

- 2.1 The contractor shall inform concerned Ex. Engineer Const/TR in writing within 24 hours of fatal/Non-fatal accident occurred to human being.
- 2.2 The GETCO investigating officer findings in to accident shall be final and binding to the contractor /Agency.

3. Safety Requirement:

- 3.1 Kick off Meeting exclusively for safety shall be done in each contract in presence of contractor's site in charge and supervisor. Safety document shall be handed over and vital safety norms and key points of safety related to project shall be explained and recorded for commitment by erection contractor.

Such records are mandatory for clearing first erection bill.

- 3.2 During site visit by GETCO official of Executive Engineer and above rank, the following checks during execution of work shall be covered.

- 3.21 Safety equipments available and utilize.

- (a) Helmet.
- (b) Safety belt.
- (c) Safety shoes.
- (d) Live line Voltage detector

- 3.22 Safety procedure adopted.

- (a) Permit to work
- (b) Earthing at the place of work.
- (c) Adequate supervision.

- 3.23 T & P physical Check. (Healthiness and Quality)

- (a) P.P.rope.
- (b) Wire rope and sling.
- (c) Earthing rod

- 3.24 If above-mentioned safety requirements found violated in any of the above three conditions shall attract penalty of Rs.1000/- plus GST per occasion. (Max.Rs.3000/--for violation of three conditions) During subsequent visit, if violation is found, then double penalty plus GST shall be deducted from the bill of the Contractor/Agency.

Signature of Contractor

Superintending Engineer (TR)

Safety Instruction for Contractors:

Following safety guidelines are mandatory for all contractors operating in GETCO premises /on transmission lines for Electrical, non-electrical & civil works.

1. The contractors must provide advance planning of work to concerned in-charge of substation in writing.
2. The list of workers/ lab ours with name and address must be given to S/s In charge prior to commencement of work by the contractor.
3. The copy of group insurance policy with list of name of workers covered.
4. The list of T&P and safety equipment (PPE) having tested and checked by GETCO officials at site.
5. The working procedure must be specified with timings of working hours indicating tea break & lunch break period.
6. Before starting any work whether switch yard, on line or in colony "permit to allow to work" must be taken from control room in-charge.
7. Utilizing Electrical/non- electrical equipments, safety rules must be implemented.
8. All workers /labour & supervisors must use safety equipments (PPE) during the work.
9. If the work is to be carried out on Sunday or public holiday the necessary permission must be taken in advance, requesting in writing.
10. Unwanted person including children of labours will not be allowed at working site/ in the switchyard and in the prohibited area.
11. Any electrical work or electrical connections to equipment for any other work must be carried out by certified electrician/wiremen with adequate size of wire through MCB per I.E. Rule. Ensure that all precautions are taken to prevent electrical accident & the installation /connection is certified by Engineer in-charge.
12. No work should be done during night hours unless & until it is required under certain circumstances with the approval next higher authority and all necessary arrangement of adequate lighting with safety precautions is made.
13. Joint checking of line by In-charge, contractor & supervisor prior to commencement of work of any electrical/non-electrical work.
14. Any power line crossing, river crossing & railway crossing or any other hazards must be discussed with workers by contractor in presence of Engineer in-charge.
15. Contractors must submit list of workers with name, qualification and experience who are engaged for line maintenance/rectification job.
16. Line clear permit must be taken on power line crossing or passing nearby for safety of workers. This must be ensured by GETCO supervisor/in-charge of substation before starting the work.
17. Contractors must arrange for Shelter and drinking water facility for the labours /workers engaged with the permission of S/s in charge.
18. The method of work, required T&P and manpower should be discussed between GETCO supervisor, contractor's supervisor and gang leaders.
19. Prior to execution of work a joint survey must be conducted by GETCO supervisor, contractor's supervisor and DISCOM line man in order to identify the following.
20. The contractor has to deploy minimum 8 to 10 skill labours/ fitters at site daily failing to which GETCO shall deduct 1,000/- plus GST as applicable per day from the bill.
21. If the contractor fails to complete the job in stipulated time period, GETCO will get the remaining work executed at the risk & cost of contractor.
22. The GETCO reserves the rights of interchanging and dismissing any person employed for the work if there is complaint against his misbehavior, misconduct or disloyalty towards job.
23. Terms and conditions regarding industrial laws and other related matters shall be complied by the contractor in all respect.
24. The contractor shall ensure that all persons have provided safety tools, shoes, helmets etc. as may be required for safety point of view and all his persons shall follow the instructions issued by the GETCO from time to time in concern with the safety and security as the work to be carried out.
25. If the Contractor defaults in execution of the orders placed or if COMPANY suffers any financial loss due to this, then COMPANY will be forfeited Security Deposit, EMD plus GST as applicable from other orders of the same firm or by encasing the Bank Guarantee.
26. If the contractor fails to complete the job in stipulated time period/leaves the site with incomplete work, GETCO will get the remaining work executed at the risk & cost of contractor.

SCHEDULE -A

MATERIALS:-

Following material will be supplied by GETCO “free of cost” for **Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture etc at 66 KV Mota Borasara-2 SS under construction Division Bharuch**

- 1) G I Structures, accessories, attachments, bolts-nuts etc.
- 2) Conductor, conductor accessories, earth wire, earth wire accessories.
- 3) Insulators, insulator hardware, G I strip size 75 x 10 mm & 50 x 6 mm /MS round bars size 20/25/32/40 mm dia. Except vertical 3.0 mtr long electrodes 66 KV /11KV/LT equipments with accessories and control and relay panels.
- 4) 110 Volt, 100 AH DC battery sets and battery chargers.
- 5) Various sizes of armored control cables and LT control cables.
- 6) PLCC equipments and PLCC panels.

Following materials / equipments will be procured / arranged by the contractor activities for 66 KV& above class sub stations.

- 1) Tools tackles required for erection activities. And stringing.
- 2) Earthing materials, CI frame & cover, cement, sand, gravel, bricks, bolts-nuts with washers, number plates, painted plates etc. Vertical 3.0 mtr long electrodes
- 3) Maintenance free earth electrodes & back fill compound
- 4) Filter machine, hydraulic crane and hydraulic jointing machine/welding machines.

STORE CENTRES

SUB-Station Equipment/Material will be issued from following Store Centres:

Sr. No.	Name of work	Store Centers for issue of S/s+line materials/equipments.
1	for Work of erection of 66KV equipment, Structures, Control wiring, Yard Lighting, Control-Room, Staff-Quarter Electrification & Supply of Furniture etc at Mota Borasara-2 SS under construction Division Bharuch	Bharuch/Haldarva

Note: Generally, all required materials will be issued from above store centre's of GETCO. In case of non-availability of some items, contractor shall have to collect from other nearby store centers without extra cost to the Board.

APPENDICES

Gujarat Energy Transmission Corporation Ltd.

APPENDIX -I

TENDERER'S EXPERIENCE

A List of Similar jobs executed by the Contractor & Name with address of a Person whom reference can be made, by the Corporation, if required necessary.

[Tenderers shall submit the information in the Format detailed here under]

Sr No	Descripti on of Work	Value Of Work Executed Rs.	Construct ion Period as per Contract	Actual Construction Period for the Completion of the work	Date Of Completion	Client	Persons to whom Reference may be made	Principal Features
1	2	3	4	5	6	7	8	9

Contractor's Representative legible signature: _____

Name of the person: _____

Seal of the company

Date & place:

Gujarat Energy Transmission Corporation Ltd.

APPENDIX – II

WORKS TENDERED / IN HAND

Details of other Works, tendered for & in hand, as on the date of the Submission of this tender [Tenderers shall submit the information in the Format detailed here under]

Sr . No	Name of work with location and address	Work in hand			Work Tender for			Remarks
		Tender Cost	Cost of Remaining work	Anticipated Date of Completion	Estimated Cost	Date when decision Is Expected	Stipulated Date or period Of Completion	
1	2	3	4	5	6	7	8	9

Contractor's Representative legible signature: _____

Name of the person: _____

Seal of the company Date & place: _____

Gujarat Energy Transmission Corporation Ltd.
APPENDIX-III

TENDERER'S DETAILS OF PERSONNEL

The List of Technical Personnel intended to be placed at the Work by the Contractor.

[Tenderers shall submit in the Format detailed here under]

Sr. No.	Description &Details of position	Name	Qualification	Professional Experience & details of works carried out	Remarks
1	2	3	4	5	6

Contractor's Representative legible signature: _____

Name of the person: _____

Seal of the company

Date & place: _____

Gujarat Energy Transmission Corporation Ltd.

APPENDIX-IV

TENDERER'S DETAILS OF MACHINERY

The List of Technical Personnel intended to be placed at the Work by the Contractor.
[Tenderer shall submit in the Format detailed here under.]

Sr. No.	Description & Details machinery	Capacity	Numbers	Make	Remarks
(a)	(b)	(c)	(d)	(e)	(f)

Contractor's Representative legible signature: _____

Name of the person: _____

Seal of the company

Date & place: _____

Gujarat Energy Transmission Corporation Ltd.

APPENDIX-V

Sr. No.	Name of firm	Name of Authorized representative of firm who has visited the site.	Qualification	Designation / post holding in company.	Remarks.
(a)	(b)	(c)	(d)	(e)	(f)

PERFORMA, SHOWING THE DETAILS OF SITE VISIT DONE BY AGENCY BEFORE QUOTING THE TENDER.

[Tenderers shall submit in the Format detailed here under]

Contractor's Representative legible signature: _____

Name of the person: _____

Seal of the company

Date & place: _____

APPENDIX – VI

Qualification Requirement.

Contractor must fill up below details & should place at the top of the Technical Bid.

Sr No:	List of Documents	
1	Registration	Class - with valid up to
2	P.F. No.	GJ/
3	Partnership deed/Proprietor (Notarized copy)	
4	Power of Attorney (Notarized copy)	
5	Bl. Sheet / P&L A/C, Statement of last three years.	
6	Latest Solvency certificate.	Rs. Lacs issued by Bank, branch dtd.
7	GST Registration No.	
8	PAN NO	

Signature of Tenderer

Company's Round Seal

Date:

Place

APPENDIX – VII

Qualification Requirement. Contractor must fill up below details

1.	PRICES: [FIRM ONLY] (Please Specify YES / NO.)	
2.	PENALTY TERMS AGREED (Please Specify YES / NO.)	
3.	SECURITY TERMS AGREED: (Please Specify YES / NO.)	
4.	TERMS AGREED: (Please Specify YES / NO.)	
5.	VALIDITY Of the offer for 180 DAYS From the date of opening of the Technical Bid: AGREED: (Please Specify YES / NO.)	
6.	PAYMENT TERMS AGREED: (Please Specify YES / NO.)	
7.	MOBILE NOS., TELEPHONE NOS. & FAX NO:	
8.	Authorized person of the firm :	
9.	Name of the proprietor, partners, directors [as the case may be], along with address, telephone, fax no. etc.	

Signature of Tenderer
Company's Round Seal

Date:

Place

SECTION - E IV

PART - B

SCHEDULE - 7

FINANCIAL CAPABILITY

Sr. No.	Details	Amount Rs. In lacs	Remarks
1	2	3	4
1.	Solvency		A scheduled Banker's Certificate of present solvency be attached.
2.	Annual turnover for last five years.		
3.	Price of the biggest job carried out.		

Signature of Authorized Representative

Company / Agency

NAME: _____

STATUS: _____

Name of tendering

Company

Signature of Contractor

Superintending Engineer (TR)

GETCO, CO, Bharuch

SECTION - E IV

PART - B

SCHEDULE - 9

LATEST INCOME - TAX CLEARANCE CERTIFICATE

SECTION - E IV

PART - B

SCHEDULE - 10

(BANK GUARANTEE ON NON JUDICIAL STAMP PAPER OF Rs. 300/-)

BANK GUARANTEE

FOR TENDER NO: _____ B.G. No. _____ issued
on dated: _____

WHEREAS Messers _____ (Names and address of the firm) having
their registered office at _____

_____ (address of firm's registered
office) (hereinafter called the "Tenderer") wish to participate in the Tender No.
_____ for
_____ (Supply / Erection / Supply and Erection / work) of
_____ (Name of the material /
equipment / work) _____ for Gujarat Energy Transmission Corporation
Ltd (hereinafter called the "Beneficiary") and

WHEREAS a Bank Guarantee for Rs. _____ (Amount of E.M.D.) valid till
_____ (mention here date of validity of
this guarantee which will be 3 months beyond initial validity of Tenderer's offer).

