GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

CONSTRUCTION DIVISION OFFICE, AT & PO KABILPORE, NAVSARI - 396424



Tender specification for erection work of 66kV Switchyard structure & equipment, yard lighting, control & electrification wiring at 66KV Ambatalat S/S and One number of feeder bay at 66KV Anklachh S/S

: TENDER SPECIFICATION NO:

CDNS/13-14/17

PART-I

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED CONSTRUCTION DIVISION NAVSARI

DOCUMENTS TO BE ATTACHED WITH TECHINCAL BID

- 1) Registration Certificate.
- 2) Provident fund account code no. Registration.
- 3) Solvency certificate.
- 4) Experience certificate.
- 5) Tin No:
- 6) Service tax Registration No.
- 7) PAN No
- 8) Labour License

If party fails to submit the above mention documents along with Technical Bid, his price bid will not be considered and tender shall be rejected.

> EXECUTIVE ENGINEER (CONST) NAVSARI

CDNS/13-14/17

Sub.: Erection work of 66kV Switchyard structure & equipment, yard lighting, control & electrification wiring at 66KV Ambatalat S/S and One number of feeder bay at 66KV Anklachh S/S

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

- (A) I / We, the undersigned, have read and examined the Tender Specification No. CDNS/13-14/17 for above work
- (B) The erection price components in the bid are subject to firm price in line with Tender Specifications and 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 Tendering Company

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

CONSTRUCTION DIVISION OFFICE, AT & PO KABILPORE, NAVSARI-396424.

TENDER NOTICE

Tender specification Erection work of 66kV Switchyard structure & Equipment, yard lighting, control & electrification wiring at 66kV Ambatalat S/S and One number of feeder bay at 66kV Anklachh S/S

ISSUED TO: M/s.			

1.	Tender No : CDNS/13-14/17	
2.	Name of Work	Erection work of 66kV Switchyard structure & equipment, yard lighting, control & electrification wiring at 66kV Ambatalat S/S and One number of feeder bay at 66kV Anklachh S/S
3.	Estimated cost.	Rs. 2005778.36
4.	Earnest Money Deposit	Rs. 20580.00
5.	Time Limit	3 (Three) Months from date of order.
7.	Last Date of receipt of tender through RPAD /SPEEDPOST Only	06.08.2013 Up to 15.00 Hrs.
8.	Date & time of Opening of Technical Bid	06.08.2013 at 16.00 Hrs.
9.	Price of tender	Rs.900.00

EXECUTIVE ENGINEER (Const) GETCO, DO, NAVSARI

SECTION - I

DEFINITION & DETAILS TO BE FURNISHED BY TENDERERS

1.1 **DEFINITION**:

- 1.1.1 The "Corporation" shall mean the Gujarat Energy Transmission Corporation Ltd., Vadodra and shall include their authorized representatives.
- 1.1.2 The "Contractor" shall mean the bidder, whose tender has been accepted by the Corporation for award of the contract and shall include his authorized representatives.
- 1.1.3 The "Engineer-in-Charge" shall mean the authorized officer of the Corporation to act as Engineer-in-Charge to supervise the work for the purpose of the contract.
- 1.1.4 The "Specification" shall mean the tender forming a part of the contract along with Performa, schedules and drawings.
- 1.1.5 The "Letter of Intent"(L.O.I.) shall mean the official letter issued by the Corporation, informing the bidder that his tender has been accepted.
- 1.1.6 The "order' shall mean the official letter issued by the Corporation, informing the bidder that his tender has been accepted.
- 1.1.7 The "Contract" shall mean the agreement to be entered into by the Corporation with the contractor and shall include the commercial, technical and general conditions, schedules, drawings and any other conditions specifically agreed between the parties forming a part of the contract.
- 1.1.8 The "Contract Value" shall mean the total amount indicated in the contract agreement as per order placed by the Corporation and calculated from the provisional quantities indicated in the tender.
- 1.1.9 The "Warranty Period" shall mean the period during which the Contractor shall remain liable for repair/replacement of any defective material/work supplied/performed by the Contractor under the contract. The "Completion Period" shall mean the period starting from the date of issue of order and required to complete the line work including handing over the line for charging.
- 1.1.10 The "Work" shall mean the activities to be carried out for erection of transmission line, using tower materials, bolts & nuts, cement, line materials viz. insulators, conductor, earth wire, their hardware and accessories, cement, sand, grit, tor steel bars for reinforcement, earthing materials, number plates, phase plates etc by the contractor under the contract.

- 1.1.11 The structure shall mean stub superstructure, extension, template base-plate assembly etc. inclusive of their required members, bolts nuts, washer attachment accessories etc. as per approved bills of materials.
- 1.1.12 The "Steel Part" shall mean all types of stub superstructure, extension, template base-plate assembly etc. inclusive of their required bought out members by the contractor from other manufacturer or to be manufactured & supplied by the contractor.
- 1.1.13 The "Bolt Nut Part" shall mean all types of bolts nuts, their spring washers, plain washer accessories, attachment etc. bought out by the contractor from other manufacturer.
- 1.1.14 The "Gross Ex-Works Prices" shall mean the prices considered by the bidder excluding Excise duty, Sales Tax etc. for structure steel and own manufactured "Bolt Nuts" part and including excise duty, sales tax. Etc. for bought out bolt nut part of structures and other line materials.
- 1.1.15 The "Ex work prices" shall mean the prices quoted for structure steel and own manufactured bolt nut part by the Bidder after considering MODVAT set-off/rebate available on steel and zinc inputs to the bidders as on date indicated in schedule of Section IV and for bought out bolt nut part and other line materials, MODVAT set off/rebate shall not be considered.

1.2 Details required to be furnished by the Tenderer:

Details required to be furnished by the Tenderer by writing Yes / No against each item. :

- 1) Whether the Tenders submitted is on Yes / No percentage basis as called for.
- 2) Whether rebate furnished is in Yes / No percentage basis as called for.
- 3) Whether the tender is submitted by Yes / No Registered Post.
- 4) Whether all pages of Tender Specifications Yes / No are sealed and signed by the tenderer.
- 5) a) Whether the Tenderer is Yes / No registered with GETCO for transmission line erection.
 - b) In case of Yes in above, please furnish following details:
 - i) Registration Letter No. & date.
 - ii) Class of Registration

		lii) Validity	
	c)	Whether Tenderer is having PF Code No.	Yes / No
6)	a)	Whether EMD Paid. (DD / BG)	Yes / No
	b)	In case of Yes, Please furnish details	Yes / No
7)	Wh		
	a)	Human Resources detail.	Yes / No
	b)	Availability of tools, equipment's etc.	Yes / No
	c)	Details of orders executed	Yes / No
	d)	Financial capability.	Yes / No
	e)	Erection / stringing capability.	Yes / No
	f)	Latest Income-tax certificate	Yes / No
	g)	Bank Guarantee (For E.M.D., if applicable).	Yes / No
	h)	Company's Article Of Association	Yes / No
	i)	Details Of Partners / Directors	Yes / No
	j)	B.R./P.A. Authorizing Person	Yes / No
	k)	Power of Attorney of Consortium Members	Yes / No.

Signature	of	Authorized
Representat Company/A NAME:		of
Name Company	of	tendering

SECTION - II

: SPECIAL INSTRUCTIONS TO THE TENDERERS:

- 1. The tender can be collected from EE (Const), GETCO, Construction Division Office, At & PO Kabilpore, N.H.No.8, Navsari-396424.
- 2. The tender will be in two parts :-
 - (a) PART-I Technical and commercial bid (b) PART-II Price bid The two bids shall be submitted in two separate envelopes to be sealed in the one envelope. The price bid of only those tenderer will
- be opened who are considered technically acceptable.

 The Tender will be issued from this office. The tender can be
- submitted on or before due date along with tender fee by DD payable at Navsari on any nationalized bank & same shall be kept in cover for EMD. The tender shall be ignored / rejected in case DD of tender fee is not submitted.
- The Tenderer shall have to return the Tender duly filled in and kept in two separate envelopes without any additions / alterations and duly signed & sealed page by page.
- First the Envelope containing EMD & Tender fee will be opened and if the payment by DD for EMD and tender fee are found OK, then only Technical Bid Cover will be opened which may be noted. The exemption in payment of EMD shall not be considered in case of NSIC / SSI Unit, as this is turnkey tender. Tenders submitted without payment of Earnest Money Deposit by the firms will be rejected without entering in to further correspondence in this regard and no reference will also be made.
- The Tenderer are forbidden from furnishing their own printed / typed commercial and other terms and conditions.
- The Tenderer shall specifically note that the Tenders are invited on percentage basis (FIRM PRICE) only.
- The Tenderer shall specifically note that the quantities mentioned in the Tender are likely to vary as per the actual requirement. As such, the successful Tenderer shall have to execute the work at the same rates of the order for the changed / increased quantities, if any, without any extra compensation whatsoever.
- The Tenderer shall have to submit 10 Xerox copies of price bidding schedules as called for in the Tender Specification for distribution at the time of opening to other participant Tenderer. These shall be the legible Xerox copies and duly bound. Failing this, the tender may not be opened / accepted.

- The tenders must be sent by Registered Post only so as to reach this office on or before specified date & time. Due care should be taken to see that the tenders sent are posted early enough to ensure their delivery by the prescribed date or even earlier.
- 10 No tender shall be accepted/opened in any case after due date and time of receipt of tender irrespective of delay due to postal service or any other reasons and Corporation shall not assume any responsibility for late receipt of tender.
- The price bid of tenderer shall only be opened at the time and date to be informed by EE (Const.), Navsari which is found technically acceptable and satisfying the requisite qualification and parameters.
- 12 All clauses related to the Erection of equipments and sub-station structures including yard lighting and control room wiring
- 13 Before quoting the rates in the tender, tenderer is supposed to see the terrain of the route. It can be ascertained with Field Office/Head Office to confirm the probable route of the line for which they are quoting.
- 14 The tenderer must ensure that all the Schedules are completely filled up in their tenders and that complete information called for is given. Failure to furnish full and complete details or furnishing vague information would make the tender liable for rejection.
- The Tenderer shall be deemed to have satisfied himself with all the conditions and circumstances affecting the prices and possibility of executing the work. The bidder shall fix his prices taking into account the site & its surroundings, approach roads etc. No idling / mobilizing / demobilizing / remobilizing OR any other type of claim shall be admitted and paid on any part of the work.
- The tenderer should fill in all schedules and submit all the details Called for in this specification in prescribed Performa only.
- 17 The tenderer should submit attested copies of Corporation Resolution of firm/ power of attorney authorizing particular person to sign tender and related documents.
- After collecting the tender from the office of the Executive Engineer (Const.), GETCO, Navsari, same should be submitted only in envelops of sufficient size duly super scribed about details of tender & signed and sealed by the tenderer.

SECTION - III

GENERAL TERMS AND CONDITTION

3.1 INVITATION OF TENDER:

The Executive Engineer (Construction) for and on behalf of "GUJARAT ENERGY TRANSMISSION CORPORATION LTD.", having its Head Office at Vidyut Bhavan, Race Course, Vadodara - 390 007, hereafter called the "Corporation" intends to invite Tender for above work.

3.2 PRE QUALIFYING CRITERIA:

3.2.1 TECHNICAL CRITERIA:

The tenderer should have supplied and/or erected at least 50 KM (Route Length) of 66 KV or above voltage class Transmission lines on towers and erection of 66KV Sub stations in any financial year during last 5 years.