We, _____ (name of the Bank and address
of the Branch giving the Bank Guarantee), having our registered office at
_____ (address of Bank's registered office)
_____ hereby give this Bank Guarantee No. _____ dated _____
and hereby agree unequivocal and unconditionally to pay **immediately** on demand in writing
from the Gujarat Energy Transmission Corporation Ltd or any officer authorized by it in
this behalf any amount not exceeding Rs. _____ (amount of E.M.D.) (Rupees
_____)

to the said Gujarat Energy Transmission Corporation Ltd on behalf of the Tenderer.

We _____ (Name of the Bank) _____ also agree that withdrawal
of the tender or part thereof by the tenderer within its validity of non-submission of
Security deposit by the Tenderer within one month from the date tender or a part thereof
has been accepted by the Gujarat Energy Transmission Corporation Ltd would constitute a
default on the part of the tenderer and that this Bank Guarantee is liable to be Invoked
and encashed within its validity by the beneficiary in case of any occurrence of a
default on the part of the Tenderer and that the encashed amount is liable to be
forfeited by the beneficiary.

This agreement shall be valid and binding on this Bank upto and inclusive of _____ (mention here the date of validity of Bank Guarantee) and shall not be terminable by notice or by change in the constitution of the Bank or the firm of Tenderer or by any reason whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alterations made, given, conceded with or without our acknowledge or consent by or between the Tenderer and the Gujarat Energy Transmission Corporation Ltd.

NOTWITHSTANDING anything contrary contained in any law for time being in force or banking practice, this guarantee shall not be assignable, transferrable by the beneficiary (i.e. GETCO). Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the Bank. Any invocation of the guarantee can be made only by the beneficiary directly.

NOTWITHSTANDING anything contained hereinbefore our liability under this Guarantee is restricted to Rs. _____ (amount of E.M.D.) (Rupees _____ (in words)).

Our guarantee shall remain in force till _____ (date of validity of the guarantee). Unless demands or claims under this Bank Guarantee are made to us in writing on or before _____ (date should be one month after the above validity period of BG), all rights of Beneficiary under the Bank Guarantee shall be forfeited and we shall be released and discharged from all liabilities there under.

PLACE:

DATE:

Complete postal address of the
Bank with Branch code,
Telephone and Fax Nos.

Signature of Bank's
Authorized Signatory with
Official Round seal

Note: The banks shall be the Banks recognized/notified by the Finance Department, Government

of Gujarat(GOG) from time to time.

SECTION - E IV

PART - B

SCHEDULE - 11

DETAILS OF PARTNERS / DIRECTORS WITH THEIR ADDRESS

Name of bidder: _____

Sr. No.	Designation	Name	Residence (address)	Working Place
1	2	3	4	5
1)				
2)				
3)				

Signature of Authorized Representative

Company / Agency

NAME: _____

STATUS: _____

Name of tendering

Company

Signature of Contractor

Superintending Engineer (TR)

GETCO, CO, Bharuch

SECTION - E IV

PART - B

SCHEDULE - 12

MEMORANDUM / ARTICLE OF ASSOCIATION

OR

CONSTITUTION OF FIRM WITH THE NAMES OF PARTNERS / DIRECTORS.

(TO BE SUBMITTED SEPARATELY WITH THE OFFER DULY SEALED AND SIGNED)

SECTION - E IV

PART - B

SCHEDULE - 13

ATTESTED COPY OF RESOLUTION OF THE PARTNERS / THE GETCO / AUTHORITY ACCEPTABLE BY LAW OF THE FIRM AUTHORISING A PARTICULAR PERSON TO SIGN TENDER AND RELATED DOCUMENTS ON BEHALF OF THE COMPANY.

(TO BE SUBMITTED SEPARATELY WITH THE OFFER DULY SEALED AND SIGNED)

SECTION - E IV
PART - C
SCHEDULE - 1
PROFORMA FOR AGREEMENT

(Non Judicial Stamp Paper of Rs. 300/-)

CONTRACT AGREEMENT

THIS AGREEMENT is made at **BHARUCH** the _____ day of _____ in the Christian Year **two thousand** _____ between M/s. _____ (address of office) _____ (hereinafter referred to as "THE CONTRACTOR" which expression shall unless excluded by or repugnant to the context include its successors or permitted assigns) of the ONE PART and the Gujarat Energy Transmission Corporation Ltd, having their Head office at Race Course, Baroda 390 007 (hereinafter called "The GETCO" which expression shall unless excluded by or repugnant to the context include its successors or assigns) of the SECOND PART.

WHEREAS the aforesaid The GETCO has accepted the tender of the aforesaid contractor for work of _____

_____ as per The GETCO's Order No. _____ hereinafter called "the works" and more particularly described and enumerated or referred to in the specification, terms and conditions prescribed in the order letter, covering letter and other letters and schedule of price which for the purpose of identification have been signed by Shri _____ (authorized signatory) on behalf of the contractors and by the **Supt.** Engineer (Trans), Gujarat Energy Transmission Corporation Ltd, Vidyut Bhavan, Race Course, Baroda on behalf of the GETCO, a list whereof is made out in the Schedule hereunder written and all of which said documents are deemed to form part of this contract and included in the expression "The works" wherever herein used, upon the terms and subject to the conditions hereinafter mentioned.

AND WHEREAS the GETCO has accepted the tender of contractors for the work of _____ for sum of Rs. _____ Rupees (_____) upon the terms and subject to the conditions herein mentioned.

NOW THIS AGREEMENT WITNESSESS AND IT IS HEREBY AGREED AND DECLARED THAT.

The contractors shall do and perform all works and things in this contract mentioned and described or which are implied therein or therefrom respectively or are reasonably necessary for the completion of the works as mentioned and at the times, in the manner and subject to the terms and conditions and stipulations contained in this contract, and in consideration of the due provision, executions, erection and completion of the works agreed to by the contractor as aforesaid the GETCO doth hereby covenant with the contractor to pay all the sums of moneys as and when they become due and payable to the contractors under the provisions of the contract. Such payment to be made at such times and in such manner as is provided by the contract.

The conditions and covenants stipulated here-in-before in this contract are subject to and without prejudice to the rights of the GETCO to enforce penalty for delays and / or any other rights whatsoever including the right to reject and cancel on default or breach by the contractor of the conditions and the covenants as stipulated in the general conditions, specifications, forms or tender schedule etc. attached with The GETCO's Order No. _____.

The contract value, extent of works, completion dates, specifications and other relevant matters may be altered by mutual agreement and if so altered shall not be deemed or construed to mean or apply to affect or alter other terms and conditions of the contract and the general conditions and the contract so altered or revised shall be and shall always be deemed to have been subject to and without prejudice to said stipulation.

SCHEDULE

List of documents forming part of the contract:

The GETCO's Tender Specification No. _____ and contractor's offer opened on dated
____/____/2020

The GETCO's contract booklet - "Tender & Contract of Works".

The GETCO's order No. _____ Dtd. ____ / ____ / 2020

Contractor's acceptance of order vide letter No. _____.

Contractor's Partnership Deed dtd. _____.

Contractor's Power of Attorney / The GETCO Resolution authorizing person to sign on behalf of Firm.

In witness whereof the parties hereto have set their hands and seals this day and month, year first above written.

Signed, sealed and delivered by

For and behalf of M/s. _____ (Signature)

Address: _____

In the presence of (Name and Address)

i) _____ (Signature)

ii) _____ (Signature)

Signed, sealed and delivered by for and on
behalf of Gujarat Energy Transmission Corporation Ltd
Sardar Patel Vidyut Bhavan, Race Course,
BARODA - 390 007.

In the presence of name and address:

- NOTE: 1) Copies of all documents forming part of the contract and listed in schedule (from tender invitation to A/T and party's acceptance letter thereof) be sealed and signed by the authorized signatory of the firm be submitted with the agreement.
- 2) Attested copy of resolution of the Partners / The GETCO / Power of Attorney acceptable by law authorizing particular person to sign on behalf of firm be invariably enclosed along with submission of Agreement.

SECTION - E IV
PART - C
SCHEDULE - 2
BANK'S UNDERTAKING

(Non Judicial Stamp Paper of Rs. 300/-)

BANK GUARANTEE NO: _____

We (Name of issuing bank, branch & address) hereby agree unequivocally and unconditionally to pay **immediately** on demand in writing from the Gujarat Energy Transmission Corporation Ltd or any Office authorized by it in this behalf, any amount upto and not exceeding Rs. _____ (Rupees _____) to the said Gujarat Energy Transmission Corporation Ltd on behalf of M/s. _____ (name of The GETCO's contractor) _____ who have entered into a contract for the supply/works specified below:

A/T No. _____ dt. _____ for **supply**/works of _____ (name of work) _____

This Agreement shall be valid and binding on this Bank upto and inclusive of _____ (Date _____) _____ and shall not be terminable by notice or by change in the constitution of the Bank or the Firm of contractors/**Suppliers** or by any other reasons whatsoever and our liability here under shall not be impaired or discharged by any extension of time or variations or alterations made, given, conceded or agreed with or without our knowledge or consent, by or between parties to the said within written contract.

NOTWITHSTANDING anything contained herein before our liability under this Guarantee shall be restricted to Rs. _____ (Rupees _____) only(in words).The Guarantee shall remain in force until _____ (Date of validity of the Guarantee). **Unless demands or claims under this Bank Guarantee are made to us in writing on or before _____ (date should be one month after the above validity period of BG), all rights of Beneficiary under the Bank Guarantee shall be forfeited and we shall be released and discharged from all liabilities there under.**

PLACE:

DATE:

Round seal and Signatures of

two Authorized Bank Officers

along with their code numbers

SECTION - E IV

PART - C

SCHEDULE - 3

INDEMNITY BOND

(Non Judicial Stamp Paper of Rs. 300/-)

INDEMNITY BOND

KNOW ALL MEN BY THESE PRESENTS that we, Messers _____ (hereinafter called "the Contractor" which expression shall, where the context so admits, include their heirs, executors, administrators and legal representatives, successors and permitted assigns) are hereby held and firmly bind unto the Gujarat Energy Transmission Corporation Ltd (hereinafter called "the GETCO" which expression shall, where the context so admits, include its successors and assigns) to refund the full amount of steel cement and other materials supplied by the GETCO under the terms and conditions of A/T No. _____ dated _____

against any loss damage or deterioration of whatsoever nature occurs to said materials supplied by the GETCO and which are in the custody of the contractor at their works site, on behalf of the GETCO, at _____ (name of line) _____ and / or if any of the said materials, when inspected by any officer authorized by the GETCO in this behalf, is found to be damaged, lost, deteriorated in quality or quantity, the contractor hereby agrees to bind himself to indemnity and at all times keep indemnified the GETCO against all loss, damage and deterioration to the cement, steel or any material supplied by the GETCO during his custody and shall pay in cash on demand from the GETCO within 30 days the market value of such materials which is lost, damaged or deteriorated in full to the GETCO and shall also hereby authorize the GETCO to deduct the said sum from any sum due to the contractor or any sum which may at any time become due to the contractor under the above referred contract or any other contract entered into by the contractor with the GETCO.

AND WHEREAS the contractors do hereby agree to be responsible for the safe custody and protection and preservation of the said materials against all risks, excluding war risks and against loss, damage and deterioration of whatsoever nature in respect of the said materials while it remains in the custody and possession of the contractor.

AND WHEREAS the said materials shall at all times be open for inspection by any officer authorized by the GETCO.