3.2.2 FINANCIAL CRITERIA:

The financial turn over of bidder (Financial year) shall not be less than Rs. 5 Crores during any or more of the preceding 3 (three) Financial years. However, for Consortium / Joint Venture Company (JVC), qualifying financial criteria of total turn over of Rs. 5 Crores is permitted for the firms, who are already in transmission activities of manufacturing items, equipments or products meant for transmission utilities and one of JVC/Consortium member shall qualify required technical qualification.

3.2.3. Registration with Corporation/Government/Semi Government 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 furnishing by the tenderer along with the technical bid.

3.3. BASIS OF AWARD:

- 3.3.1.The Bidder has to quote for the complete scope of work under specification as stated in the technical specification bids. The offer with part of the work will be treated as incomplete and shall be rejected.
- 3.3.2.Basis of Bidding Evaluation: The quantities of various items covered and indicated in the bidding schedule are only provisional for evaluation purpose. Since the quantity of items would depend upon the final survey of the transmission line, contract or shall be the responsible to execute such final quantity of items and shall be paid for such actual quantity basis on the unit rates accepted and incorporated for the contract. For this purpose unit rate for which

- item so offered and accepted, the price on % basis will only be applicable.
- 3.3.3.Basis of Comparison: Offer/Bids received shall be evaluated on the lump sum prices for entire scope of work including applicable taxes and duties, service tax. The taxes, duties shown in offer applicable shall be paid /reimbursed by the Corporation. However the other levies like octroi, entry tax, and work contract tax shall be paid & absorbed by the contractor.
- 3.3.4. Lump sum prices shall include the Ex. Work prices, freight, insurance charges, type test charges if applicable and erection prices with service tax or any other taxes, levies to be paid thereof.
- 3.3.5.Applicable entry tax. /Octroi duty of destination site on bought out finished items, which are directly dispatched from sub vendor's works to Corporation's site/sites to be paid & absorbed by the contractor.
- 3.3.6. Prices for survey, freight and insurance charges, etc. and other charges if any shall be quoted on the firm price basis and no price variation shall be applicable for these components.
- 3.3.7.Ex. Work prices of reinforcement steel, tower accessories which include danger plate, phase plate, number plate, circuit identification plate and anti climbing devices and pipe and counter poise earthing etc. be quoted/offered on the firm price basis and no price variation shall be applicable to these items.
- 3.3.8. Payment for survey shall be paid on pro-rata basis on completion of survey and approval thereof by the Engineer in charge. Please note that all documents under the contract for material supplied or work executed shall be released to the main contractor directly.
- 3.3.9. Provision of type test certificate for the material carried out during last 5 (five) years should be attached along with technical bid.

3.4 REGULATION OF LOCAL AUTHORITY

The Corporation shall through out continuance of the contract and in respect of all matters arising in the performance thereof, serve all notice and obtain consents, approval and permission required in connection with the regulations and bye-laws of the local authority which shall be applicable to the works. However, the contractor shall obtain all the necessary licenses/ permission as per Central /State Govt. or local statutory bodies at his cost. All works shall be executed in accordance with the Indian Electricity Rules 1956 and any statutory modifications thereof, wherever they are applicable unless otherwise agreed to in writing by the Corporation.

3.5 AMENDMENT OF TENDER

- 3.5.1 At any time prior to the submission of tenders, the Corporation may, for any reason whether at his own initiative or response to a clarification requested by bidder, modify the Tender conditions by Amendment.
- 3.5.2 The Amendment will be issued in writing or by telex or fax or cable to all bidders who have purchased the tender, which will be binding to them.

3.6 AUTHORISED REPRESENTATIVE:

- 3.6.1 All the tenderer are requested to mention the name of their authorized representative with full address in the tender documents.
- 3.6.2 In case the representative is changed during the course of execution of the contract, such changes shall be notified by the successful tenderer, failing which, Corporation shall not accept any responsibility.

3.7 REJECTION OF TENDER:

- 3.7.1 The bidder is expected to examine all instructions, terms, conditions, schedules and other details called for in this specification and to keep himself fully informed to all matters which may in any way affect the work or cost thereof. Failure to furnish the required information or submission of tender not substantially responsive to specification will be at the bidder's risk and may result in rejection.
- 3.7.2 **The** offer is liable to be out rightly rejected in case the bidding schedules are not filled in and the prices and particulars are given in other format. Further the offer containing
 - a) Different rates for the same items i.e. rates quoted in the slabs.
 - b) Deviation / Addition / Alterations / Omissions in bidding Schedules.
 - c) Deviation and contradictions to the terms and conditions specified in this tender.
 - d) Non submission of tender in two parts Bids i.e. Technical/Commercial Bid &Price Bid separately as indicated, are liable to be summarily rejected.

3.8. CORPORATION'S RIGHT:

- 3.8.1. The Corporation reserves the right of terminating this contract or part—thereof at time during its tendency without giving notice of Termination or the reasons thereof.
- 3.8.2. The Corporation will be entitled to deduct directly from the bills, to be paid to the contractor any sum or sums payable by him and which sum / sums the Corporation is required to pay as a principal

- employer on account of contractor's default in respect of all liabilities referred to.
- 3.8.3. The bidders shall specifically note that any overwriting or corrections or manuscript in the bid shall be ignored and will not be considered authentic unless the same are signed with Bidder's Stamp / Seal.
- 3.8.4. The Corporation reserves the right to split the contract into two or more bidders for the lines covered in the specification or for particular line. In such cases, the term for completion period will be negotiated.
- 3.8.5. In case of any doubt or interpretation of the terms and condition, the decision of the Chief Engineer (Trans), Gujarat Energy Transmission Corporation, Vadodara will be final and binding to the bidder and no dispute in this regard will be entertained.
- 3.8.6. Corporation reserves the right to accept any bid or reject any or all bids or cancel/withdraw/invitation to bid without assigning any reason. Such decision of the Corporation shall not be subject to question by any bidder or the Corporation shall bear no liability whatsoever for such decision.

3.9. CONTRACT:

- 3.9.1. The work covered by this Specification shall be carried out strictly as per the laid down conditions. The tenderer will be deemed to be fully aware of this Booklet and any ignorance of the same will not exempt the contractor from his liability to abide the same.
- 3.9.2. The Contractor shall not execute any part of the erection work through sub-contract without obtaining prior written permission from the Corporation.
- 3.9.3 Such permission given by the Corporation will not relieve the contractor from any liability or obligation under the contract. The contractor shall be responsible for workmanship, quantity and quality of the work done by the sub-contractor or his workmen.
- 3.9.4 The Corporation shall have right to obtain the agreement, order and other conditions entered into by the contractor with any of the sub-contractor/s. The technical particulars of the work to be executed by sub-contractor shall be subject to approval of the Corporation.
- 3.9.5. The labour license required under the relevant clauses of laws shall be obtained by the contractor and the Corporation will not have any bearing rising out of this.
- 3.9.6 It will be the responsibility of the Tenderer to see that requisite labour payments to the labours are made by the sub contractor, if the case may be as per the prevailing laws of the Government. Any

problems/legal complications arising out of this will be solely to the Tenderer account and the Corporation will have no bearing on any such account.

3.10 EFFECT AND JURISDICTION OF CONTRACT:

- 3.10.1 The contract shall be considered as having come into force from the date of issue of order, which is accepted by the Contractor.
- 3.10.2. The laws applicable by the contract shall be the laws in force in India. The courts of Vadodara shall have exclusive jurisdiction in all the matters arising under this contract.

3.11. FORCE MAJEURE:

- 3.11.1 The following causes which substantially affect the performance of the contract shall only be considered as force majeure conditions.
 - 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, and embargoes.

Provided the party affected by the 'Force Majeure' shall within fifteen (15) days from the occurrence of such a cause, notify the other party in writing of such cause with sufficient documentary proof.

- 3.11.2 Not withstanding any provision mentioned above, the Corporation shall not be in any way liable for non-performance either in whole or in part of any contract or for any delay in performance thereof in consequence of strikes, shortages, combination of labour or workman or lockout, breakdown or accident to machinery or accidents of whatever nature.
- 3.11.3 The Contractor or the Corporation shall not be liable for delays in performing their respective obligations resulting from any force majeure causes as defined above. The date of completion will be extended by a reasonable time by mutual agreement.
- **3.11.4** In case of damage or destruction of any property or equipments belonging to the Contractor due to force majeure causes, the Corporation shall not be liable for the same.

3.12 **ARBITRATION:**

3.12.1All questions, disputes or differences whatsoever, which may, at any time, arise between the parties i.e. the Corporation and the Contractor upon, or in relation to or in connection with the contract, shall be referred to sole Arbitrator appointed by the Chairman, GETCO, for that purpose, who shall be a retired High Court Judge or a retired District Judge and the decision of the said Arbitrator shall be final and binding upon the parties. Reference to the

Arbitrator shall be governed by the provisions of The Arbitration & Conciliation Act, 1996 as amended from time to time and the Rules made there under. The arbitration proceedings shall be conducted at Vadodara, Head Office of GETCO or at any such place as the sole Arbitrator may determine. The award of the sole Arbitrator shall be final and binding upon the parties.

3.12.2 Performance under this contract shall, if reasonably possible, continue during the arbitration proceedings, and no payments due or payable by the Corporation shall be withheld unless they are the subject matter of the arbitration proceedings.

3.13 **LABOUR LAWS**:

- 3.13.1 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.
- 3.13.2 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.
- 3.13.3 The Contractor shall at his own expenses comply with all labour laws and keep the Corporation 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 labourers 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.

3.13.4 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.

3.13.5 DEPOSIT LINKED INSURANCE SCHEME

The contractor shall have to deposit 1/2 % 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.

3.13.6 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.

3.13.7 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 Corporation.

3.13.8 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 tendency of the contract.

3.13.9The contractor shall employ adequate number of experienced staff 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.

3.13.10 CONTRACTOR TO INDEMNIFY THE CORPORATION:

The Contractor shall Indemnify the Corporation and every member officer and employees of the Corporation 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 Corporation or Government for or in respect of performance of his obligation under the contract documents. The Corporation shall not be liable for intervention of authority Government for or in respect of performance of his obligation under the contract documents. The Corporation 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 Corporation against all claims, demands, proceedings, cost, charges and expenses whatsoever in respect thereof or in relation thereto.

3.13.11 WORKMEN'S COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

Insurance shall be effective for all the Contractor's employee engaged in the performance of this contract. If any of the work is sublet, the Contractor shall required 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.

3.13.12 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 Corporation, 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 keep himself present throughout the working hours.

3.13.13 REGISTRATION WITH PROVIDEND 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.

3.14 AUTHENTICATION.

- 3.14.1The complete details (Name, Designation, Specimen signature etc.) of the Authorized person to sign the tender documents, correspondence agreement, test reports etc. during tendency of contract, shall invariably be enclosed with the tender along with the Resolution etc. of the Firm for authorizing particular person for authenticating documents. The number of authorized signatures shall not be more than three. Any tender without these details will be out rightly rejected.
- 3.14.2In case the Authorized signatory person leaves the firm, on permanent basis, another person shall be nominated under intimation to this office. However the intimation shall be signed by the Director/Owner of the Firm only.
- 3.14.3Except in case as indicated in 3.18.2. the authorized signatory will not be changed.

3.15 Termination of Contract:

In case the 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 Corporation shall exercise its discretionary power either:

- 3.15.1To recover, from the contractor as agreed, by way of penalty clause above, or
- 3.15.2To 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

3.16. To cancel the contract.

In the event of the risk purchase of stores of similar description, the opinion of the Corporation 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 Corporation 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 Corporation shall be final as regards to the acceptability of stores supplied by the contractor and the Corporation shall not be required to give any reason in writing or otherwise at any time for rejection of the stores.

3.17. Jurisdiction:

- 3.17.1.All questions, disputes or differences arising under out of or in connection with the Tender / Contract if concluded shall be subject to the exclusive jurisdiction of the court under whose jurisdiction the place from which the tender / Acceptance of tender is issued, is situated i.e. Navsari.
- 3.17.2. Many of the tenderer are submitting their offers with the conditions of advance payment along with the order; such conditions are not acceptable by the Corporation.
- 3.17.3. The Tenderer if being an agent, who submits its offer to Corporation, will have to give information and declare the name of the principle from whom he will procure the materials and supply to Corporation along with company's written confirmation about quality and backup performance guarantee. Only on getting complete information form Agent such offer if found suitable shall be taken in consideration by Corporation's Representative prior to dispatch of materials for Corporation's approval.
- **3.17.4.** The tenderer are required to furnish the technical information and the Guaranteed Technical Particulars (GTP) along with company seal and signature of the Tenderer on each and every page / papers.
- 3.17.5. Tenderer should invariably fill up all the details of all the Annexure including the prices in the price bid Annexure, (which are attached

with this tender copy). This is mandatory. Also all the Annexure should be duly signed by authorized signatories with their rubber stamp and along with Company's Rubber (Round) seal / stamp affixed on each paper.

- 3.17.6.If the Tenderer fails to pay the Security Deposit or defaults in execution of the orders placed or if Corporation suffers any financial loss due to this, then Corporation will be at liberty to adjust the amount from other orders of the same firm or by encasing the Bank Guarantee.
- 3.17.7.All the tenderer must ensure that all the relevant documents / papers submitted with the tender should be serially numbered, properly bounded / tied together. This must be adhered to.

3.18. INDEMNITY BOND.

For the items/materials to be supplied by the contractor, it will be responsibility of the contractor to take delivery and unload material at the site and to execute an indemnity bond duly notarized (Performa annexure) in favour of the Corporation, against loss/damages and risk involved for full value of the material. This indemnity bond shall be furnished by the contractor before commencement of supply and shall be filled duly signed and handed over to the respective engineer in charge of the Corporation.

3.19. AGREEMENT.

The Contractor has to execute the agreement as per Performa annexed

SECTION - IV (A)

COMMERCIAL TERMS AND CONDITION

4.1 TENDER FEE :-

The tender fee specified in notice inviting tender will have to pay by Demand Draft payable at Navsari drawn on any nationalized bank, which shall be placed in EMD cover along with DD of EMD.

4.2. EARNEST MONEY DEPOSIT:

- 4.2.1 The amount E.M.D. at the rate of 1% of the estimated cost as Earnest Money Deposit (E. M. D.) is payable. The EMD payable by Demand Draft (DD) in favour of Gujarat Energy Transmission Corporation Ltd. on any Scheduled Bank in Navsari. Cheque for EMD is not accepted. Co-operative Bank Guarantees are not allowed.
- 4.2.2 No Interest will be allowed against payment of E.M.D. Documents towards payment of Earnest Money Deposit (EMD) shall be submitted in one envelop and the tender documents in the other and then both these envelopes shall be kept in envelop supplied by the Corporation or tenderer's own envelop for submitting the tender.
- 4.2.3 EMD will be forfeited in case (i) if the tender which it covers is withdrawn during the validity of the offer and (ii) the Tenderer fails to furnish / deposit the security deposit as per this tender specification.
- 4.2.4 For claiming refund of the EMD, the Bidder has to submit the original receipt issued by the Corporation to the EE (Const.), GETCO, Construction D.O., Navsari along with application & advance stamped receipt. However the EMD will be refunded only after placement of order on the successful bidder and acceptance of the same by the Bidder.
- 4.3 **VALIDITY PERIOD:-**The offer should be valid for a minimum period of 180 days from the date of opening of tender.

4.4 (A) Tenderer should furnish the following details:

- (1) Sales Tax Registration No. date and issuing authority.
- (2) Registration No. under shops and Estt. Act and issuing authority.
- (3) A list of the Partners / Directors with the permanent as well as present address, phone, mobile & fax numbers and other details as their relationship, if any with the Corporation's employee should be furnished along with the tender.
- (4) List of pending orders (with orders Nos. & date) and customer's name and address and orders executed so far with other electricity Corporation's.
- (5) Furnish Audited Accounts of last three years of the firm.

- (6) All the testing equipment MUST have been calibrated up to date; the details for the same may be submitted.
- (7) The list of machinery available at factory for manufacturing the item required for transmission line.
- (8) The factory License obtained from State Government authority.
- **(9)** Copy of Registration with validity of the registration.
- (10) Copy of latest bank solvency certificate of 20% of tender value.
- (11) Copy of experience certificate.
- (12) Service tax registration No.
- **4.4.2.** Revision of prices or any commercial terms affecting the price after opening of technical bids shall not be considered and will be ignored.
- 4.4.3. Tenderer should indicate the name of their partners of their manufacturing firm.
- 4.4.4. Tenderer should specifically mention in the offers and should indicate in Block letters the name of the Partners / Proprietor / Directors who is / are the signing authority.

(B) Prices:

- 4.3.1 The quoted prices for erection of S/S shall be on firm price basis and shall be valid up to completion of contract
- 4.3.2 The service tax shall be indicated in erection part of price bid.
- 4.3.3 No price variation shall be allowed on supply and /or erection part.

4.3.4 **EXCISE DUTY** :-

100% value of Excise duty on tower materials & line materials shall be reimbursed on submission of documents of excise duty paid by the bidder at the prevailing or offered applicable rate, whichever is lower. Neither however have Chartered Accountants certificated along with last advance bill that excise duty paid by the tenderer and claim from GETCO has not been refunded nor refund claim is pending with excise department. Further, tenderer have to furnish and undertaking to Corporation that in any event, if any refund of excise duty either in full or part is received by tenderer in further in respect of the material supplied to GETCO against all under reference and the same shall be passed on to the Corporation without any former claim to that effect from GETCO.

- 4.3.5 The rate quoted shall be inclusive of freight, transportation, loading, —unloading & stacking at site.
- **4.3.6** The prices accepted by the Corporation shall remain valid till completion of the contract for the main order.
- 4.3.7 The contractor shall take suitable storage-cum-erection insurance against theft; loss/damage accident etc. up to completion of line for

all towers and line materials at no extra cost to the Corporation and prices quoted shall be inclusive of this item.

- 4.3.8 No extra payment toward all type of template including extensions and special tower will be made to successful bidder.
- 4.3.9 **SALES TAX**:-The prices should be quoted inclusive of sales tax i.e. GST or CST to be indicated. The rate of sales tax (GST or CST) should clearly be indicated. However, in the breakup of end cost, sales tax has to be shown separately. The stores are required for consumption in generation, transmission and distribution of electrical energy and as such, Gujarat State forms "C" / C-1" / Central "C" from will be issued at the time of payment of bills, you are requested to quote your sales tax registration Number and date in all the bills.
- 4.4.10. No sales tax will be paid on bolt-nuts being bought out item.
- 4.4.11. The Gujarat sales tax is applicable on Freight component also for the dispatches within the Gujarat State.
- 4.4.12.As per the Government of Gujarat directives, while evaluating your offer incidence of sales tax will not be considered.

4.4.13. Sale Tax on works contract:

Works contact tax is a liability of the bidder and if applicable, the same shall be borne by the bidder.

In case of contract value exceeding RS. One crore, tax shall be deducted at source at 2% of the net value payable as per the section 57(b) of the Gujarat Sale Tax Act of 1969 amended up to date. However, if contractor desires payment without deduction of 2% TDS, he has to obtain and produce certificate from competent authority of sales tax department to that effect.

4.4.14 E.D. / ST amount ceiling:

Bidder shall also confirm that the total claim of excise duty and sales tax shall not exceed the amount indicated in the price bid.

4.4.14. STATUTORY VARIATION:

Any statutory increase or decrease in the taxes and duties subsequent to your offer if it takes place within the original contractual delivery date will be to the Corporation'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 the Corporation. No statutory variation shall be admitted, if the excise duty becomes payable because of exceeding the prescribed limits for turn over or for any such other reasons.

4.4.16. INCOME TAX:-

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

4.5. SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE DEPOSIT:-

The contractor will have to pay the security deposit at 5% of the order Value on placing the order 2.50% will have to be paid in cash or demand Draft drawn in favour of **GETCO within 7 days from the date of intimation from this Office** and the remaining 2.50% will be recovered from the bills.

SD will be refundable after completion of Guarantee period of 06 Months from Date of completion of satisfactory of work

- 4.5.1. 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 and performance guarantee. Such Security Deposit will be payable by DD payable at Navsari / Bank guarantees from Scheduled / Nationalized Banks will be acceptable, if the amount of security deposit payable exceed Rs. 50,000/-. The Bank Guarantees furnished / submitted should have clear one time validity till the completion of the order in all respect and up to the expiry of the Guarantee period of Two years from the date of commissioning of Transmission line. Bank Guarantee for interim period will not be allowed. If by any reason the contract period is extended, then contractor should undertake to renew the Bank Guarantee at least one month before the expiry of the validity failing which Corporation will be at liberty to en cash the same, without entering into further correspondence formalities, etc in the matter.
- 4.5.2. No interest will be allowed on amount of Security deposit.
- 4.5.3. The Security Deposit cum performance Guarantee deposit of 10% on total contract value shall be valid up 12 months from the date of charging of line.
- 4.5.4. This security deposit is for the performance of contract and the same is liable to be forfeited by the Corporation in event of non fulfillment of the term and conditions of this contract by the contractor.

(CORPORATE BANK GUARANTEES NOT ALLOWED)

Completion Period:

- 4.5.5. The contractor should start all relevant activities like mobilization of gang, collection of drawing from GETCO, profiles and tower schedules, selection of site store for storage of materials for supply and erection on receipt of LOI from the Corporation. No separate commencement period will be given by the Corporation for this activity.
- 4.5.6. The contractor is required to commence his activity for supply and erection work on receipt of detail order date and shall complete all

- activities in all respect with in 3(Three) Month from the date of order as indicated in SCHEDULES -B hereunder.
- 4.5.7. The tenderer shall confirm that on placement of order, the work will be executed as per Schedule-03 of section-VII only. The tenderer have to submit the bar-chart accordingly.
- **4.5.8.** Time being the essence of this contract. Completion period shall be strictly adhered to by the contractor in view of urgency of this project in time.

4.7. Guarantee Period:

Total material supplied and work executed shall be covered under guarantee period against any defect in materials, poor workmanship or defect/ wrong design etc. for a period of 12 Months from the date of commissioning of line.

4.8. Penalty for Delay:

- 4.8.1. 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 cut off date stated as per stipulated delivery period shall be subject to the penalty at the rate of ½ % of the contract value per week (of delayed supply and/or work) OR part there of with a ceiling of 10 % of the contract value.
- 4.8.2 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 Corporation.
- 4.8.3 Tenderer shall have to supply all materials to match with the erection activities.

4.9. Presentation of Bills:

- 4.9.1 Monthly RA bills for 80% value of the supplied material and work executed including cost of material consumed is to be prepared in triplicate and submitted to Dy. Engineer (Const) in-charge of the work, who will in turn process the same and forward it to the concern Executive Engineer (Const), in-charge of the work for necessary payment. These bills shall be serially numbered with suffix SE-I.
- 4.9.2 10% payment out of balance 20% shall be released on completion of line work, handing over and acceptance by the concern E.E. (Const) after rectification work if any and settlement of material account according to actual quantity utilized for completion of line. No extra payment will be release for to material which is not required for completion of line if supplied excess during execution work. D.E (Const) in charge of the work will in turn process the same and forward it to concern Ex. (Const) in-charge of the work for necessary payment. This bill shall be serially numbered with suffix SE-1.