Now the conditions of the above written bond are such that the contractor shall pay the full amount forthwith to the GETCO in the event of loss, damage or deterioration or whatsoever except due to circumstances arising out of war in respect of the materials supplied by the GETCO and shall fully and effectually indemnify and keep indemnified to the GETCO against such loss, damage and deterioration.

The contractor shall keep the said materials open at all times for inspection by the officers authorized by the GETCO and produce at any time when demanded.

THE WITNESS WHERE OF: We the Said M/S _____

(Signature of contractor)

(Seal of Firm)

hereto signed at _____

this day _____

In the presence of

Name _____

address _____

(Signature)

Name _____

address _____

(Signature)

SECTION - E IV

PART - C

SCHEDULE - 5

PROGRESS REPORT

Details of progress achieved during I / II fortnight to Month _____

A/T No. & Date _____

Name of Substation _____

Sr. No.	Erection Activity	Unit	Total Work Involved	Work done up to last fortnight	Work done during fortnight	Total work done up to this report	Balance work to be done	Remark
1	2	3	4	5	6	7	8	9

Details of work done quantities:

Details of work done (activity wise, location wise):

Signature of Authorized Representative

Company / Agency

NAME: _____

STATUS: _____

Name of tendering

Company

SECTION - E IV

PART - C

SCHEDULE - 7

MATERIAL ACCOUNT

(STATEMENT TO BE ATTACHED WITH MONTHLY RUNNING ACCOUNT BILLS)

- 1) Statement giving item wise details of monthly receipt of line material from GETCO and consumption for erection of Substation for the Month of _____.
- 2) A/T No. & Date: _____.
- 3) Name of Line: _____

Sr. No.	Items	Prov. Requirmen	Receipt of Material from GETCO			Consumption of Material in Line			Actual wastage	Balance quantity of material in stock
			Qty. rcvd. Upto last month	Qty. rcvd. This month	Qty. rcvd. Till this month	Qty. utilized upto last month	Qty. utilized this month	Qty. utilized till this month		
1	2	3	4	5	6	7	8	9	10	11

Signature of Authorized Representative

Company / Agency

NAME: _____

STATUS: _____

Name of tendering Company

SECTION - E IV
PART - C
SCHEDULE - 8

(TO BE SUBMITTED ON THE LETTER HEAD OF THE FIRM)

Reference No.

Date:

To,
The Superintending Engineer,
Gujarat Energy Transmission Corporation Ltd.,
TRANSMISSION CIRCLE,
P. O. Maktampur,
BHARUCH-392 012

Sub: _____
—

Ref:	A/T/LOI	No.

We hereby acknowledge, agree and accept your A/T under reference above with the terms and conditions mentioned therein.

Signature of Authorized Representative

Company / Agency

NAME: _____

DESIGNATION: _____

Note: To be signed by authorized person on behalf of the Firm.

SECTION - E IV

PART - C

SCHEDULE - 9

BANK GUARANTEE EXTENSION FORMAT

(To be executed on non-judicial stamp paper of Rs. 50/-)

(Name and address of the Bank issuing the Bank Guarantee extension.)

EXTENSION OF BANK GUARANTEE NO. _____ Dated. _____ of Rs. _____.

The validity period of our subject Bank Guarantee issued in your favor on behalf of M/s. _____ is hereby extended upto _____.

Notwithstanding anything mentioned herein before, our liability under this guarantee is restricted to an amount not exceeding Rs. _____ (Rupees _____ only) and it will remain in force till _____ (validity date) _____.

All other terms and conditions mentioned in the original Bank Guarantee will remain unaltered. This extension forms an integral part of the above quoted original Bank Guarantee and may be kept thereto.

Place:

Date:

Signature of authorized

Authority of Bank

Seal of Bank

Date:

SCHEDULE – 17
I N T E G R I T Y P A C T

OUR ENDEAVOUR

To create environment where Business Confidence is built through Best Business Practices and is fostered in an atmosphere of trust and respect between providers of goods and services and their users for the ultimate benefit of society and the nation.

GETCO COMMITMENT

- To maintain the highest ethical standards in business and professional.
- Ensure maximum transparency to the Satisfaction of stakeholders.
- To ensure to fulfill the terms of agreement / contract and to consider objectively the viewpoint of parties.
- To ensure regular and timely release of payment on due dates for work done.
- To ensure that no improper demand is made by employees or by anyone on our behalf.
- To give maximum possible assistance to all the vendors / supplier / Service provider and other to enable them to complete the contract in time.
- To provide all information to suppliers / contractors relating to contract / job which facilitate him to complete the contract / job successfully in time.
- To ensure minimum hurdles to vendors / suppliers / contractors in complete of agreement / contract / work order.

PARTY'S COMMITMENT

- Not to bring pressure/recommendations outside GETCO to influence its decision.
- Not to use intimidation, threat, inducement or Pressure of any kind on GETCO or any of its employees under any circumstances.
- To be prompt and reasonable in fulfilling the contract, agreement, legal obligations.
- To provide goods and / or services timely as per agreed quality and specifications at minimum cost of GETCO.
- To abide by the general discipline to be maintained in out dealings.
- To be true and honest in furnishing information including payment to agents / sub-agent.
- Not to divulge any information, business details available during the course of business relationship to others without the written consent of GETCO.
- Not to enter into carter / syndicate / understanding whether formal / non-formal so as to influence the price.

Seal & Signature

(GETCO Authorized Signatory)

Name:

Designation:

Seal & Signature

(Party's Authorized Person)

Name:

Designation:

SCHEDULE - 19
SAFETY CUM INDEMNITY BOND

(On Non-judicial Stamp paper of value not less than **Rs. 300.00**)

KNOW ALL MEN BY THESE PRESENTS that we, _____ by this SAFETY CUM INDEMNITY BOND Executed

on this _____ Day of _____ 2019. I/We Having Registered Office_____

_____(herein after called "THE CONTRACTOR" which expression shall mean and includes my /our heirs, executors, administrators and legal representatives, successors and permitted assigns) do hereby binds myself/ourselves and also our company/firms after having the power to bind by this promise and undertaking in favor of the Gujarat Energy Transmission Corporation Limited (GETCO), Vadodara a State Transmission Utility under The Electricity Act, 2003 having its registered office at Sardar Patel Vidyut Bhavan, Race course, Vadodara.(hereinafter called as GETCO, which expression shall mean and include its legal representative, administrators assigns) has agreed under the terms and conditions of the contract no._____ dated_____made between _____ and _____for the contract of the _____value of Rs. _____ interalia on production of Safety Cum Indemnity Bond.

We do hereby undertake and agree to Indemnify and keep Indemnified GETCO from time to time to the extent of Rs._____ Rupees_____only against any losses or damages, costs, charges and expenses caused to or suffered by reason of the CONTRACTOR while Project, R&M, O&M work including work carried out by outsourcing agency, failing to take proper care or not complying the guidelines given hereunder as per Annexure-A and instructions which may be given from time to time during the continuance of the contract and we further undertake to unconditionally pay the amount claimed by the GETCO on demand and without demur to the extent aforesaid.

Whereas the CONTRACTOR has/have been awarded to execute the job/works under order no._____, dated_____ for_____ issued by the GETCO after having observing necessary formalities, the details of which is described in the order no._____ dated _____ and whereas the said job/works will be /likely to be done in places covered under Employees' State Insurance Act, 1948 (ESI) and /or the Workmen Compensation Act, 1923 and /or other laws relating to the Labor Management and Welfare Act. (Respective Amendments) And whereas according to the condition of the Contract the CONTRACTOR is under obligation to execute this Safety cum Indemnity Bond before the commencement of actual execution of work. Now the indenture witnesses that I/We the CONTRACTOR do hereby undertake to follow the guidelines as per Annexure-A prepared by the GETCO. Further we the CONTRACTOR agree that the GETCO shall be sole judge of and as to whether there has been any breach of the guidelines as per Annexure-A of this bond and as to the extent of the loss, damages, costs, charges and expenses caused to or suffered by the GETCO.

We the CONTRACTOR further agree that our liability under this bond shall not be discharged because of the change in the constitution of the GETCO or for the extension of the time limit or for any other reason.

We the CONTRACTOR further agrees to the given terms and conditions:

a) That the CONTRACTOR undertakes /undertake to indemnify and keep harmless the GETCO from all claims, actions, proceedings and risk, damage danger to any person whether belonging or not belonging to the CONTRACTOR.

b) That the CONTRACTOR shall keep harmless the GETCO from all claims, compensation, damages any proceedings in respect of any of its employee / workmen under the Workmen Compensation Act or any other laws for the time being in force.

c) That, if during the course of execution of work as stated in the contract order mentioned

hereinabove issued by the OBLIGEE, it is found that the CONTRACTOR has not complied with guidelines as per Annexure-A or terms and conditions / formalities within the meaning of Employees' State Insurance Act, 1948 (ESI) or Workmen Compensation Act 1923 or any other laws

relating to the Labor Welfare for the time being in force, and also has not observed the safety norms in accordance with the law prevailing at the place of work/job to the satisfaction of the GETCO, the GETCO shall have the right to stop the execution of work/job and the period of such stoppage shall not be taken into account for the calculation of the total period of completion of work for which the CONTRACTOR is responsible to complete the work/job and it will be deemed that discontinuance was due to default of the CONTRACTOR .

d) That, if any time, due to exigency, GETCO as the Principle Employer, becomes liable to pay any such compensation mentioned hereinabove, whether on failure of the CONTRACTOR or for any other reason, the GETCO shall have the right to recover the said amount from any amount receivable by GETCO or any bank guarantee deposited or anything payable whether in connection with this contract or other contract by the CONTRACTOR to the OBLIGEE.

e) That the CONTRACTOR is/are aware and accept that for the persistent or repeated violation of any guidelines as per Annexure- 'A' and terms and conditions mentioned in this Safety cum Indemnity Bond, GETCO shall have right to terminate the contract of work issued to the CONTRACTOR.

f) In case if any safety related fatal Electrical / Mechanical accident occurred to any employee of agency or outsider due to negligence or non-compliance of GETCO safety norms then in addition to the compensation and liability as per statutory requirement, contractor / agency is hereby agreed to pay the penalty amount as given below:

Sr. No	Amount of Contract in Rs.	Penalty amount
1	Up to 1 Lac	Rs.5000/- plus GST as applicable
2	Above 1 Lac to 10 Lac	Rs.40000/- plus GST as applicable
3	10 to 100 Lac	Rs.100,000/- plus GST as applicable
4	> 100 Lac	1.0 % of contract value plus GST as applicable

g) I/We the CONTRACTOR hereby confirm that in case of any dispute/difference for settlement of claims under this Safety Cum Indemnity bond the courts in Gujarat State wherever job/work is performed or as per GETCO norms shall have the jurisdiction to decide the rights & liabilities of the parties while adjudicating the matter of claims under this Safety Cum Indemnity Bond.

h) This Safety cum Indemnity Bond shall continue and hold good until it is released by the GETCO in Writing on the CONTRACTOR's application after the Contractor has discharged all his obligations under the order mentioned hereinabove and submitted a "NO DEMAND CERTIFICATE" from the GETCO under the said order. The Safety cum Indemnity Bond shall be valid for a CONTRACT PERIOD and renewable thereof (Claim Period).

i) This Safety cum Indemnity Bond and the guidelines as per Annexure-A herein contained are in addition to and not by way of limitation or substitution for any other guarantee, indemnities Here to before given to the GETCO by the CONTRACTOR and this indemnity do not Revoke or limit such indemnities or guarantees. IN WITNESSWHEREOF the Parties hereto have executed this indenture the day the year First hereinabove written.

(Signature with seal of The CONTRACTOR)

In the presence of: -(1).

(2).

ANNEXURE - A

OUR ENDEVOUR - Safety a habit

To create environment where Business Confidence is built through Best Business Practices and is fostered in an atmosphere of trust and respect between providers of goods and services and their users for the ultimate benefit of society as the nation, safety guidelines are agreed upon by the agency as under.

Safety is our prime concern and zero accident is our goal. In order to prevent the accident, while execution of works in indoor and outdoor systems of GETCO, the following guideline and preventive measures are identified.

Indoor safety precaution	Outdoor safety precaution
The method of work required T&P and manpower should be discussed between GETCO supervisor, contractor's supervisor and gang leaders.	The method of work required T&P and manpower should be discussed between GETCO supervisor, contractor's supervisor and gang leaders.
Prior to execution of work a joint survey must be conducted by GETCO supervisor and contractor's supervisor for risk assessment. ☐☐ Clearly identify the work location, to distinguish between the equipment that is dead and other equipment / part that may be live. ☐☐ Disconnect equipment from supply. ☐☐ Protect against other live parts. ☐☐ Take special precautions when close to bare conductors / Bus bar.	Prior to execution of work a joint survey must be conducted by GETCO supervisor, contractor's supervisor and DISCOM line man in order to identify the following: a. HT/LT line or tap line crossing under each span of line of the work. b. Isolation point of each line crossing. c. Each line crossing & isolation point under each span must be discussed and noted in maintenance register with sketch.
Following safety guidelines are mandatory for all contractors operating in GETCO premises for Electrical, non-electrical & civil works. 1. The contractors must provide advance planning of work to concerned in-charge of substation in writing. 2. Before starting any work whether switch yard, "permit to allow to work" must be taken from control room in-charge. 3. Utilizing Electrical / non-electrical equipments, safety rules must be implemented. 4. If the work is to be carried out on Sunday or public holiday, the necessary	Contractor's supervisor and GETCO Supervisor must ensure all isolations physically with adequate earthing technically prior to give clearance to gang leader for taking up job. While execution of stringing work, the identified line crossing must be isolated / de-energized and written clearance should be obtained from concerned DISCOM supervisor. The isolation of Tap line must be physically seen and verified by Contractor and GETCO supervisor. At D.O. fuse junction contractor's person should be posted to ensure that no person restore D.O. supply while work is under

permission must be taken in advance, requesting in writing. 5. Unwanted person including children of labors will not be allowed at working site/ in the switchyard and in the prohibited area. 6. Any electrical work or electrical connections to equipment for any other work must be carried out by certified electrician/wiremen with adequate size of wire through MCB as per I.E. Rule. o Live penal area / bus bar must be isolated and sealed / bifurcated with red color tape for visible warning. o Display Board must hang on LCP panel. o Transformer must be switched off whenever and wherever contractor and line workers are not satisfied with isolation, earthing or any equipment performance of GETCO, it will be pointed out and work shall begin only after resolution. Contractor shall not take up job in absence of GETCO authorized person. All wire temporary connection & material never erection activity has any connection and disconnection work of busbar, string bus.	execution Contractor's supervisor must ensure that concern officer take LCP for EHV line and power line crossing.
All workers / labor of contractor & supervisors must use personal protective equipment (PPE) during the work like gloves, safety belt, Safety shoes, Helmet, earthing rods, etc, duly approved by GETCO.	All workers/labour of contractor & supervisors must use personal protective equipment (PPE) during the work like gloves, safety belt, Safety shoes, Helmet, earthing rods, Live line detector etc, duly approved by GETCO.
The local earthing must be done at the place of work before execution of any work.	The local earthing must be done at the place of work before execution of any work.
11 kV breakers in panel must be switched off and racked out only after ensuring no voltage in breaker and without door opening.	Circuit breaker opening is not isolation and isolator on either side must be opened. No work during rains and cloudy weather condition.
	Transmission line activities. 1) Used of Voltage detector to ensure outage. 2) Earthing at three points, local, left & right side of bus bar / string bus. 3) Match line color code with color of wrist band.
	Local earthing of electrical equipments like filter M/c, welding machine, testing

	kits etc. is must. Crane shall only be used for material handling and erection. Working platform shall only be used for work in switchyard.
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Revised ANNEXURE-14

(UNDERTAKING IN REGARD TO STOP DEAL / BANNED FOR BUSINESS DEALING/BLACK LIST THEREOF)

Sub: Undertaking in regard to stop Deal/Banned for Business dealing/Black list thereof.

Ref: Tender No.: TCBRH/26-27/2613

All Bidders will have to furnish the following undertaking duly filled in, signed and stamped for each quoted item of the Tender along with the Technical Bid.

I/We _____ authorized signatory
of M/s _____

_____ hereby certify that M/s _____
_____ and their proprietor/any partner/and directors of the firm is not stop
deal and/or banned for Business dealing and/or black listed by GUVNL and/or their any
subsidiary company viz. GSECL/ GETCO / DGVCL / MGVL / UGVCL / PGVCL.

Seal of the firm

Signature of the Tenderer

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED
TRANSMISSION CIRCLE, GETCO-BHARUCH



TENDER SPECIFICATION FOR

(NOTE: Price Bid should not be submitted in Hard copy)

**Work of erection of 66KV equipment, Structures,
Control wiring, Yard Lighting, Control-Room,
Staff-Quarter Electrification & Supply of
Furniture etc at Mota Borasara-2 S/S under
construction Division Bharuch**

PRICE BID

PART - II

PRICE SCHEDULE

TENDER NO: TCBRH/26-27/2613

SCHEDULE-B

NAME OF WORK: Work of Erection of 66KV Equipment, Structures, Control wiring, Yard Lighting, Control-Room Electrification & Supply & Installation of furniture and Supply and Installation of CCTV Camera etc at **66KV Mota-Borasara -2 S/S**

SCHEDULE B-1: EQUIPMENT ERECTION & BUS BAR STRINGING

Sr. No.	Description of work/Supply	Unit	Total Qty	Rate	Amount
1	Erection of equipments of any type / make with required all spares & accessories as per supplier's manual and FQP, including individual & interpole wiring of for all mentioned voltage class switchyard (as per respective technical specification & relevant Special Conditions) Suitable for all types of bus configurations. Scope includes the dragging/loading/unloading of same from site store to erection site. Erection of Breakers - 66 KV without Crane.	Set of 3 Pole	4	5535.00	22140.00
2	Erection of CT & PT CVT on erected structure including complete dragging/ loading/ unloading of same with crane only from site store to erection site and fixing of required clamps, connectors as per instructions of Engineer-In-Charge. 66 KV CT/PT (without Crane permitted)	Per Phase	18	623.00	11214.00
3	Erection of surge arrester with counter on Erected structure including complete dragging/loading/ unloading of the same with crane only from site store to erection site and fixing of required clamps, connectors as per inst. of Engineer-In-Charge. 66 KV	Per Phase	12	415.00	4980.00
4	Erection of Centre Break/Double Breake Isolator (All make) with earth blade on its erected structure consisting of 3 base channels with porcelain/solid core insulator including interconnected piping with operating mechanism and accessories with final adjustment for simultaneous operating & closing. The rates are inclusive of dragging / loading / unloading of the same from site store to erection site as per instruction of Engineer-In-Charge. 66 KV	Set of 3 Phase	2	3459.00	6918.00
5	-- DO -- as above but without earth blade complete. 66 KV	Set of 3 Phase	7	2491.00	17437.00
6	Erection of 66KV Poly cone/Solid Core/ Bus Post Insulator on its erected structure complete, fixing of accessories and shifting of same including loading/ unloading from its site store to erection site. 66 KV	Per No	10	277.00	2770.00
7	Laying of any size of 11/22 KV XLPE/PILC cable including excavation of trench 300mm wide & 600mm deep in any type of soil including laying and filling up sand of 100mm layer from bottom & bricks on three side of cable & refilling the trench with Murram/soil & ramming etc. Required bricks, sand, power cable marker/C.I./G.I. plate etc. will have to be supplied by the contractor. Rates are inclusive of shifting of cable drum to the site from S/S site store. Drum should be handled only by jacking to avoid damage to cables.	Mtr	180	138.00	24840.00

8	Laying of any size of 11/22 KV XLPE/PILC cable in ready made cable trench or in open space. Rates are inclusive of shifting of cable drum to the site from S/S site store. Drum should be handled only by jacking to avoid damage to cables.	Mtr	500	63.00	31500.00
9	Erection S/S & Equipment structure including punching of nut bolts. Rates are inclusive shifting of same up to erection site from its s/s Store. 66 KV	MT	24.00	2491.00	59784.00
10	Erection of 66/22-11KV, class Power Transformer with complete mounting of all the accessories i.e. bushings, radiators, conservator tank etc. including laying of cable between all accessories/mounted on the transformer/ marshalling KIOSK filling and filtration of oil with filter machine as per direction of Engineer-In-Charge, manufacturer Engineer or as per instruction manual. Required filter machine, Hydraulic Jack, Vacuum pump etc. for erection & oil filtration will be provided by contractor.				0.00
	i) 05 MVA	No	0		0.00
	ii) 10 MVA	No	0		0.00
	iii) 15 MVA	No	2	24905.00	49810.00
	iv) 20 MVA	No	0		0.00
11	Stringing of Single ACSR Zebra Bus complete in all respect with fixing of all fitting, insulators sag compensating spring and all accessories as per the instruction of Engineer-In-Charge.	Rmtr / Phase	200	63.00	12600.00
12	Preparing and fixing of required length of jumper of single Zebra/Panther/ Dog in the switchyard on respective Bus & equipments, tensioning, Compressing & dressing of jumpers complete as per instruction of E.I.C.	Rmtr Per Phase	350	16.00	5600.00
13	Installation of earthing strips/MS Round bar in any kind of soil except Rocky (HR/SR) soil as per earthing philosophy of GETCO Earthing Grid: 1) including digging of 600mm depth and 450mm wide trench 2) Cutting, bending, laying and fixing of Earthing Grid conductor. 3) 75*10 mm/50*6 mm GI Strips: Fixing of two bolt at each straight joints and lap welding removing oxide films formed during welding applying two coats of red oxide and black powder after welding and applying zinc rich paint on welded joints. 4) 25/32/36/40MM dia MS rod: Lap welding at each stright & cross joints removing oxide films formed during welding applying two coats of red oxide and black powder after welding and applying zinc rich paint on welded joints. 5) including supply of red oxide paint, black powder HDGI nuts bolts as per specifications. 6) Back filling of the trech with yellow/Normal soil. structure & Equipment earthing : 1) including digging of 600mm depth and 450mm wide trench. 2) cutting, bending as per required shape, laying and fixing of risers from Grid to structure and equipments. 3) Lap welding removing oxide films formed during welding, applying two coats of red oxide and black powder after welding and appting zinc rich paint on welded joints including supply of HDGI nuts & bolts	Mtr	3800	43.00	163400.00

	for all connections including supporting to structures etc as per specification 4) Back filling of the trench with yellow /Normal soil. 50x6mm G.I. Strips /MS round bar up to and including 25mm				
14	Installation of earthing strips/MS Round bar in Rocky (HR/SR) soil as per earthing philosophy of GETCO Earthing Grid: 1) including digging of 600mm depth and 450mm wide trench. 2) Cutting, bending, laying and fixing of Earthing Grid conductor. 3) 75*10 mm/50*6 mm GI Strips: Fixing of two bolt at each straight joints and lap welding removing oxide films formed during welding applying two coats of red oxide and black powder after welding and applying zinc rich paint on welded joints. 4) 25/32/36/40MM dia MS rod: Lap welding at each straight & cross joints removing oxide films formed during welding applying two coats of red oxide and black powder after welding and applying zinc rich paint on welded joints. 5) including supply of red oxide paint, black powder HDGI nuts bolts as per specifications. 6) Back filling of the trench with yellow/Normal soil. structure & Equipment earthing : 1) including digging of 600mm depth and 450mm wide trench. 2) cutting, bending as per required shape, laying and fixing of risers from Grid to structure and equipments. 3) Lap welding removing oxide films formed during welding, applying two coats of red oxide and black powder after welding and applying zinc rich paint on welded joints including supply of HDGI nuts & bolts for all connections including supporting to structures etc as per specification. 4) Back filling of the trench with yellow /Normal soil. 50x6mm G.I. Strips /MS round bar up to and including 25mm	Mtr	0	164.00	0.00
15	Providing bore for bore type earthing with drilling of minimum 200 mm dia bore upto following mentioned depth Rocky (HR/SR) soil as per earthing philosophy of GETCO 1) work including inserting 20/25mm dia MS rod (for 66kV S/S)/40mm dia MS rod (for EHV S/S) in bore depth and to be connected to earthing grid at junction point by proper welding at both end. 2) This includes cutting, fabrication & welding of flat. 3) Refilling and compression of surrounding areas with Normal/yellow soil ground enhancement material etc wherever applicable as per approved soil strata and earthing design calculation. 4) Required G.I. Earthing strip/MS rod will be supplied by GETCO free of cost. 5) Earthing material like Normal/yellow soil, ground enhancement material (0.5CMT/meter depth), water etc shall be supplied by contractor.	No	0	3486.00	0.00
16	Installation of ground rod 20/32/40 mm dia bar in 5,3 mtr Long vertical spike for mesh type earthing in Normal soil.	No	36	158.00	5688.00