- 4.9.3 Balance 10% payment shall be released only after finalization of material account and passing of final bill only. 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.
- 4.9.4 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.
- 4.9.5 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.
- 4.9.6 The intimation of above indicated bills shall be submitted to concerned Superintending Engineering (TR) in-charge of the work and Chief Engineer (Trans.), GETCO, HO, Baroda, for information and records.
- 4.10. Terms of Payment:

The payment for materials to be supplied and erected shall be made as under only after execution of the contract documents/furnishing of Security Deposit and on execution of transmission line work.

- 4.10.1. For erection works.
 - (i) 100% payment of amount claimed covering various activities such as excavation, foundation, tower erection, earthing, tack welding stringing of conductor and earth wire including insulator hoisting works against R.A. bills duly certified by EIC within 60 days from the date of R.A. bill.

4.11. TAKING DELIVERY AND INSURANCE:

- 4.11.1 The contractor has keep substation materials 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 substation by Corporation.
- 4.11.2 The Contractor has to open site store nearby the substation and ensure for safe custody of all the stored materials at his own cost.
- 4.11.3. 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 Corporation.

- 4.11.4 STORAGE CUM INSURANCE:-The contractor shall take suitable storage cum erection insurance—cover at his cost for the entire project for 60 % cost of substation materials, which are required to complete the substation. Contractor shall have to take comprehensive 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 substation by the Corporation. 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 to E.E (const), Navsari, SE (TR), Navsari and C.E (TR), GETCO, H.O., Baroda. In absence of the above insurance policy, R.A. Bill payment will be with held.
- 4.11.5 In the event of any damage, theft, loss, pilferage, fire etc., you shall be responsible to lodge, pursue and settle all the claims with the Insurance Company for all items, materials and the Corporation shall be kept informed about it. You shall replace the lost / damaged materials / items promptly irrespective of the settlement of the claims by under writer and ensure that the work progress is as per agreed schedule. The loss, if any, such replacement will have to be borne by you and Corporation will not entertain any claim / representation in this regard. However it will be contractor's responsibility to insure entire project till the line is taken over by the Corporation

4.12. MATCHING OF END COST:

In case the Corporation 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 latter from GETCO.

Under Building and & other construction worker's welfare cess act contractor has to pay welfare cess @ 1% of the estimated cost for other work & Rs 30.00 per sqmtr of construction for civil work will be reimburse by GETCO on production of documentary evidence of payment.

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:

Sr. No.	Amount of contract in Rs.	Penalty amount
1	Up to 1 Lac	Rs. 5000/-
2	Above 1 Lac to 10 Lacs	Rs. 25000/-
3	10 to 100 lacs	Rs. 100000/-
4	> 100 lacs	1.0 %

2. Reporting:

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

3. Safety requirement :

- a. 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.
- b. During site visit by GETCO official or Executive Engineer and above rank, the following checks during execution of work shall be covered.
- 3.2 1 Safety equipments available and utilize.
 - a) Helmet.
 - b) Safety belt.
 - c) Safety shoes.
 - d) Live line voltage detector.
- 3.2 2 Safety procedure adopted.
 - a) Permit to work.
 - b) Earthing at the place of work.
 - c) Adequate supervision.
- 3.2 3 T & P physical check (Healthiness and Quality)
 - a) P.P rope.
 - b) Wire rope and sling.
 - c) Earthing rod.
- 3.3 If above mentioned safety requirements found violated in any of the above three conditions shall attract penalty of Rs. 1000/- per occasion. (Max. Rs. 3000/- for violation of three conditions)
- 3.4 During subsequent visit, if violation is found, then double penalty shall be deducted from the bill of the Contractor/Agency

- a) I/ we, the undersigned, have read and understand the Tender Specification No. the above work of Transmission line along with the entire 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	

TECHNICAL TERMS AND CONDITION

4. B.1 Scope:

- 4. B.1.1 Taking delivery of all materials by the contractor, to check the material before transportation at GETCO's Store and to keep them in safe custody at contractor's store at site.
- 4. B.1.2 To dispatch all materials to erection site.
- 4. B.1.3 To arrange transportation and transit insurance of material to be transported.
- 4. B.1.4 Procurement of cement of 43 grades as per IS-8112 of approved brand by GETCO for casting of foundation of various type of towers/structures/equipments as per approved foundation drawings.
- 4. B.1.5. Excavation of different types of foundation of various towers as per approved Corporation's drawing, erection of equipments and sub-station structures.
- 4. B.1.6. Insulator hoisting, stringing of Bus conductor and earth wire including laying, jointing, jumpering and tree cutting of entire section for safe clearance.
- 4.B.1.7 Structure material to be credited in member wise/ tower wise as per bill of material without shortages in MT basis.
- 4.B.1.8 Conductor/ Earth wire credited will be done on route length basis and scrape conductor is to be credited as per following calculation—No of conductor/earth wire x length of span x slandered weight of conductor /earth wire.
- 4. B.1.9. Insulator credited will be no of based on inventory taken before removal of line.
- 4. B.1.10. Hardware/ Amour Rod will be on the basis of scrape (Aluminum / G.I. Scrape) in Kg unit.
- 4. B.1.11. Guarantee of all above items, materials and activities.
- 4. B.1.12 To carry out yard lighting and control room wiring as per the schedule and as per the instruction of Engineer-in-charge.
- 4. B.1.13The contractor shall make his own arrangement for procurement of required bolt nuts well in advance and supply as per scheduled completion period and lighting and wiring material of ISI mark as per the specification given by GETCO and as per the instructions of Engineer-in-charge.
- 4. B.1.14. The Bolt nuts shall be preferably procured from the following manufacturer's only.

- 1. M/s GKW, Calcutta.
- 2. M/s Nexo Industries, Ludhiana.
- 3. M/s Indian Steel & Wire Products, Jamshedpur.
- 4. M/s Bharat Industries, Calcutta.
- 5. M/s Sterling Bolt Pvt. Ltd., Hawrah.
- 6. M/s Agrawal (A Brand)
- 7. M/s Raj Enterprise Fasteners Pvt. Ltd., Indore.
- 8. M/s BRK Industries, Ludhiana.
- 9. M/s Tackman India, Chandigadh.
- 10. M/s NL Engineers, Mohali, Ludhiana.
- 11. M/S A.V. Forging, Punjab.

For any other make of bolt nuts, the contractor will have to take prior approval of the Corporation. For such approval the contractor has to submit the following in respect of prospective bolt nut supplier:-

- Plant capacity per annum
- > Type test reports for bolt nuts to be supplied
- > List of orders executed/under execution.
- 4. B.1.15 However Corporation reserves right to test the samples of Bolts and nuts of the proposed supplier of bolt nut before approving the manufacturer at the cost of the contractor.
- 4. B.1.16 The successful contractor has to arrange for all the tools/tackles and materials required for completion of substation at his own cost. Contractor shall only be responsible for damage or loss to erection tools.
- 4. B.1.17 All works shall be carried out in accordance with the revised and latest Electricity Act in force and rules made there under.
- 4. B.1.18 Successful contractor shall carryout all addition, alteration required to complete the substation for commissioning at the same rates quoted in the offer for respective items. Any additional items which have not been covered in the specification & for which prices are not covered in the price schedule shall not be executed.

4. B.2. Procurement of equipment, tools-tackles & materials:

4.2.1 All the materials, tools, equipments required in sufficient quantity, shall be procured/arranged by the successful tenderer before the work is taken up on hand and shall not link the delivery/completion period with procurement/arrangement made by him for these items tools/equipments.

4. B.3 Drawing & Bills of Materials:

4.3.1 The Corporation shall provide one set of drawings and Bills of Material for various types of structures to be erected to the successful tenderer on award of contract.

- 4.3.2 The Corporation will provide drawings for foundation and earthing to be carried out for various types of equipments and sub-station structures to the successful tenderer.
- 4.3.3 Design/drawing for any other item to be executed including foundation, tower, special extension, additional member for special tower cross arm, base plate assembly if required shall be prepared and submitted to the Corporation for approval by the successful contractor at no extra cost to the Corporation and 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 (If applicable).

4. B.4. Dispatch of Materials:

4.4.1. Yards/Stores provided for stacking of material shall be kept upon the instruction of Corporation's representative as and when required. The cost and handling of storage shall be to the Contractor's account.

4. B.5. Wastages:

4.5.1 As the material is to be procured by the successful bidder, the contractor shall make his own arrangement to avoid breakage, losses and wastage of material, cement, etc. and no wastage except specified in this tender for ACSR conductor & Earth wire on this account shall be considered payable by the Corporation (0.5 % for Sag and Jumpering Un accountable wastage on total consumption of conductor/earth wire used.)

4. B.7. Quantities:

4.7.1. The quantities mentioned in the schedule attached herewith are tentative and to be procured/executed by the successful contractor at the same rates accepted by the Corporation in the A/T and all the terms and conditions of the order. However, payment shall be made only for the quantities utilized / executed to complete the work. In case of any deviation resulting in any increase in quantity, prior approval of the H.O. for such quantity should be obtained before releasing payment for such items.

4. B.8. PROGRESS REPORTS:

The contractor shall submit weekly reports to the Executive Engineer (Const), Gujarat Energy Transmission Corporation Ltd., Navsari showing the progress of procurement, manufacture, inspection and dispatch of the materials. The copy of this report shall be submitted to Superintending Engineer (Trans), GETCO, CO, Navsari. The report shall reach on **Monday every week**.

4. B.9. GENERAL:

4. B.9.1. The successful tenderer shall not use any drawing/designs or part thereof of all/any structure covered under the Contract for the purpose other than the contract awarded against this tender.

- 4.B.9.2 In the event of any stores or part thereof found broken or damaged during transit or failed during the testing and trial at site before commissioning of line, the contractor shall replace the same free of cost. However, Corporation will arrange recoveries of amount equivalent to cost of such damaged / broken materials before actual replacement is given.
- 4. B.9.3. Any correspondence or enquiry subsequent to opening of Technical and Commercial bids is not desirable; if the same is indulged into it will be considered for disqualifying the tender. The Tenderer will be required to abstain from pursuing / canvassing the matter, directly or indirectly with any Officers of the Corporation, as otherwise the same would also result into disqualification of the tender.
- 4. B.9.4 The Corporation shall have the right to make any changes, additions / deletions or modifications in any terms / conditions of the tender and / or specifications as may be deemed necessary by the Corporation at it's sole discretion at any time before the due date of opening of the tender.
- 4. B.9.5 Tenderer should furnish a list of orders for similar items executed by them indicating the name of the utility/customer and their order.
- 4. B.9.6 Corporation does not accept the printed conditions of any Tenderer. It will be ignored without any reference; hence tenderer should withdraw such printed conditions, if they have any.
- 4. B.9.8. If technical deviations furnished by the Tenderer are not agreeable to the Corporation, the offers may be ignored. However it will be solely at Corporation's discretion to consider the technical deviations OR not to consider for any of the Tenderer. No correspondences of the Tenderer after opening with the bid will be entertained in this matter.

4. B.10. Guarantee:

- 4. B.10.1 If the goods stores and equipments found defective due to bad design materials or workmanship, the same should be repaired or replaced by the contractor free of charge within 24 months from the date of commissioning of line. The contractor will be responsible for the proper performance of the tower materials and B/N with accessories, insulator, conductor, earth wire and hardware etc for all bought out line materials for 24 months from commissioning of line.
- 4. B.10.2 The Corporation's General Conditions of contract will apply to all supply & erection and contractor will be deemed to fully aware of the Corporation's general conditions of contract for the supply of plant equipment and materials, except the conditions modified in this commercial terms and conditions and any ignorance of these

conditions will not exempt contractor from his / their liability to abide by the same. Copy is enclosed with this tender specification.

4.B.10.3 If in any company, the interest of any employee of the Gujarat Energy Transmission Corporation Ltd. or his relative as defined in Section VI of the Company's Act. 1956, is 10% or more, GETCO will not deal with such company at all. Tenderer therefore, must specifically disclose this fact in his technical Bid. Non-disclosure of such facts would disqualify the Tenderer for further dealing with Gujarat Energy Transmission Corporation Ltd.

4. B.11. Audit Inspection:

From the lots inspected by the User Department Inspector, the Inspector of Audit Inspection Wing may pick up samples from the lots supplied at consignee stores of the Corporation at random for quality check only. The samples picked up will be tested for acceptance test / type test or as decided by Corporation at Government approved laboratory in presence of representatives of supplier and GETCO as per relevant ISS/BIS/ GETCO specifications. The test results will be binding on the suppliers and Corporation in general will not allow re-sampling. If the material fails in any of the acceptance tests carried out, the full lot of materials will be considered as rejected, and if replacement is not possible due to consumption of the materials then in that case for whole of the rejected lot, Corporation will deduct maximum up to 30% (Thirty) of the End Cost Price. If the same are not utilized / consumed, Corporation may ask for replacement at sole discretion of the Corporation or may accept with maximum deduction up to 30% (Thirty) of the End Cost Price and all these will be binding on the supplier.

In case if the material do not confirm to specifications or fails at Government approved laboratory or other laboratory decided by Corporation for testing and if subsequent testing are to be carried out (which will solely at Corporation's discretion), then all Testing fees, expenses of the inspector and other expenses incurred by the Corporation will be to your account. The decision in this regard for acceptance as above of the Corporation shall be final and this will be binding on you.

6.16. SCOPE OF WORK:-

The work includes the following:-

- 1. Erection of 66kv Beakers, CTs/PTs, Isolators with/without earth blades, L.A., Bus post insulators, 10MVA; 66/22-11kv power x'mer, stringing of Panther Bus complete in all respect, jumpering, installation of earthing pits, installation of earthing strips, fire stand, 66kv and 11kv control panels for feeders as well as x'mer and their wiring, laying of control cables, installation of L.T. panel board, station x'mer, battery charger, battery set complete along with their respective foundations.
- 2. Erection of 11kv D.P. structures for out going 11kv feeders along with their foundations and providing stay sets as per schedule.
- 3. Laying of 11kv XLPE power cables in cable trench as per the specifications.
- 4. Providing and fixing of yard lighting and control room wiring as per the specifications and given in schedule and as per the instruction of Engineer-in-charge.
- 5. All the material to be supply should of the GETCO's approved brand or mentioned in the work order and must be approved by the engineer in charge and submit all the required guarantees to the concerned engineer.

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED TRANSMISSION CIRCLE, NAVSARI. CONSTRUCTION DIVISION, NAVSARI.

** TECHNICAL SPECIFICATION **

Erection of Equipments.

- 1. All the equipment to be opened carefully and any damage during opening of equipment cases or during shifting of at erection places will be at Contractor's cost.
- 2. Before erection of equipment it should be cleaned properly or if required may be washed as per instruction Engineer-in-charge.
- 3. Before erection initial testing of equipment whatever is required is to be done with the help of Engineer-in-charge for which no any extra charge will be paid.
- 4. Arrangement of erection is to be get inspected by Engineer-in-charge before erection of equipment and its structure.
- 5. No any extra charges are to be paid if any equipment is required to change its position as per requirement after erection.
- 6. Within the sub-station yard no any extra shifting charge will be paid to the Contractor for any equipment.
- 7. The detailed drawings of equipments can be seen from this office during any working day and the equipments which are to be erected can also be seen physically at NAVSARI store during any working day and time.
- 8. The erection work should be carried out according to the specification as per instructions and programmed laid out by the Engineer in charge. Contractor has to ensure safe shifting and shifting and erection of all accessories/ equipments as per standard norms.
- 9. The contractor has to arrange for minor fabrication (if required) at free cost & follow all labour laws I.E. Rules safety rules, Insurance rules, GETCO rules at his risk & cost.

Executive Engineer (Const) GETCO, NAVSARI.

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED TRANSMISSION CIRCLE, NAVSARI. CONSTRUCTION DIVISION, NAVSARI.

** TECHNICAL SPECIFICATION **

Erection of 66KV G.I. Structure.

- 1. All the structure to be erected in line level and in plumb as per instruction of Engineer-in-charge.
- 2. If any structures fall after erection but before grouting then it is responsibilities of Contractor to bet replace damaged members at his cost.
- 3. After taking delivery of the structures from GETCO stores than contractor is fully responsible for safe custody and theft which will be at Contractor's cost till completion.
- 4. During erection due care is to be taken for any damage to any equipment in side the S/S yard and any damage to the equipment is at Contractor's Cost.
- 5. Required tools, tackles, ropes, spanners and skilled labours etc. are to be arranged by the Contractor at his cost.
- 6. All bolt and nuts to be fixed properly and spring washer, flat, washer to be used as per drawing.
- 7. If any minor fabrication / modification is required during erection to the structure i.e. holes, cutting, which is to be carried out by the Contractor at free of cost.
- 8. Any loose materials which obstacles during the erection are to be shifted by the contractor for which no extra charges are to be paid.

Executive Engineer (Const) GETCO, NAVSARI.

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED TRANSMISSION CIRCLE, NAVSARI. CONSTRUCTION DIVISION, NAVSARI.

** TECHNICAL SPECIFICATION **

Sub-station structures and equipment earthing.

- 1. Earthing pits are to be excavated as per standard drawing and as per instruction of Engineer-in-charge of s/s.
- 2. Generally in rocky / soft rock strata mesh type earthing are to be provided from scrap / flat which will be given to the contractor at free of cost for which account to be submitted and necessary fabrication welding, joining with pipe is to be done by the contractor.
- 3. Back filling and watering of earthing pits is to be done in the presence of GETCO Supervisor only.
- 4. Contractor has to arrange watering in such way that resistivity of each pit should comes to the required limit.
- 5. For laying of earthing strip in side the sub-station yard for equipment and s/s structure contractor has to be carried out as per the specification is to be laid properly by making welding joint and both wherever is required.
- 6. In case of hard strata contractor has to fill-up earthing trench after laying of strip by black cotton soil.
- 7. All earthing joints are to be welded with structure of equipment by means of proper welding and bolts with structure and with the earthing pits. All the welded joints are to be painted with Aluminum Paint.
- 8. For earthing GETCO will supply only G. I. Strip & Scrap for mesh, remaining materials such as salt-cock pipe etc. is to be supplied by the contractor.
- 9. All earthing joints including the earthing trench is to be made over lapped with earthing strip.
- 10. The earthing mat laying should be done as per drawing No: GETCO/E/06S/STD/P-010.
- 11. Arrangement of earth pit (check pit) & pipe earthing should be done as per drawing No: GETCO/E/06S/STD/P-011. (2 sheet)
- 12. Equipment earthing should be done as per drawing No: GETCO/E/06S/STD/P-012 (sheet 1 to 24).

Executive Engineer (Const) GETCO, NAVSARI.

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED TRANSMISSION CIRCLE, NAVSARI. CONSTRUCTION DIVISION, NAVSARI.

** TECHNICAL SPECIFICATION **

Bus bar / Earth wire stringing.

- 1. For stringing of conductor any size or any type is to be utilized which must be properly cut after taking correct measurement.
- 2. Conductor to be spread in a straight condition and no any twist is permitted if any twist is there than same is to be replaced by the Contractor at his cost.
- 3. No any scratches should be allowed during spreading bus conductor.
- 4. All disc. Insulators are to be cleaned and all the 'W' pin must be ensured before fixing to the conductor.
- 5. Before taking the tension of bus conductor on gantry beam, beam tension plate bolt, nuts to be checked and tighten. No over tension is to be allowed during tensioning of conductor and sag of conductor is to be kept as per instruction of Engineer-in-charge.
- 6. Wherever spacer are required to be provide at regular interval as per instruction of Engineer-in-charge.
- 7. Jumpering is to be done as per standard practice however it must be done with taking proper care of clearance between conductor and column.

Executive Engineer (Const) GETCO, NAVSARI.

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED TRANSMISSION CIRCLE, NAVSARI. CONSTRUCTION DIVISION, NAVSARI. ** TECHNICAL SPECIFICATION **

Control Cables Lying and termination.

- 1. Before laying of control cable proper schedule of cable laying with showing length of each cables is to be prepared and is required to be approved by Engineer-in-charge.
- 2. Cable should laid in such a way that no any twisting of cables is to be found or no cables should be cut under length or over length.
- 3. All cable are to be laid and clamped in side the cable trench as per the instruction of Engineer-in-charge.
- 4. Cable markers should be provided near by termination at both ends.
- 5. Wherever there is no cable trench for small equipment and having a small length about 10 mtr. Then cable should be laid by providing ISI mark heavy duty PVC/GI pipes. The required PVC/GI pipes shall be supplied by Contractor.
- 6. For termination of control cable required size of cable glands copper lungs ferrules tap, sleeves, etc. are to be supplied by the Contractor at his cost.
- 7. All cables terminated inside the panel / equipment with giving proper shape and clamping and taping no any cable leads to be got earthed.
- 8. Complete cable schedule in triplicate is to be given by the contractor with giving details of each termination of cables from one end to other end with giving cable number and size of cable and this to be approved by Engineer-in-charge. For preparing the schedule necessary drawing will be provided by the GETCO. And contractor will be paid extra charges for preparation of schedule which is to be approved by Executive Engineer.
- 9. During testing of control wiring of panel / equipment, contractor has to witness the job and any changes is required that is to be done by the contractor without any charge.
- 10. Any fabrication is required in side the kiosk box / panel / equipment for fixing of glands and clamps is to be done by the contractor at his cost.
- 11. The Control wiring work should be carried out according to the specification and as per instructions and programmed laid out by the Executive Engineer-in-charge of the work.
- 12. The Control Wiring work should be commenced immediately from the date of receipt of instructions from office and should be completed within thereafter.
- 13. Erection of Battery Charger is includes shifting in control room bolting with side panel leveling of Battery Charger with proper grouting as per instruction of Engineer-in-charge.

Executive Engineer (Const) GETCO, NAVSARI

GUJARAT ENERGY TRANSMISSION CORPORATION, TRANSMISSION CIRCLE, NAVSARI CONSTRUCTION DIVISION, NAVSARI

Sub.:- Yard lighting, C.R.Building & Quarter Electrification Work.