17	Supply,installation,Testing & Commissioning of maintainanace free treated earth electrodes Suitable for NORMAL SOIL as per drawing no. GETCO/E/P-021 (1 of 2) R3 dated:29-05-20and technical specification GETCO/E-TS- Maintainanace Free earth pits/R1 dated 04.06.15 for 66/11 KV Sub-Stations with ground enhancement material/back filling/ grounding compound as per IEEE 80-2000 clauses 14.5 (d) and as per Part-7 of IEC-62561 using copper bonded earth electrode (with 250 micron coppber coating) having 24 mm dia.(Min) and 3000 MM length which shall be capable of handling STC of 25 KA-1 sec. Work also includes providing BB Masanory inspection chamber (manhole) incl. light type CI cover.	No	42	13893.00	583506.00
18	...DO..as above for Rocky soil as per drg no. GETCO/E/P-021 (2 of 2) R3 dated:29-05-20	No	0	14844.00	0.00
19	Fabrication for erection of any Equipment/Structure/panel or anywhere in s/s & F.B. at other endas per Inst. Of E.I.C.	L.S. (Max.)	1	4992.00	4992.00
20	Erection of support structure for 11 KV Power cable termination at 11 KV Bushing for 15/20 MVA Power Transformer as per GETCO Drawing No: GETCO/E/06S-STD/11 KV STR- A2-02 1)Material for supporting strucure will be supplied free cost by GETCO. 2) Necessary wooden clamps as per drawing with required nut-bolt-washers & HDPE rubber piece for packing etc shall be supplied by contractor 3).Job also includes minor fabrication if required as per instruction of EIC.	No	2	998.00	1996.00
21	Erection of support structure for Station Transformer as per GETCO Drawing No: GETCO/E/06S-STD/11 KV STR- A3-03. 1)Necessary wooden clamps as per drawing with required nut-bolt-washers & HDPE rubber piece for packing etc shall be supplied by contractor. 2)Job also include erection of required 11 KV L.A. & D.O. fuse and minor fabrication if required as per instruction of EIC 3)Material for supporting structure ,DO fuse & 11 KV L.A. will be provided by GETCO free of cost.	No	1	2196.00	2196.00
22	Providing & fixing on above support str. of Set of following Items on 11KV support structure system for power cable of 66/11KV Transformer as per GETCO drawing GETCO/E/06s-STD/SPL-028A R3 dt 26.10.16 and instructio of EIC 1) Allu. alloy bus bar of size 120X20x2000 mm : 03 Nos. 2) 11KV SRI of PCD 127 mm 12 No 3) Copper laminated fusion welded flexible jumper of size 75 X 10 X 600 mm having 2000 Amp capacity : 03 No 4)Bi metallic plate(Al/Cu):3 No 5) 11kv heat shrikale anti tracking sleeve on Al Bus bar of all three phase 6 meter 6) Including required GI/SS nut bolt and washer of good quality for fitting support structures. 7) All live parts shall be covered with heat shrinkable MV insulated tape sleeve.	Set	2	27303.00	54606.00

23	Erection of 11KV D.P. Structure GETCO Drawing No: GETCO/E/06S-STD/11KV STR -A1-01 and GETCO/E/06S-STD/11KV STR -A4-04 1)Job includes erection of 11kv A/B switchs ,11kv LA,jumpering between 11kv cable to 11kv Bus etc on erected structure. 2)Material for DP structure.AB switches,PI and conductor for jumpers will be supplied free of cost by GETCO. 3)Necessary wooden clamps with required nut bolt washers & HDPE rubber pieces for packing etc to hold 11kv power cable as per drawing shall be supplied by the contractor. 4)Job also includes minor fabrication if required as per instruction of EIC.	No	10	2196.00	21960.00
24	Stringing of Single ACSR Dog bus between 11KV D.P. Structure to cross boundary structure in all respect 1) Job includes fixing of all fittings and accessories on erected DP structures 2) single tension hardware suitable for ACSR dog cond 6 set shall be supplied by the contractor. 3) Necessary ACSR DOG conductor,11kv insulator will be supplied by GETCO free cost.	Set of 3 ph.	5	4786.00	23930.00
25	Providing of M15 Grade Concrete for various equipment structure, Guy, 11kv DP, M.K. Box, Neutral channels, cable support channel, grouting of Pole/ Flood light structure with cement, sand & metal in proportion of 1:2:4 respectively. 1) work including mulling with smooth cement mortar (1:6) finish. 2) Necessary sand,metal,water & cement shall be supplied the contractor.	Cmt	6	5276.00	31656.00
26	Excavation in Hard Rock for excavation of Earthing Pits/ power cable & control cable trenches, Yard Light Poles etc.	Cmt	0	525.00	0.00
27	Loading, Transporting & Unloading of all material for 66 KV substation like Structure,indoor & out door SS Equipments, DP Structure,earthing materials,battery set,fire wedge,GI/MS scrap,all other material etc in Substation & opposite end feeder bay from Store to SS Site	Job	1	51720.00	51720.00
28	Supply & laying of 1 CoreX25mm², armoured Copper Cable , multi-strand flexible of approved make ISI marked in ready made trench or PVC pipe from Battery Charger to Battery Set including termination at both side as per inst. of EIC.	Mtr	45	199.00	8955.00
29	Providing and fixing of various type of sign Board, sticker, Big Sign Board, earthing pit board, earthing pit Board & Single line diagram etc as per instruction of IEC. Sticker of red, white, black Letters are to be utilised for various sign board.	Job	1	24957.00	24957.00
	Earthing Pit Board Size:- 6" x 6" -30 Nos.				
	Safety Slogan Board, Hard Sheet board size 2' x 2'and 4mm thick (Gujarati Language)- 2 Nos.				
	Safety Slogan Board, Hard Sheet board size 3' x 2'and 4mm thick (Gujarati Language) with red and Yellow colour.-03 Nos.				
	Single line diagram size 5' x 3' Digital with Alluminium frame with fitting and as per approved diagram given by IEC.-01 No.				

	Big sign board size 5' x 4' and 2mm thickness indicating sub station name digital with S.S. rod with hole & as per approved symbol with fitting charge.- 01 No.				
	Switch yard sign Board 12" X 6" with 2 mm Thickness black & white Gujarati language.-25 Nos.				
	Safety Slogen Board size 2" x 6" in side control room.-05 Nos.				
	Various type of control room equipment sticker size-24 cms x 5cms.--18 Nos.				
	Safety picture board size :- 3' x 3' (Laminated for O/D use)-03 Nos.				
	Name plate board of transformer size :- 2' x 1'- 04 Nos.				
	Cable marker size:- 6" x 6", Radium, fixed on 750mm long M.S.Rod for fixing arrangement.- 30 Nos.				
30	Providing and fixing of Radium sticker for out door and Indoor equipments identification like LA, ISOLator, Circuit breaker, transformer, CT,PT,MK box, C&R panels , 11KV panel board etc.	Sq. Inch	4000	2.00	8000.00
31	Providing and Fixing of Fire stand from 75mm GI pipe A class ISI mark heavy duty having 5ft width and 4ft height as per inst of Engr. In charge 1)Work includes cutting,drilling,welding of pipe as required. Fabrication and supply of 16mm dia meter hook required size for buckets . 2) 4 Nos.of fire buckets are to be provided. 3)Fire stand should grouted with excavation of pit size 300mm*300mm-2 nos of 600mm depth with 1:3:6 mis muffing 300mm in height including quality as per instruction of EIC. 4) Fire stand is to be painted with post box red colour of approval quality as per instruction of EIC. 5)All required approved material including cement,sand,metal etc are to be provided by contractor.	Job	1	4992.00	4992.00
32	Providing, Fabrication and erection of VHF set entena support pipe on control room by providing 25mm dia. GI pipe of length 20 feet.including providing & fixing of 4 nos. of guy from GI wire 10 SWG. This job includes painting of GI pipe by good quality paint white and red alterlatively	Job	1	1498.00	1498.00
33	Labour charge for fixing of 11KV XLPE Indoor/Outdoor cable kit of any make for size 95 to 300mm ² . Cable kit provided by GETCO.	No	24	748.00	17952.00
34	Providing and fixing of RAYCEM/MSEAL/CABSEAL or equivalent approved make form GETCO heat shrinkable type 11kV XLPE Outdoor cable Termination Kit suitable for 11kV 3CX95Sqmm to 300Sqmm XLPE Power Cable by using adequate capacity of Al lugs.... If required	No	5	6139.00	30695.00

35	Providing & Fixing of Aquaguard Toatal Reviva Water R.O. Plant including Commissioning & Testing and also with required peripherals for installation of plant as per site condition (1) Dimension: 320 X 275 X 410 mm (2) Weight : 8 KG (3) Water flow : 8 to 12 LPH (4) Input power : 230V AC (5) RO membrence : TFC spiral Contractor has to provide guarantee for the 12 month from the installation.	No	1	6889.00	6889.00
36	Providing and fixing of ISI mark Rubber Matting sheet Suitable for 11KV Class As per following specification. Reference IS:15652-2006 with latest amendment. Suitable for Voltage Class :B Max Use Voltage : 11KV AC proof voltage : 22KV Dielectric strength : 45KV Leakage current : < 10 micro ampere Colur RED/BLUE Make : Vardhman or equivelent (Rubberhouse India) Width :1 mtr. Thickness :2.5 mm. Surface :Chequered on one side and other side plain. NOTE: Contractor has to supply Rubber Matting sheet as per IS:15652-2006 with latest amendment specification and shall submit test certificate for routine test as per relevant IS	sq.mtr	20	4492.00	89840.00
37	Providing & fixing of reputed make ISI mark Fire Extinguisher .with leatest ammendment Dry chemical powder 09 kg Capacity Note: Contractor shall submit Test certificate for routine test as per relevant IS.	No	2	6301.00	12602.00
38	- Do - but CO2 type - 6.5Kg	No	2	7047.00	14094.00
39	- Do - but CO2 type - 22.5Kg	No	2	17817.00	35634.00
40	- Do - but Mechanical foam type - 50Ltr	No	1	14499.00	14499.00
41	Erection of Control Panel, Relay panel or C/R panel or RTCC panel including grouting of panel, jointing with adjoining panels including required fabrication for joining panels & entry of control cables and complete vermin proofing. Job includes supply of required bolts, nuts etc. and shifting of panel from S/S site store to work site. 66 KV	No	6	691.00	4146.00
42	Erection of 11KV CB panel of any make including grouting, jointing with adjoining panels & horizontal , vertical levelling including required fabrication for entry of power cable, control cable and complete vermin proofing, Job includes supply of required bolts, nuts etc. and shifting of panel from S/S site store to work site.	Per No	10	2076.00	20760.00
43	-DO- but for LT panel board GETCO including fixing of all switches bus bars etc.	No	1	968.00	968.00
44	Erection of Battery Charger of any make as per manufacturer's instruction manual including grouting, vermin proofing.	No	1	968.00	968.00