SCOPE OF WORK

- 1. Supply storage and installation of various lighting fixtures complete with lamps and accessories.
- 2. Supply storage and installation of lighting panels.
- 3. Laying and termination of 415 V, PVC armored power cable from lighting panel to the junction box at the bottom of the gantry to lighting fixtures receptacles & looping from one gantry to other shall be buried underground. Contractor shall quote the unit price of cable erection separately. Cables glands and lugs are included in contractor's scope.
- 4.Laying & termination by 415 V, PVC armored power cable from street lighting panels to street lighting poles and power cables for looping from one gantry to gantry shall be in the scope of lighting contractor. These cables shall be buried underground. Cable glands and lugs are included in contractor's scope.
- 5. The contractor shall fully co-ordinate the design and the work with the Engineer In Charge and various other contractors of the project.
- 6. Materials & components not specifically stated in this specification & which are necessary for satisfactory installation & operation of the lighting system shall be deemed to be included in the scope of the specification.
- 7. The design manufacture & performance of equipment shall comply with all currently applicable statues, regulations and safety codes in the locality where the equipment will be installed. Nothing in this specification shall be construed to relieve the bidder of these responsibility.
- 8. Unless otherwise specified, equipment offered shall confirm to latest applicable Indian and EE standards. Equipments complying with one another authoritative standards—such as British, U.S.A., V.D.E., etc., will also be consider if it insures performance equivalent of supplier to Indian Standards. In such cases the bidder shall clearly indicate the standard adopted and furnish a copy of the latest English version of the standards along with the tender should there by any dispute of design, work shall be followed:-

9 Indian Standards as per latest amendment should be followed:-

(i)	IS: 1913	-	General & Safety requirement for Electric Lighting			
Fitting	gs.					
(ii)	IS: 3523	-	Water Proof Electric Lighting Fittings.			
(iii)	IS: 4012	-	Dust Proof Electric Lighting Fittings.			
(iv)	IS: 4013	-	Dust Tight Electric Lighting Fittings.			
(v)	IS: 1777	-	Industrial Lighting Fittings with Metal Reflectors.			
(vi)	IS: 3287	-	Industrial Lighting Fittings with Plastic Reflectors.			
(vii)	IS: 2493	-	Well glass Lighting Fittings for use underground in			
mines.			(Non flamp proof type).			
(viii)	IS: 1947	-	Specification of Flood Light.			
(ix)	IS: 2149	_	Luminaries for Street Lighting.			

(x)	IS: 2183	-	High Pressure Mercury Vapor Lamps.
(xi)	IS: 1534	-	Ballasts for use in Fluorescent Lighting Fittings (PART-I).
(xii)	IS: 1569	-	Capacitors for use in Fluorescent Lamps.
(xiii)	IS: 2215	-	Starters for Fluorescent Lamps.
(xiv)	IS: 2713	-	Tubular Steel Poles.
(xv)	IS: 5133	-	Steel & Cast Iron Boxes.
(xvi)	IS: 2629	-	Hot Dip Galvanizing of Iron & Steel.
(xvii)	IS: 694	-	PVC Insulated Cables for Working Voltage up to &
			including 1100 V
(xviii)	IS: 732	-	Code of practice for Electrical Wring Installation
			(System Voltage not exceeding 650 Volts)

(xix) IS: 3043 - Code of Practice for Earthing.

(xx) Indian Electricity Act.

(xxi) Indian Electricity Rules.

10. The Standards mentioned above are available from:Indian Standards Institution

Manek Bhavan,

9, Bahdoor Shah Zafar Marg,

New Delhi – 110 001.

11. All Sodium Lamps fixtures shall be complete with accessories like ballasts, Ignintors, Power Factor Improvement Capacitors etc.

This shall be mounted as possible in the fittings assembly only. If these can not be accommodated inside, then a separate metal enclosed box shall be included to accommodate the accessories and in addition with fuse & terminal block suitable for Loop - In - Loop - Out connections. Outdoor type Weather proof box. They shall indicate starting time of this lamps to get full light out put. Curves for starting characteristics and variation of lamp characteristics with varying supply voltage etc to be furnished by the bidders.

12. Each lighting fixture shall be provided with and earthing terminal suitable to connection to 8 SWG G.I. Earthing Conductor.

13. <u>Cable Termination Box:</u>-

- 1. Cable Termination Box for gantry structures, shall be completely weather proof confirming to IPW 55 and provided with lockable door & HRC fuse mounted on fuse carrier and fuse base assembly. The terminal shall be stud type and suitable for two nos. 4 mm² cable necessary arrangement for glanding cable along with supply of gland are included in tender scope.
- 2. The bolts, nuts & screw required for erection is to be supplied by the contractor at his own cost.
- 3. Outside and inside the cable terminal boxes shall be supplied by the contractor at his colours.
- 4. Finished painted appearance on equipment shall aesthetically pleasing appearance free from dots and uneven surface.
- 5. Touch up paint at site shall have to be done, if necessary.

14. <u>STREET LIGHT POLES:-</u>

- 1. The structure/pole & wall mounted G.I. pipe post shall be supplied with one Aluminium Cast junction box described in Schedule'B' item No: 62
 - heavy duty bakelite connector, brass Neutral link, rewire able fuse, rubber gaskets etc.

- 2. The junction box should be provided with proper bracing arrangement on Structure/ wall by means of G.I. strips The junction box should have two holes at the bottom to accommodate two siemens type tinned brass cable glands of suitable size for cable to be used. The cable glands of approved make should be supplied by the contractor.
- 3. The wall mounted G.I. Pipe post shall be painted with one coats of Anti-Corrosive oxide primer & two coats of Aluminum paint. as per instruction of Engineer In Charge

15. <u>INSTALLATION OF POLES AND WALL MOUNTED G.I. PIPE POST:</u>

1. The G.I. Pipe post shall be fixed on the face of wall at suitable height, by means of 3 pairs of wall clamps, nuts and bolts.

16. **CABLE WORK:-**

1. PVC Insulated PVC cuter and inner sheath, armoured copper conductor cables suitable for 1100 Volts A.C. as per IS: 1554 (Part – I – 1964) of size as specified in schedule of quantities. The cables should be approved make, any of following, Unicable C.C. / Unistrar / Gloster / I.C.C. or equipment, subject to approval of Competent Authority.

17. GENERAL PRECAUTIONS FOR HANDLING OF CABLES:-

- 1. Before laying cables there shall be tested for physical damage, continuity, absence of cross phasing, insulation resistance to earth and between conductor, insulation resistance tests shall be carried out with 500 / 1000 volts megger.
- 2. The cable shall be supplied for site wound on wooden drum as far as possible. For smaller length and sizes cables in properly coiled from can be accepted. The cables shall be laid by mounting the drum of cable on drum shall be mounted on a properly supported axle and the cable laid out from the drum in no case the cable will be rolled on as it produces kinks which may damage the conductor.
- 3. Sharp bending and kinking of cables shall be avoided. The bending radius for PVC insulated & sheet armoured cables shall not be less than 10 'D', where 'D' is overall dia. Of the cable armoured cable shall never be concealed in roads with G.I. Pipe conductor R.C.C. pipes, required pipes will be supplied by the contractor. After drawing cable, the end of the pipe shall be sealed with cotton/bituminous compound

18. <u>LAYING OF CABLES (UNDERGROUND SYSTEM):-</u>

- Cables shall be so laid in ground that, these will not interfere with other underground structures. All water pipe sewage lines or other structure which become exposed by excavation shall be properly supported and protected from injury until the filling has been rammed solidly in places under and around them. Any Telephone or other cables coming in the way are to be properly shielded / diverted as directed by the Engineer In Charge. Cables shall be laid at a minimum depth of 750 mm from ground level.

 Excavation will generally be in ordinary alluvial soil. The width of the trench shall be sufficient for laying of required number of cables. The surface of the ground after back filling the earth, shall be made so as to confirm in all respects to the surrounded ground and to the entire satisfaction of site Engineer.
- 2. For wall mounted fixture the cable shall be laid in wall, by using grooved wooden base block G.I. saddles, screw etc.
- 3. Joints in the cable through out its length of laying shall be avoided as far as possible and if unavoidable, prior approval of site Engineer shall be taken. If allowed proper straight through epoxy joint shall be made without any additional

cost. A loop of one meter of each length of cable shall be left near each street light pole. Also a loop of one meter shall be provided on both ends of the cable. This additional length shall be used for fresh termination in future. Cable for this loop shall be paid for supply & laying

19. TERMINATION AND JOINTING OF CABLES:-

On both ends of cables suitable size brass heavy duty cable glands shall be used before it enters junction box/ main LT panel/ joint box etc. armour of cable shall be connected to earth point.

20. <u>EARTHING TO G.I. PIPE/ STRUCTURE/POLES & FIXTURE :-</u>

- 1. Each fixturestructure/wall and G.I. Pipe post shall be earthed by plate type earthing 300x300x15mm & 20x5mm earthing strip shall be buried in specially prepared Earth pit of depth 1.5 Mtr. Necessary earthing strip including plate, salt (16 KGs. per pit) & Charcoal/coke (16 Kgs. per pit) required for earthing, shall be supplied by the Contractor. The upper end of G.I. earthing strip shall be fixed on each pole and G.I. pipe post by means of 2 Nos. of 8 mm. dia. Brass bolts and nuts with washer as shown in drawing shall be made available with pole. There should not be any joint of G.I. earth strip, in between earthing terminal of pole and bottom end of plate.
- 2. The common earthing shall be done for two post top luminaries installed on main gate of the switch yard for measurement recording. The quantity will be considered as ONE only and no extra payment will be made, for common earthing.

21. INSTALLATION STREET LIGHTING LUMINAIRES:-

This include fixing of street light fitting complete with accessories and lamp on the pole/ bracket, connecting it with 2 x 2.5 sq. mm (710.67 mm) Dia. PVC insulated and PVC sheathed copper flexible conductor and commissioning the same.

22. INSTALLATION POST TOP LUMINAIRE:-

This includes providing & installation of post top lantern complete with all accessories & lamp connection it with 2 x 2.5 sq. mm. (710.67 mm a) PVC insulated & PVC sheathed copper flexible conductor testing & commissioning the same.

- All the fitting required for fixing the luminaries, such as reducer, coupler, gasket & all types of hardware shall be provided by the contractor himself. All tools and tackles required for the entire work shall also be arranged by the contractor. In any case Board will not provide any such facility, whatever.
- All materials shall be got approved from E.E./D.E. Construction, NAVSARI before commencement of work. If there is any dispute regarding interpretation of ecifications. The decision of E.E Construction, NAVSARI shall be final and binding to the contractor.

25. **RULES AND REGULATIONS:-**

All works included in this specification shall confirm to the relevant Indian Standard Specification or the British Standard Specification and shall be governed by the I.E. Act Rules & Regulations in force. Due consideration will be given to any special suggestions put forward by the contractor which are calculated to enhance the general utility, efficiency and economy of the installation.

26. **COMPLETION OF CONTRACT:-**

Lighting installations shall be completed in every respect. The contractor shall not be eligible for any extra charges in respect of minor accessories even through they may not have specifically included in the contract document. Earthing of installation wherever required shall also be carried out as per the standard regulations. No extra charges shall be allowed on this account.

27. TOOLS AND TACKLES:-

All the tools & accessories shall be brought by the contractor and department does not bind itself to supply them.

28. MATERILAS AND WORKMANSHIP:-

All the materials shall be of the best quality as specified and so as to suit the tropical climate wit humid atmospheric conditions. All fittings & fixtures should be got approved by the Ex. Engr. before installing the same. The Ex. Engr. shall have to right to reject any of the materials if the same are found to be defective and/ or inferior quality than those specified.

29. **SPECIFICATIONS:-**

The fitting will have to be supplied and the work will have to be carried as per specification attached herewith and the same should be got approved by the Executive Engineer, NAVSARI.

30 **ERECTION, STORAGE, INSURANCE:**-

The successful contractor shall provide, at his own cost, the insurance cover for the materials, transit, storage, handling & erection. No payment will be made before any damage to the material or to the staff engaged by him in carrying out the work.

31. The offer shall be complete in all respect & shall include all materials, tools & appliances whether specified or not required for completing of the installation of yard lighting system.