45	Erection of 100AH/250 AH DC Battery set on wooden stand as per instruction manual of supplier including first filling of Battery Solution, proper connection of cells and applying charging/ discharging cycles as per manufacture's / instruction of Engineer in charge. (b) 100AH, 250AH , 110V... If Required	Per set	1	6227.00	6227.00
46	Erection of Station Transformer of 22 KV or 11KV / 430 V on its plinth, grouting of foundation bolts, fixing of channels, danger board etc.including connection with power cable/LV cable terminations including shifting from S/S site store to plinth as per instruction of Engineer-In-Charge.	No	1	2214.00	2214.00
47	Providing and fixing Phase plate on 66KV Gantry and Bus supporting structure including supply of nut and bolts. Rate are taken from SOR A-19	Loc.	4.0	1690.00	6760.00

TOTAL - 1 (SCHEDULE B - 1) 1507893.00

SCHEDULE B - 2 : CONTROL WIRING

Sr No	Description of work/Supply	Unit	Total Qty	Rate	Amount
48	Preparing of Complete Wiring schedule of wiring for line /transformer bay for 66 KV Bays in triplicate. Necessary drawing will be provided by the GETCO. Schedule should be approved by EE or DE in charge. (66 KV)	Bay	4	1996.00	7984.00
49	Laying of 1.1KV PVC, 2C x 2.5mm Sq., 2c x 3.5mm Sq.4c x 2.5mm Sq., 7cx2.5mm Sq., 4c x 4mm Sq. copper control cable or any equivalent size of all L.T.cable inside hume pipe/cable trench including binding / clamping of cable with GI wire or shaddles as per the requirment including the supply and fixing of identification tags on both ends and at every 100 mtrs.	Per RMtr	2000	6.00	12000.00
50	Laying of 1.1KV PVC, 12c x 2.5mm Sq., 12c x 4 mm Sq.12c x 6 mm Sq., 19cx2.5mm Sq., 27c x 2.5 mm Sq. copper control cable, 3.5 c or 4 c x 10 mm sq. , 70 mmsq. alluminium armoured or unarmored L.T.cable inside hume pipe/cable trench including binding / clamping of cable with GI wire or shaddles as per the requirment including the supply and fixing of identification tags on both ends and at every 100 mtrs.	Per RMtr	1500	10.00	15000.00
51	Laying of 1.1KV PVC, 2c x 2.5mm Sq., 2c x 3.5mm Sq.4c x 2.5mm Sq., 7cx2.5mm Sq., 4c x 4mm Sq. copper control cable or any equivalent size of all L.T.cable in ground by digging trench of suitable width and 450 mm depth in any type of soil including the supply and fixing of identification tags on both ends and at every 100 mtrs.	Mtr	500	21.00	10500.00
52	Laying of 1.1KV PVC 12c x 2.5mm Sq., 12c x 4 mm Sq.12c x 6 mm Sq., 19cx2.5mm Sq., 27c x 2.5 mm Sq. copper control cable, 3.5 c or 4 c x 10 mm sq. , 70 mmsq. alluminium armoured or unarmored L.T.cable in ground by digging trench of suitable width and 450 mm depth in any type of soil including the supply and fixing of identification tags on both ends and at every 100 mtrs.	Per RMtr	100	26.00	2600.00

53	Providing & Fixing of GI Pipes (Heavy Duty) of following size for cable protection including fixing with equipments, structures including required 'L' & 'T' band,coupling for CT/PT/MK Box/Transformer/ISO cabling on structure including fabrication. 40 MM Dia.	Per RMtr	90	255.00	22950.00
54	Providing & Fixing of GI Pipes (Heavy Duty) of following size for cable protection including fixing with equipments, structures including required 'L' & 'T' band,coupling for CT/PT/MK Box/Transformer/ISO cabling on structure including fabrication. 50 MM Dia.	Mtr	20	284.00	5680.00
55	Termination of Control Cable at Panel / M.K./ Equipments including supply of required size of brass cable glands, lugs, ferrules, PVC Binding Tape, Buttons etc. for Up to 7 Core Control Cable.	End	180	199.00	35820.00
56	As above but for Above 7 Core Control Cable.,	End	70	349.00	24430.00
57	Providing & installation and commissioning of remote control switch board for ON/OFF control of all 11kv panel at operator table with supply of good quality metal sheet box (18 SWG)size 450 x 450 x 125 mm with door, 20 nos standard ISI make and rating industrial push botton,indication lamp(LED)with installing accept/reset arrangement with required ISI marked copper flexible wire size 2.5 Sq. mm including complete wiring in PVC pipe and fixing on wall as per inst. of EIC. only 19/27 core x 2.5 sqmm cable supply by GETCO.	Job	1	6489.00	6489.00
58	Providing and fixing of all weather proof, cold rolled sheet steel junction box for CVT & PT, CT terminations with 30 Nos. of disconnecting type, 'Elmex' make CATDM 4 or equivalent type connectors and required no of fuses, links etc.as per instruction of Engineer-in-charge,as per drawing enclosed	No	6	21549.00	129294.00
TOTAL - 2 (SCHEDULE B - 2)					272747.00
<u>SCHEDULE B - 3 : YARD LIGHTING</u>					
Sr No	Description of work/Supply	Unit	Total Qty	Rate	Amount
59	Providing & fixing of all weather proof, cold rolled sheet steel AC Panel - 2 for Yard-Light AC supply having (1) 63A 4P MCB : 01 NO (2) MCX-12A contactor : 01 NO (3) Digital Timer : 01 NO (4) 20A TPN MCB : 06 NOS (5) Indication lamp : 03 NOS (6) Push Butten : 02 NOS (7) Terminal Connector as per site requierment and other detail as per drawing enclosed including grouting & Necessary fabrication of GI Angle or fixing on GI Structure and earthing with main grid as per instruction of EIC.as per drawing enclosed.	No	1	24732.00	24732.00

60	Providing & fixing of all weather proof, cold rolled steel sheet floor mounted fixed type single door grey color Main Ac Dist box having size 900x600x250MM with door closing arrangement and necessary rubber gasket. (1) L&T/Anchor/Havells make 100A,4P MCCB 1 No (2) L&T/Anchor/Havells make 63A,4P MCB 2 No (3) 100 A Copper Busbar link-length 6 inch size & 25x3 MM-4 Nos (4) Tinned Earth Bus 25x3 MM length -32 Inch- 1 No (5) 25& 16 sqmm Cu.flexible cable -4 & 8 Meter respectively (6) Required Nos of Cu. Lugs,etc. as per instruction of EIC.	No	1	20650.00	20650.00
61	Supplying & laying of following size Control/L.T power cable in readymade cable trench or by excavating in any type of soil cable trench size 1 ft. wide 2.5 ft. depth and refilling the same as per the direction of EIC. Item Includes the cable laying upto termination box with clamps & proper clamping of cable on gantries by GI pipe & glands as per direction. Item includes providing & supply of bircks, sand as per requirement. The L.T power cable to be provided by contractor as under :As per ISI 1554 (Part-I). 3.5 Core x 50 mm2 Alluminium cable -Armoured, from distribution X'mer to Main Distribution Board near dist. X'mer and from MDB to indoor LT panel board (LTPB) - both 2 runs.	Mtr	100	292.00	29200.00
62	Supplying & laying of following size Control/L.T power cable of FINOLEX or equivalent ISI make in readymade cable trench or by excavating in any type of soil cable trench size 300mm wide and 600mm depth and refilling the same as per the direction of EIC. Item Includes the cable laying up to termination box with clamps & proper clamping of cable on gantries by GI pipe & glands as per direction. Item includes providing & fixing of bricks, sand as per requirement to protect cables . The L.T power cable to be provided by contractor as under :As per ISI 1554 (Part-I). 4 Core x 25 mm2 Aluminum cable -Armored, from LT panel board (LTPB) to Yard Light AC MK (AC Panel-2), AC Panel 1 in C.R. and yard AC Box	Mtr	100	175.00	17500.00
63	-- do -- 4C/7C x 4/2.5mm2 Copper cable - Armoured, from yard-light AC panel-2 to all yard-light fixture junction boxes on LM & street light light pole & Station transformer to Colony & LT panel to watchman cabin. (Only laying. Cable will be supplied by GETCO)	Mtr	650	19.00	12350.00
64	-- do -- 4C x 2.5mm2 Copper cable - Armoured, from yard-light AC panel-2 to all junction boxes on post top lantern (Only laying. Cable will be supplied by GETCO)	Mtr	125	19.00	2375.00
65	Providing & fixing of 'B' class ISI marked GI. Pipe of 32/40mm dia for cable looping & road crossing with necessary elbo/band for each pole & J.Box for yard lighting & for control-room flud lights wiring work with fixing on wall with shadles if required as per inst. Of EIC.	Mtr	60	180.00	10800.00

66	Providing & erection of 7.0 Mtr, long swaged type welded GI tabular street light pole on the foundation in any type of soil as per inst. Of E.I.C. confirming to relevant IS and as per attached Drawing No:GETCO/E/STD/LTG.POLE-R2 dated: 24.12.2019	No	6	9983.00	59898.00
67	Providing & erection of 4.5 Mtr, long swaged type welded GI tabular post top lantern pole on the foundation in any type of soil as per inst. Of E.I.C. confirming to relevant IS and as per attached Drawing No:GETCO/E/STD/LTG.POLE-R2 dated: 24.12.2019	No	3	6988.00	20964.00
68	Supply and fixing of Pole/Wall/Structure mounted FRP junction box standard make of required size with clamp, providing 1 SPN MCB G class of 16 A having short ckt breaking capacity of 10KA peak of standard ISI make like L&T/ANCHOR/MDS /HAVELLS & 2 Nos. of stud type connector of standard make like Connectwell. The cable glands & lugs are also included for both incoming & out going cables Amp. of standard make like MDS/HAVELLS & 2 Nos. of stud type connector of standard make like Connectwell. The cable glands & lugs are also included for both incoming & out going cables.	No	29	748.00	21692.00
69	Earthing to tubular pole/luminaries , by coil type earthing at 10 SWG, GI wire in earth pit of 1.5 mtr. Depth in any type of soil by using salt/ coke (charcole) 16 kgs each & remaining filling with BC soil & clamping the earth wire with pole & Junction box.	No	13	400.00	5200.00
70	Providing and fixing of 1 x 250 Watt LED luminaries - Energy Efficient flood light with complete allied accessories having features like powder coated, aluminium housing, heat resistant toughened glass provided with gasket (Philips/CGL/Bajaj/GE/Osram/Wipro or equivalent make), Luminaries to be fixed on swaged pole /GI structure by providing required fabrications & 4 core 2.5 sqmm double insulated flexible stranded wire should be used from fitting to approved SMC type junction box as per instruction of E.I.C	No	16	11576.00	185216.00
71	Providing & fixing of LED STREET LIGHT POLE (1 x120 Watt) CGL Cat-Log - LSTO120/CDL 120 W or equivalent UNDER CAT-II OR ABOVE AS PER R&B SOR) by providing required fabrications with allied accessories. It also includes supply & laying of 4C x 2.5 mm2 double insulated flexible stranded wire should be used from control gear fitting approved SMC type junction box as per inst. of EIC.	No	6	9593.00	57558.00
72	Providing & fixing of 1X40 W LED POST TOP LANTERN fixtures (CGL Cat-Log - LPTO-40/CDL 40 W or equivalent under Cat-II) or equivalent Philips/CGL/Bajaj/GE /Osram make on sewerage pole by providing required fabrications with allied accessories. It also includes supply & laying of 4C x 2.5 mm2 double PVC flexible copper cable from control gear fitting to SMC junction box as per instruction of EIC.	No	7	7556.00	52892.00
TOTAL - 3 (SCHEDULE B - 3)					521027.00
<u>SCHEDULE B-4: CONTROL ROOM INDUSTRIAL ELECTRIFICATION</u>					

Sr. No.	Description of work/Supply	Unit	Total Qty	Rate	Amount
73	Providing and fixing of 50W LED lighting fixture (CGL cat No. LCTLR-50-FO-CDL 50W or equivalent under Cat-II or above as per R&B SOR), 4 core 2.5 mm ² double insulated flexible stranded wire should be used from control gear fitting to approved SMC type junction box as per inst. of EIC	No	18	5059	91062.00
74	Providing and fixing of DBS as AC Panel - 1 for CR of ISI marked Powder coated Pearl DBS of ivory color, wall mounting, Double door Distribution board of L&T, Heggur or higher make fitted with 63Amp Phase Bus bar, Earth / Neutral Bars and inter connecting wires with removable bottom gland plates for all power cable entry from bottom with DIN Channel, incoming contact and 1No - 63Amp TPN MCB 'C' Series, 6Nos-20A SP MCB 'C' Series and 13No -10A SP MCB 'C' Series All MCBs are L&T, Anchor or Higher make only. Complete in all respect and as per instruction of EIC.	No	1	6738	6738.00
75	Supplying & Laying Sub-main lines of 3X2.5 mm ² (two for P & N and one for Earthing) copper PVC insulated wire of ISI brand in suitable standard make steel conduit pipe having minimum 1.5 mm thickness of approved brand with ISI brand with clamps with its associated accessories for various circuits emanating from AC panel 1 as per inst. of E.I.C.	Rmtr	250	125	31250.00
76	Point wiring for control room tube lights, fans, exhaust fans, fancy lights, water tight bulk head lights with PVC insulated 660 V grade standard copper wire in ISI make GI conduit pipe 20 mm dia and 1.6 mm wall thickness size fitted with saddles on the wall/ceiling. Size of wire shall be with 3C x 1.5 sq.mm PVC insulated copper wire for phase and neutral and earth wire [Green] and 5 Amp Anchor/Roma or any equivalent switch as per specification with 16 gauge M.S. box. The box shall be covered with 3 mm thick decorative mat finish hylum sheet. The work is all inclusive of supply and fixing of required materials as afore said [like M.S.conduit pipe, saddles, switches, M.S. box, ceiling Rose, flexible copper wire etc] to complete point wiring with each fixture to be earthed by SWG-12 stranded copper conductor having green color as per direction and instructions of E.I.C.	Point	52	1298	67496.00
77	Providing, fixing & termination for emergency D.C. supply arrangement. This job includes supply & laying of 2C x 2.5 mm ² Copper armoured cable from battery charges to SBDC, fixing & providing SBDC & complete wiring with supply of wire & D.C. lamp (110V D.C., 100 watt-4 Nos.) in standard steel conduit pipe as per drawing No: GETCO/EE/6S-standard/S-015 as per inst. of E.I.C.	Job	1	4492.00	4492.00

78	Providing and Fixing points wiring in GI. Conduct pipe size 20 mm dia and 1.6 mm wall thickness with singal PVC insulated 2.5 Sqmm. copper wire of ISI standard good quality using 1.5mm thick suitable size ISI mark (2+3 pin in socket) Anchor brand 15 Amp. 250 Volt plug socket as seperate plug point with shock proof accessories incl. indication lamp ; erected on separate decorative mat finish hylum sheet board on wall with providing adequate green earthing wire as per specification and instruction of Engineer Incharge.	Point	6	1213	7278.00
79	---- Do ---- as above but with single PVC insulated 3Cx1.5 sq. mm.copper wire of ISI mark plug socket for 5A domestic use separate plug pointas per direction and instruction of E.I.C.	Point	10	814	8140.00
80	---- Do ---- as above but looped on same board i.e. no separate board, plug socket for 5A domestic use as per direction and instruction of E.I.C.	Point	12	199.00	2388.00
81	Fixing of Ceiling Fan of 1400mm sweep Bajaj/Crompton / Orient/ usha / Cinni make (ISI approved) flexible wiring by using twin core double PVC 48/0.2 mm copper flexible cord of suitable & approved make and size from ceiling rose upto fan terminal & supply and fixing of energy saver regulators , extra GI pipe of required size and length for lowering of fan if required as per instruction of EIC.	No	8	1797.00	14376.00
82	Providing and fixing of 41.5W (1x4) LED Lighting fixture of Crompton Greaves make Model LPFC-36-CDL 4.05W or equivalent unde cat -II or above as per R&B SOR as per instruction of EIC.	No	4	3154.00	12616.00
83	Providing and fixing of 40W (1x4) LED Lighting fixture as per drawing (in office Area & Porch Area)CGL Cat No LCTLSN-40-CDL(1x4) 40W or equivalent under cat -II or above as per R&B SOR as per instruction of EIC.	No	4	3417.00	13668.00
84	Providing and fixing of 30W (1x4) LED street Light Bulkhead (CGL Cat No LSTO-30-CDL 30W or equivalent under Cat-II or above as per R& B SOR) on out side C/R building and inside cable trench in C/R including wiring from ceiling rose to fixture with suitable size of PVC insulated ISI marked copper wire only as per instruction of EIC	No	8	2678.00	21424.00
85	Providing and fixing of heavy duty exhaust fan in battery room size 18" of Make GEC/KHAITAN/ CROMPTON/ BAJAJ incl. M.S. lourex shutter of Fan & necessary wall finishing works and applying bird proof net on outside wall with required arrangement for rain water sealing and necessary conection from ceiling rose as per Direction and instruction of EIC.	No	2	3494.00	6988.00
86	Providing and fixing of commercial exhaust fan in washroom area size 9" of Make GEC/KHAITAN/ CROMPTON/ BAJAJ incl. M.S. lourex shutter of Fan & necessary wall finishing works and applying bird proof net on outside wall with required arrangement for rain water sealing and necessary conection from ceiling rose as per Direction and instruction of EIC.	No	3	1600.00	4800.00
87	as per point Wiring but with Fixing of Electric bell (30 Watt) with bell switch near officer's table. All materials must be ISI mark and approved by	No	2	149	298.00

	Engineer I/C				
88	Providing and fixing of 18 Watt LED Lighting fixture (CGL Cat No LCTL-18-CDL 18W or equivalent under Cat-II or above as per R&B SOR) as per Instruction of EIC	No	5	1281	6405.00
89	Supplying & Laying of following size control /LT Power cable of FINOLEX or equivalent ISI mark in readymade cable trench or by excavating in any type of soil cable trench size 300mm wide and 600mm depth and refilling the same as per the direction of EIC. Item includes the cable laying up to termination box with clamps & proper clamping of cable on gantries by GI pipe & glands as per direction. Item includes providing & fixing of bricks , sand as per requirement to protect cables . The LT power cable to be provided by contractor as under: As per ISI 1554 (Part-I). 4 Core X 25 mm ² Aluminium cable -Armoured, from LT panel board (LTPB) to AC Panel-1 in control room.	Rmtr	30	175	5250.00
90	Providing and fixing of GI 1.5Mtr Long , 16MM Dia Lightning rod (Spike) for Lightning Protection of Control Room Building as pper Instruction of EIC as shown in drawing Bno GETCO/E/STD/DSLP-66kV CR-R0 dtd 26.10.17	No	4	141.00	564.00
91	Providing and fixing 50X6mm GI Flat for Control room DSLP protection. The work is to be carried out as per DRG. No.GETCO/E/STD/DSLP-66kV CR-R0 dtd 26.10.17 as per inst of EIC. The rates are including fixing of clamps on wall which is to be fabricated from 50X6 GI strips (GI strip will be supplied by GETCO free of COST)-	Rmtr	100	296.00	29600.00
TOTAL - 4 (SCHEDULE B - 4)					334833.00

SCHEDULE B -5 : QUARTER RESIDENTIAL ELECTRIFICATION

Sr No	Description of work/Supply	Unit	Total Qty	Rate	Amount
92	Providing and fixing of 18W LED Lighting Fixture (CGL Cat No. LCTL-18-CDL 18W or equivalent under Cat-II or above as per R&B SOR) as per EIC	No	9	1281.00	11529.00
93	Providing and fixing of open type full point wiring with OVEL shape pvc pipes with accessories with 2.5mm ² copper, insulated wire of POLYCAB/AVOCAB make. The switch board of standard companies and switches, pendent holder brackets holder, cellig rose etc. should be of SSK/ANCHOR make including earth wire of 1.5mm ² .	Point	32	270	8640.00
94	As per Item No 82 (Above) but for 5 pin 5 Amp. Point wiring	Point	12	199.00	2388.00
95	As per Item No.82 (Above) but for 5 pin 15 Amp. Point wiring	Point	7	698	4886.00
96	As per Item No.82 (Above) for call bell including fixing of approved call bell.	Point	2	300	600.00
97	Circuit charges for individual circuit with 2.5mm ² copper wire in condute pipe as per Drg. And Inst. Of EIC. (1) Two Nos of power point can be looped in one circuit. (2) 8 Nos of light/fan/holder/can be looped in on circuit (3) 5 Amp plug point is to be considered as 2 Nos of light point.	CKT	12	270	3240.00

98	Providing and fixing of 1200mm ceiling fan CGL/ORIENT/USHA make white colour with all required accessories Fan is to be purchased from CGL/ORIENT/USHA make dealer and inspection is to be arranged at authorise dealer deppo. Note : This is the approximate quantity, after getting net requirement of tubelight & fan it is to be purchased.	No	6	1597.00	9582.00
99	Providing and Fixing of Distribution Board 12 Way, SPN fitted with 1 No. of 25 Amp. MCB, 1 No. D.P. ELCB 32 Amp and required Nos of MCB's. The DP, MCB, ELCB should be of standard company like L&T, Siemen, MDS etc.	No	2	2995.00	5990.00
100	Providing earthing to quarter with 10SWG copper earth wire connecting to required installement. This work include preparation of earth pit of size 0.5M x 1.5M depth and back filling by using Solt, Charcoal 16 Kg. Each, 2Mtr. Long heavy duty 19mm PVC pipe and black cotton soil with C.I. earthing plate of 10Kg weight. as per Inst. of EIC. Required all material to be supplied by contractor.	No	2	499.00	998.00
101	Providing & fixing of surface mounted 12-way Distribution Box of L&T/STANDARD/MDS/INDOASIA make for electric power supply to staff quatr. It includes providing and fixing of one 32A TPN, three 16A DP switch of L&T/STANDARD/MDS/INDOASIA with fixing and commissioning of energy meter provided by DISCO, if required with complete wiring with 2.5mm ² copper, insulated wire of POLYCAB/AVOCAB make.	No.	1	1997.00	1997.00
102	Providing & fixing of Wall Mounted Fan Crompton / Orient/ PSPO / Usha / Cinni (must be ISI approved) including wiring from ceiling rose to Fan terminals of by using twin core flexible PVC to PVC 48 / 0.2 mm copper cord of suitable & approved size & fixing of Fan regulator.	No	1	1597.00	1597.00
103	Providing and laying of 2 core, 2.5 sq. mm PVC armoured copper cable of standard ISI make , inside hume pipe / cable trench / in ground, from control room / transformer distribution board to junction box of quarter & main switch of watchman cabin. During laying of cable in the ground, excavation of 300mm width and 450mm depth in soil with murrum refilling to be done. This includes supply of saddles on the wall of block as instructed and approved by E.I.C.	Mtr	100	120.00	12000.00
104	Cutting,uprooting and removing of grass,shrubs,bushes etc. from area as per priority given by E.I.c. and also removing unwanted plants like bordies,ankdas,nafaties etc. to be excavated uproots. Also includes disposing of cut grass , shrubs and unwanted plants outside the premises of GETCO as per instruction of E.I.C. Scope included all tools and tackels, equipment, transportation,loading and unloading of cut grass. Nothing will be issued by GETCO.	Sq. mtr.	3000	1.00	3000.00
TOTAL - 5 (SCHEDULE B - 5)					66447.00