32. <u>TESTING AND COMMISSIONING:-</u>

The complete Yard Lighting, C.R.Building & Quarter Electrification includes all allied accessories after completing of work must be satisfactory tested as per IEE Rules and necessary certificate in this respect should be provided by the contractor at the time of testing & commissioning of installation, if any appliance or supplied materials is found defective or failed the same should be replaced and fixed by the contractor at his own cost and risks.

DATE:	
Signature of Contractor	Evecutive Engineer (Construction)
Signature of Contractor.	Executive Engineer, (Construction), GETCO, NAVSARI.

GUJARAT ENERGY TRANSMISSION CORPORATION, TRANSMISSION CIRCLE, NAVSARI CONSTRUCTION DIVISION, NAVSARI

Sub.:- Yard lighting, C.R. Building & Quarter Electrification Work.

The successful bidder has to follow strictly standard design of alimentation for 66 KV Sub-Station as per circular No: CE(Project)/SE(Proj)/V/4858 Dtd: 24-06-2008 issued by C.E.(Pro) details are as under.

- 1. GETCO Technical Specification Illumination
- 2. Annexure –I (Fitting detail of Control Room).
- 3. Annexure-II (Luminance details for switch yard area).
- 4. Standard drawing for switchyard Illumination No: GETCO/E/06S-STD/S-013 (Sheet 1 To 3).
- 5. Standard drawing for Control Room No: GETCO/E/06S-STD/S-015 (Sheet 1 & 2).

If any change in quantity as well as specification will be intimated well in advance before commencement of work & accordingly the successful bidder has to carryout the work & procure the required items.

Executive Engineer (Const), GETCO, NAVSARI.

WORK & SAFETY REGULATIONS

- 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
- 2. 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.
- 3. All equipment used in construction 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.
- 4. 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.
- 5. The Contractor shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need.
- 6. 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.
- 7. 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
- 8. 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.
- 9. 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.
- 10. 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.

- 11. 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 he provided by the Contractor to electricians/workmen/officers.
- 12.In case any accident occurs during the construction/ 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.
- 13. 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.
- 14. The Contractor shall not be entitled for any damages/compensation for stoppage of work due to safety reasons 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.
- 15. 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 fire fighting 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.
 - e. 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.
- 16. 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.

17.

a. Temporary connection wiring must be connected through "ELCB" of appropriate capacity only(No loose wires to be connected, only cables to be

used)

- b. Joints of cables are to be avoided.
- c. Temporary colony arrangement for labourers to be made by contractor out side the construction area including water arrangement and minimum amenities. Children and ladies should not allowed in moving sub station area for water, cooking food etc.
- d. Danger tape must be provided to high light as a working area.
- e. Switchyard gate must be kept closed
- 18 All the safety measures to be observed and record should be maintain during the construction of transmission line and substation as per Chief Engineer project latter no CE (Pro))/II/6999 dt 7.10.2008

SECTION – VI SCHEDULE - 03 DETAILS OF HUMAN RESOURCES

Details of the human resources available with the bidder for the successful performance of the contract

Namo	e of the Bidder:				
Sr. No.	Designation	Name	Qualification	Professional experience & details of works carried out.	Remark
-1	•	2	4	_	-

				carried out.	
1	2	3	4	5	6
1)	Works Manager				
2)	Marketing Manager				
3)	Design Manager				
4)	Quality Control Manager				
5)	Number of Skilled Employees.		(Only Nos.)		
6)	Number of unskilled Employees.		(Only Nos.)		
				•	•

Signature of Authorized Representative	
Company / Agency	
NAME:	
STATUS:	
Name of Tendering Company	

SECTION – VI SCHEDULE – 04

Details of equipment available on hand with the bidder at the works

Name	of the Bidder:			
Sr. No.	Name of Equipment	No. of Units	Capacity in MT per annum.	Remarks
1	2	3	4	5
1)	Cutting Machine.			
2)	Drilling Machine.			
3)	Punching Machine			
4)	Galvanizing bath (with size of bath).			
5)	Any other			
			gnature of Authorized Ro ompany / Agency	epresentative
		NA	AMF:	

STATUS:

Name of Tendering Company

SECTION -VI SCHEDULE - 05

FINANCIAL CAPABILITY

Name of the Bidder: _			_

Sr. No.	Details	Amount Rs. In lacs	Remarks
1	2	3	4
1.	Solvency and Income Tax clearance.		A Scheduled Banker's Certificate of present Solvency be attached .and last Income Tax certificate
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

SECTION -VI SCHEDULE - 06

LATEST INCOME-TAX CLEARANCE

CERTIFICATE

(TO BE SUBMITTED SEPARATELY WITH THE OFFER)

SCHEDULE – 07

DETAILS OF PARTNERS / DIRECTORS WITH THEIR ADDRESS

Name of the Bidder:

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

Signature of Authorized Representative
Company / Agency
NAME:
STATUS:
Name of Tendering Company

SECTION -VI SCHEDULE – 08

MEMORANDUM / ARTICLES OF ASSOCIATIOS OR CONSTITUTION OF FIRM WITH THE NAMES OF PARTNERS / DIRECTORS.

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

SECTION – VI SCHEDULE – 09

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

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

SECTION -VI SCHEDUEL – 10

PROFORMA FOR AGREEMENT

(Non Judicial Stamp Paper of Rs. 50/-)

			CONT	RACT A	AGREEMEN'	Γ
Thi	s Agre	ement is mad	e at BA	RODA 1	the	day of
in	the	Christian			thousand	
		(he	reinafte	r referr	ed to as	"THE CONTRACTOR"
incl Guj Vid Cor con WH	ude its arat yut Bloomatitext in IEREA	s successors Electricity Contains havan, Race on" which ex clude its succ	s or perorporatic Course, pression or	rmitted on, hav Barod shall u r assign	assigns) of ing their He a 390 007 inless excludes) of the othe	epugnant to the contract the ONE PART and the ead office at Sardar Patel (hereinafter called "The ed by or repugnant to the er part.
		as p	er Corp	oration	's Order No.	hereinafter
refe lette	erred to er, cov pose o	o in the specif	fication, nd other on have	terms a letters been sig	and condition and schedule gned by Shri	alf of the contractors and
is m doc exp	nade ou ument ression	ut in the Sche s are deemed	dule her to form s" where	on be eunder part of ever her	half of the Cowritten and this contracted used, up	orporation, a list whereof all of which said tand included in the on the terms and subject
AN	D WH	EREAS THE	CORPO Struction	ORATION OF THE	ON has accep	oted the tender of or the sum of Rs.
) upon the terms and
NO	W TH	the condition IS AGREEM CLARED TH	ENT W			T IS HEREBY AGREED

- 1. The contractors shall do and perform all works and things in this contract mentioned and described or which are implied therein or there from 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, supply and completion of the works agreed to by the contractor as aforesaid the Corporation 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.
- 2. The conditions and covenants stipulated here-in-before in this contract are subject to and without prejudice to the rights of the Corporation 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 Corporation's Order No.

The contract value, extent of supply & erection works, delivery 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

LISU	of documents forming part of the contract:		
1.	Corporation's Tender Specification No. TR	II/TL /	and
	contractor's offer opened on dated/	_/2003	
2.	Corporation's contract booklet - "Tender &	Contract of Works	".
3.	Corporation's order No. TR II / TL/	Dtd. / _	/
	2003		

4. Contractor's acceptance of order vide letter no.

5. Contractor's Partnership Deed dtd.

I ist of do anymouts forming nort of the contract.

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

7.

8.

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

1)	Signed, sealed and delivered by	
	(Signature with name, Designation and official seal)	
	For and behalf of M/s	(Signature)

Address:	- -
In the presence of (Full Name, Address and i)	ý
ii)	- -
Signed, sealed and delivered by	- -
(Signature with name, Designation and office for and on behalf of Gujarat Energy Trans	,
Vidyut Bhavan, Race Course, BARODA - 390 007	
In the presence of name, full addressed and (1)	O
(2)	-

SECTION – VI SCHEDULE – 11

(TO BE SUBMITED ON Firm's LETTER HEAD)

Ref. No.	Date:
To The Executive Engineer (Const) Gujarat Energy Transmission Corporation Ltd. At & PO Kabilpore, N.H.No.8, Navsari-396424.	
SUBJECT:	
REFRENCE: A/T No	
We hereby acknowledge, agree and accept y terms and conditions mentioned therein.	your A/T under reference above with
	(Signature)
	Designation

SECTION - VI SCHEDULE – 12 E. M. D. BANK GUARANTEE FORMAT

APPENDIX – I

(BANK GUARANTEE ON NON JUDICIAL STAMP PAPER OF Rs.100/-)

WHEREAS Messers (Name &

WIILKLAS	IVICSS	CI3									(INAI	iie a
Address	of	the	Firm)	hav	ing	tł	neir	re	gistere	ed	office	at
						(Add	dress	of the	e firms	Reg	istered o	office)
(Hereinafter	calle	ed the	'Tender	er') v	vish	to	part	icipat	e in	the	tender	No.
		for							of			
(Supply/Ere												
for										_	-	-
WHEREAS												
Rs					-							-
of this guara				•								_
is required t			_	-		_			-			ŕ
We,										_		
having our registered of hours on de any officer Rs(Rupeeswords) to Tenderer.	regist office) and emand auth	stered of hereby hereby in in writin norized (Am	give this agree un g from th by it ount	Bank equivo e Gu in th	c Gu ocally jarat is t	aran and Endoeha	ntee d Un ergy If a of	No condit Trans ny a	tionally missic	ddress / to p on Co t no	oay with proporation t exce E.M	dated in 48 on or eding M.D.),
We					(N	lame	e of	the	Bank)	also	agree	that
withdrawal submission or a part the would cons is liable to b any occurramount is liable.	of the of Secereof hatitute a involvement of the control of the co	tender urity Dep as been default ked and of a de	of part toosit by the accepted on the parents encased efault on	hereof ne Ter I by th art of withir the I	by dere e Gu the T do its	the r wit jarat end vali of th	tende hin o t Ene erer a dity	erer vere modergy Tendership to the modern t	vithin onth fr ransm at thi e Ber	its va om th nission s Ban neficia	ilidity or e date to n Corpo nk Guar ary in ca	Non ender ration antee se of
This agreer terminable b		(N	Mention h	ere th	e ďa	te of	f vali	dity o	f Bank	() and	l shall n	ot be
firm of Tend												

guarantee ————			_	_	contained Rs		(Amt.	of	E.M.Ď.) (Ru	pees
						_) (In	words). Oi	ur Guar	antee	shal
remain in fo	rce ti	II		(Dat	e of validity	of the	Guarant	ee).			

impaired or discharged by any extension of time or variations or alternations made, given, conceded with or without our knowledge or consent by or between the tenderer

and the Gujarat Energy Transmission Corporation.

SIGNATURE OF THE BANK'S AUTHORISED SIGNATORY WITH OFFICIAL SEAL

SECTION – VI SCHEDULE – 13 IN STAMP PAPER OF RS.100/-

PERFORMA OF BANK GURANTEE FOR SECURITY DEPOSIT / PERFORMANCE

BANK GUARANTEE NO:	
The Bank of	hereby agree
unequivocally and unconditionally to pay within 4	8 hours on demand in
writing from the Gujarat Energy Transmission Cor	poration or any Office
authorized by it in this behalf, any amount up	to and not exceeding
Rs.	(Rupees
) to t	he said Gujarat Energy
Transmission Corporation on behalf of M/s	
who have entered into a contract	
specified below A/T No dt	for
erection of (name of work)	
This Agreement shall be valid and binding on this B	
of and shall not be terminable by not	tice or by change in the
constitution of the Bank or the Firm of contractors	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 consen	
to the said within written contract.	
NOTWITHSTANDING anything herein before o	ur liability under this
Guarantee shall be restricted to Rs.	
The Guarantee shall remain in force until	\
PLACE:	
Date:	

Signature of authorized Authority of Bank Seal of Bank

SECTION – VI SCHEDULE – 14

STATEMENT – I

Subject: erection work of 66kV Switchyard structure & equipment, yard lighting, control & electrification wiring at 66KV Manekpur Substation

Reference: Tender enquiry no.