SCHEDULE B - 6 : SUPPLY OF FURNITURE

Sr No	Description of work/Supply	Unit	Total Qty	Rate	Amount
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105	Supply of Steel Chair 'S' type, overhanging arm with cushion with cane seat/ 1"x16" gauge round pipe frame complete as per instruction of EIC & procurement from Adult training center for blind,Ahmedabad as per Corporate office letter no. ACE(Proc)/V/Furniture/2016-17/2943 dt 1.3.17 & GOG Circular SPO/102015/691093/CH.	No.	2.00	1850.00	3700.00
106	Supply of Steel Rack of size 36"x30"x15" (3' x 2.5'x1') with three partitions, prepared with 20 gauges as per instruction of EIC & procurement from Adult training center for blind, Ahmedabad as per Corporate office letter no. ACE(Proc)/V/ Furniture/2016-17/2943 dt 1.3.17 & GOG Circular SPO/102015/ 691093/CH.	No.	1.00	2100.00	2100.00
107	Supply of Steel Table of size 54"x30"x30" (4.5' x 2.5' x 2.5') one side three drawers, one side shelf 1x18 gauge square pipe with Nova PAN Prelaminated top complete with locking arrangement to drawers & self as per instruction of EIC & procurement from Adult training center for blind, Ahmedabad as per Corporate office letter no. ACE(Proc) / V/ Furniture/2016-17/2943 dt 1.3.17& GOG Circular SPO/102015/691093/CH.	No.	1.00	8750.00	8750.00
108	Supply of Computer Table from prelaminated board with Key board facility and drawer with locking facility with continuous printer out facility & mouse tray and also with special tray fo CPU & UPS having size 42"x24"x30" complete as per instruction of EIC & procurement from Adult training center for blind, Ahmedabad as per Corporate office letter no. ACE(Proc)/V/Furniture/2016-17/2943 dt 1.3.17 & GOG Circular SPO/102015/691093/CH.	No.	1.00	7200.00	7200.00
109	Supply of Steel revolving Chair, revolving & tilting, low back high type seat with foam rubber 3" in seat 2" in back with good quality raxine cover ,five legs. Chromium plated frame complete as per instruction of EIC & procurement from Adult training center for blind,Ahmedabad as per Corporate office letter no. ACE(Proc)/V/Furniture/2016-17/2943 dt 1.3.17 & GOG Circular SPO/102015/691093/CH.	No.	1.00	4600.00	4600.00
110	Supply of Steel Cupboard , of size 78"x36"x18" four partition, door & Shelves 20 gauge complete as per instruction of EIC & procurement from Adult training center for blind, Ahmedabad as per Corporate office letter no. ACE(Proc)/V/ Furniture/2016-17/2943 dt 1.3.17 & GOG Circular SPO/102015/ 691093/CH.	No.	1.00	9200.00	9200.00
TOTAL - 6 (SCHEDULE B - 6)					35550.00

SCHEDULE B - 7 : SUPPLY OF CCTV CAMERA

Sr No	Description of work/Supply	Unit	Total Qty	Rate	Amount
111	Supply of IP Bullet Camera (2 MP) with bracket & mounting accessories, as per technical specification and tender and conditions.	No.	5.00	8395.35	41976.75
112	Supply of IP PTZ Camera (2 MP) with bracket & mounting accessories, as per technical specification and tender and conditions.	No.	0.00	68488.78	0.00

113	(a) Supply of (i) Network Video Recorder (8 Ch) in built 6 TB SURVEILLANCE HDD, as per technical specification and tender and conditions.	No.	1.00	27063.57	27063.57
114	(a) Supply of POE SWITCH 8 port with 02 nos SFP port with 02 SFP module, as per technical specification and tender and conditions.	No.	1.00	34198.51	34198.51
115	Supply of 22" LED Mointor with Wall Mount Bracket, as per technical specification and tender and conditions.	No.	1.00	9841.30	9841.30
116	Supply of 1KVA UPS, as per technical specification and tender and conditions.	No.	1.00	24258.40	24258.40
117	Supply of Powder coated 9 U Rack, as per technical specification and tender and conditions.	No.	1.00	10874.84	10874.84
118	Supply of 4 Pair, CAT-6, Armoured cable, as per technical specification and tender and conditions.	MTR	305.00	80.66	24601.30
119	Supply of armoured 4 core, 2.5 sq.mm with standard copper conductors power cable, as per technical specification and tender and conditions.	MTR	0.00	96.80	0.00
120	Supply of Standard ISI marked weather proof Junction box, as per technical specification and tender and conditions.	No.	5.00	529.37	2646.85
121	Supply of 9 mtr Long GI Tubular Pole, as per technical specification and tender and conditions.	No.	0.00	36289.79	0.00
122	Laying of 4-Pair CAT-6 armour cable and Power Cable in PVC/HDPE pipe with all necessary accessories, as per technical specification and tender and conditions.	RMTR	0.00	14.12	0.00
123	Laying of CAT-6 Armoured/ Fibre opticle cable and Power cable in PVC/HDPE pipe with all necessary accessaories, as per technical specification and tender and conditions.	RMTR	305.00	14.12	4306.60
124	Digging suitable width up to 450mm and back filling in any type of soil for laying of surveilance system cable.	RMTR	0.00	148.22	0.00
125	Installation and commissioning charges for CCTV surveillance system including providing and mounting stand for LED and brackets for IP Bullet/PTZ Camera, Patch cord, LIU, power adopter, HDMI cable, connectors, required splicing of cable etc. as per tender term and condition.	Job	1.00	3690.49	3690.49
TOTAL - 7 (SCHEDULE B - 7)					183458.61
TOTAL - 1 (SCHEDULE B - 1)					1507893.00
TOTAL - 2 (SCHEDULE B - 2)					272747.00
TOTAL - 3 (SCHEDULE B - 3)					521027.00
TOTAL - 4 (SCHEDULE B - 4)					334833.00
TOTAL - 5 (SCHEDULE B - 5)					66447.00
TOTAL - 6 (SCHEDULE B - 6)					35550.00
TOTAL - 7 (SCHEDULE B - 7)					183458.61
Grand Total=					2921955.61
18% GST=					525952.01
Final amount=					3447907.62
Rupees in Words:- Thirty Four Lac Forty Seven Thousand Nine Hundred Seven Rupees & Seven Paisa only.					

**Superintending Engineer
GETCO, CO, Bharuch**

Notes:

1	While calculating the weight of stub-setting, the weight of stub, cleat & templates shall also be added in stub weight.
2	Red oxide & zinc rich paint shall be applied after tack welding of nuts.
3	The above rates are with supply of cement by the contractor.
4	The rate indicated above includes taking delivery of all stringing material Board's stock at destination keeping them in safe custody and transporting the same to erection site.
5	All erection work is to be carried out strictly as per the manual of OEM (Original equipment manufacturer), FQP and instruction of E.I.C.
6	All equipment erection charges are inclusive of shifting dragging handling of the respective equipment up to S/S erection site from its S/S site store but exclusive of service tax.
7	Contractor has to ensure safe shifting dragging erection of all equipments to comply with labour laws I.E. rules etc.
8	All erection charges are inclusive of fixing of clamp connectors, all necessary accessories to the respective equipments.
9	Transformer erection charges cover shifting, dragging, handling etc. for its bushings, radiators, conservator tank and allied accessories and oil filling, filtration (if required).
10	All erection work includes erection insurance to be arranged by the contractor at his cost. These insurance charges will be reimbursed on production of Insurance policy & Money receipt.
11	All the required tools and tackles like compression jointing machine for conductor, earth wire, cutting machine, welding set, drill machine, etc are to be arranged by the contractor at his cost.
12	Contractor should complete transportation within one job as per above schedule. No extra payment will be given in any case other than this job.
13	If filtration of transformer is required in any case the filter machine shall be arranged by Contractor at his own cost.
14	Earthing pit activities should be done in such a way in presence of GETCO supervisor that final earthing pit resistance should be record as per standard. All expenditure like sufficient watering to maintain earth resistance up to the mark should be borne by contractor.
15	All the brought out items get to be approved from DE/EE invariably.
16	The execution of bore are to be carried out as per soil strata in consultation with E.E.
17	The Classification of hard rock strata should be got approved from E.E. invariably.
18	Contractor has to make arrangement for site engineer and skill labors for maintaining all activities and records as per FQP. also assisting to staff/Engineer in charge to take IR values, Earth pits values, name plate detail, oil samples etc all activities relative to commissioning of project.
19	Contractor has to make arrangement for skill labors for assisting to commissioning engineer, PLCC staff/engineer, SMS/testing staff/Engineer as an when require as per instruction of Engineer in charge.
20	After completion of project successful bidder has to submit all the records like battery charging report, control wiring schedule, earth pit lay out, earthing grid layout, power cable lay out, yard light pole and Ckt lay out etc in hard and soft copy for handing over the project.
21	For Colony & Yard lighting and Control Room Industrial Electrical wiring works the rates quoted shall be inclusive of providing and fixing / Installation ,testing and commissioning of complete Control Room lightings, Ceiling Fans, Exhaust Fans etc..
22	All items / materials shall be installed / erected in accordance with specified manuals /technical guide lines of the manufacturer and as per instruction of EIC.
23	Cable laying, Circuit distribution and Fixture fixing shall be carried out as per GETCO Standard Drg. No. GETCO/E/06S-STD/S-013 (R0) Sheet 1 to 3 of 3 and as per Instruction of Engineer In charge.
24	Control Room Wiring, fixing of fixture, Ceiling fan & Exhaust fan etc shall be carried out as per Standard Drawing No. GETCO/E/6S-STD/S-015 (R0) Sheet No 1 & 2 of 2. and GETCO/E/6SSTD/S-013 (R0) Sheet No 1 of 3 and as per instruction of Engineer In charge.
25	For entire control Room, Office & store etc. building wiring is to be done by Providing and fixing of ISI Marked MS conduit pipes 20mm dia. & 1.6 mm wall thickness size (Minimum Size) and PVC insulated stranded copper wire of FENOLEX/ANCHOR make as per relevant IS.
26	Total tilting angle for the flood light luminaries provided on pole is considered as maximum of 45 degrees, looking to the tilting angle 20 degree available with luminaries itself & supporting pipe should be fabricated & welded accordingly. Also arm for fixing of Flood light luminaries shall be fix as per required angle & direction as per instruction of EIC.

27	EE/DE will decide the make of luminaries, fan, cable, MCB, Switches etc. and same is to be inspected at authorize depot.
28	Yard light pole should be inspected at the cost of contractor.
29	GST will be reimbursed after submission of documentary evidence by the contractor for the amount which shall be lower of (1) the Amt. supported by the documentary proof of GST paid; (2) GST payable on the Amt. passed for payment as per terms and conditions of the order.
30	All the work related to the transmission line like detailed survey, check survey, tower/DP foundations, material testing, tower/DP erection, stringing, final testing, etc should be carried out as per GETCO'S standard FQP for transmission line.
31	Successful bidder has to appoint site engineer to maintain site register and FQP as per ISO
32	All work should be done according to ISO & FQP and all require documents including filled FQP, testing results, etc should be submitted while handing over the line
33	The above rates are with supply of cement by the contractor.
34	The maintenance free treated earth pit shall be guaranteed for trouble free operation for a period of 30 years from date of commissioning. Any defect discovered during this period shall be rectified free of charge.
35	Standard Guidelines & Recommendations for Earthing System for EHV Sub-station issued vide Circular R & M/3 dtd.5.11.12 & CE(TR) Circular 36 dtd. 23.9.08 to be followed.
36	The General notes for Earthing system & drawings for earthing the equipments (including welding joints) are compiled in Drg. No. GETCO/E/STD/P-012 sheet 1 to 24 (available in SOR booklet).

I am/we are willing to carry out the above said work at _____ (% in figure)

(% in words _____) above / below, the rates indicated in the Specification (GETCO's rate). The Tender amount thus works out Rs:-
 _____ (Rupees in words _____)
 _____)

Seal & Signature

And address of Contractor

Superintending Engineer (TR)

GETCO, CO, Bharuch