In connection with the above subject and reference I/ We confirm the following:

- I / We, the under signed have read and examined the Tender Specifications in tender mentioned under reference along with the Commercial terms and conditions.
- I / We, declare that our Technical Bid is strictly in line with the Tender specifications (except the deviations shown in Annexure of Technical Deviations as per clause no.38 of this tender document).

Further, I /We also agree that additional conditions / deviations, if any, found in the Commercial terms & conditions (except reference under clause no.38 of this tender document), our offer shall be out rightly rejected without assigning any reason thereof.

Seal of the Firm		the Authorized ives of the firm
Date:		
	Name:	
	Status:	

Name of the Tendering Firm / Agency:

SECTION- VI SCHEDULE – 15

STATEMENT - II

I / WE, confirm that following documents are attached with the technical bid of the offer.

Sr.	Details	Confirmation
No		(Tick √ any one)
1	Firm's details as per "Annexure –1"	YES / NO
4	Past experience details as per "Annexure-4"	YES / NO
5	Performance certificates as per "Annexure-5"	YES / NO
	•	
7	Certificate of Important Instruction & certificate-A	YES / NO
	·	

Seal of the Firm	Signature of the Tenderer

Date:

NOTE: ALL THE DOCUMENTS SHOULD BE PROPERLY FILED AND SHOULD BE GIVEN FLAG MARKING FOR IDENTIFICATION.

ANNEXURE - 1 DETAILS OF THE FIRM

N/	ME OF THE FIRM:	
Α		
1	Address of Registered Office	
2	Contact Personal	
3	Designation	
4	Residential Address	
5	Phone Nos. (Office and Residential)	
6	Fax No.	
7	Telegraphic code	
В		
1	Address of works	
2	Contact Personal	
3	Designation	
4	Residential Address	
5	Phone Nos. (Office and Residential)	
6	Fax No.	
7	Telegraphic code	

ANNEXURE- 2

DETAILS OF THE EXPERIENCE FOR SUPPLY AND/OR ERECTION WORK IN LAST FIVE YEARS FROM THE DUE DATE OF TENDER:

Sr. No	ITEMS SUPPLIE D TO	ORDER REFERENC E No. & DATE	ITEM S	QUANTI TY	ORDER FULLY EXECUTE D. YES/NO		REMAR KS
Α	GUJARAT	ENERGY TRA	NSMISS	ION COR	PORATION L	ΓD.:	
1)							
2)							
В	OTHER ST	ATE ELECTRI	CITY CO	PORATI	ONS:		
1)							
2)							
С	PRIVATE I	FIRMS:					
1)							
2)							

ANNEXURE – 3 LIST OF PERFORMANCE CERTIFICATES SUBMITTED WITH THE TECHNICAL BID

No	Name of the Authority by whom certificate is issued	Reference No. & Date	Details of items		
1	2	3	4		

ANNEXURE – 4

LIST OF THE TENDER DRAWINGS SUBMITTED WITH THE TECHNICAL BID.

Sr. No	Description	Drawing Number	Number of Sheets			
1	2	3	4			

SECTION – VI SCHEDULE -16

Tender for Erection of	
Firms Letter Head CERTIFICATE -	Tender No. Due On: - "A"
I / We	authorized signatory of hereby Certify that is not related with other firms who this inquiry / Tender.
Seal of the Firm Place: Date:	Signature of the Tenderer With Designation.

SECTION – VI SCHEDULE - 17

INDEMNITY BOND

(Non Judicial Stamp Paper of Rs. 100/-)

INDEMINITY 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 (hereinafter called "the Corporation" which expression shall, where the context so admits, include its successors and assigns) to refund the full amount of LINE materials and other materials supplied by the Corporation 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 Corporation and which are in the custody of the contractor at their works site, on behalf of the Corporation, at (name of line) and / or if any of the said materials, when inspected by any officer authorized by the Corporation in this behalf, is found to be damaged, lost, deteriorated in quality or quantity, the contractor hereby agrees to pay full amount forthwith to the Corporation and hereby bind himself to indemnify and at all times keep indemnified the Corporation against all loss, damage and deterioration to the cement, steel or any material supplied by the Corporation within 30 days, the market value of such loss, damage and deterioration in full to the Corporation and shall also hereby authorize the

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.

Corporation 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 Corporation.

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

Now the conditions of the above written bond are such that the contractor shall pay the full amount forthwith to the Corporation 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 Corporation and shall fully and effectually indemnify and keep indemnified to the Corporation 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 Corporation and produce at anytime when demanded.

THE WITNESS WHERE OF: We the	ne			
here to signed at	(Signature	of contractor	with	Name,
Designation & official seal)				
This day of				
In the presence of:				
With Name, Full Address & Signatur	ces:-			
1				
2				

GUJARAT ENERGY TRANSMISSION CORPORATION LTD. CONSTRUCTION DIVISION OFFICE, NAVSARI.



TENDER SPECIFICATION FOR

Tender Specification for erection work of 66kV Switchyard structure & equipment, yard lighting, control & electrification wiring at 66KV Ambatalat S/S and One number of feeder bay at 66KV Anklachh Substation

TENDER SPECIFICATION

CDNS/13-14/17

PRICE BID

PART-II

Name of Work : Work of erection of 66KV equipment, structures, control wiring, yard Lighting, Control-Room & Staff-Quarter Electrification etc at 66KV Ambatalat S/S and one of 66KV FDR Bay at 66KV Anklachh S/S

SCHEDULE B-1: MAIN ERECTION

Sr No	Description of work/Supply	Unit	S/S Qty	Opposi te end F/B Qty	Tot al Qty	Rate	Amount
1	Erection of 66KV Breaker (All type / make) including supporting structure & fixing all its accessories, fittings, connections etc. complete as per owner's/supplier's manual and instruction of E.I.C. including individual & interpole wiring of operating box and that with M.K.Box. with assisting to the erection engineer Erection without crane is permitted. Rates are inclusive of dragging/loading/unloading of same from site store to erection site.	Set of 3 Pole	3	1	4	5544.00	22176.00
2	Erection of 66KV CT/PT (all type make) on its erected structure including complete dragging/ loading/ unloading of same from site store to erection site and fixing of required clamps, connectors as per instructions of E.I.C.	Phase	12	3	15	624.00	9360.00
3	Erection of 66KV LA (All type/make) on its erected structure including complete dragging/loading/ unloading of the same from site store to erection site and fixing of required clamps, connectors, corona rings, surge counter and other accessories etc. as per inst. of E.I.C.	Phase	9	3	12	416.00	4992.00
4	Erection of 66KV Centre Break 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 E.I.C.	Set of 3 Pole	1	1	2	3465.00	6930.00
5	DO as above but without earth blade complete.	Set of 3 Pole	4	1	5	2495.00	12475.00
6	Post Insulator on its erected structure including minor required fabrication & complete fixing of accessories and shifting of same including loading/ unloading from its site store to erection site.	No	6	1	7	277.00	1939.00
7	Laying of any size of 11KV XLPE cable including excavation of trench 300mm wide & 600mm deep 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, 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	Mtr	500	0	500	139.00	69500.00

	avoid damage to cables.						
8	Laying of any size of 11KV XLPE 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	0	500	63.00	31500.00
9	Erection of 66KV Equipment/Lighting Mast/ VHF Mast structure including punching of nut bolts. Rates are inclusive of minor required fabrication and shifting of same up to erection site from its s/s Store.	MT	24	0	24	2495.00	59880.00
10	Erection of 66/11KV, 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, painting of rail and neutral supporting channels, filling and filtration of oil with filter machine as per direction of E.I.C. manufacturer Engineer or as per instruction manual. Required filter machine shall be arranged by the contractor.						
	1) 05 MVA	No	0	0	0	12474.00	0.00
	2)10 MVA	No	2	0	2	20790.00	41580.00
	3) 15 MVA	No	0	0	0	24948.00	0.00
	4) 20 MVA	No	0	0	0	31809.00	0.00
11	Stringing of Single ACSR Zebra Bus complete in all respect with fixing of all fitting, insulators and all accessories as per the instruction of E.I.C.	RmtrPer Phase	150	0	150	63.00	9450.00
12	Preparing and fixing of required length of jumpers of single 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	300	50	350	17.00	5950.00
13	Installation of earthing strips as shown below including digging of 600mm depth and 450mm wide trench/fixing on structure as per attached drawing including fixing arrangement with two bolt arrangement, jointing with nut-bolts and lap welding and applying zinc rich paint on welded joints including supply of GI Nuts & bolts as per specification. No HR shall be given in laying of strips size 50x6mm G.I. Strips / copper strips.	Mtr	1400	200	160 0	45.00	72000.00
14	Providing bore for bore type earthing with drilling 0f minimum 200 mm dia bore up to 18mtr depth in any type soil or rock strata as per instruction of EIC which includes inserting 50X6mm flat in bore depth.the to be conneted to the earthing grid at junction point by proper welding at both end. this includes cutting, fabrication & welding of flat also surrounding areas of / with mixture of coke, charcol, salt, black cotton soi, as per instruction of EIC(Wherever applicable as per soil strata & approval from Engg. Dept.)	No	0	0	0	5500.00	0.00

15	Installation & Fixing of ground rod 20 /24 mm dia. Bar in 50mm dia. Bore in any type of soil except hard rock, 3000mm deep from bottom of trench including cutting of steel bar welding with grid bar/ strip and back filling of bore with black cotton soil / bentonite powder as per attached drg. Required steel rod shall be supplied by Contractor.	no	0	0	0	750.00	0.00
16	Providing and fixing of treated earth electrod 100 mm inner diameter cast iron pipe(cenrifugal casted,flange type) of 13 mm thickness and 3000 mm length including making drilling of 200mm diameter bore & civil work for masonary pit as per SOR Work includes fabrication and fixing of GI strips for earthing connection as per drawing attached. Excavated earth pits/bores should be filled by mixture of coke, charcoal, salt and black cotton soil up to top. as per the instruction of EIC. Extra earth should be removed away from the site s/s premises or refilling earthing pits if required .all required materials for job to be supplied by the contractor.material to be approved by EE const.TRF BAY: TRF-4,LA-3,Xmer BKR/CT/ISO - 1	No	0	0	0	13286.00	0.00
17	Providing and fixing inspection chember of precast cement Hume pipe of size 600mm diameter, 600mm length and 50mm Thick with 50mm thick cover having 100mm hole for watering to pit including excavation up to 300mm depth in any kind strata, the pipe will be 300mm above ground after fixing two coats of white wash with painting of pit number complete as per instruction of EIC.	No	0	0	0	700.00	0.00
18	Erection of 66KV Control Panel , relay panel or C/R panel or RTCC panel including grouting of panel, jointing with adjoining panels with providing required B/N including required fabrication for joining panels & entry of control cables and complete vermin proofing.	No	5	1	6	693.00	4158.00
19	Erection of 11KV CB panel set (1+6) and second incomer/bus coupler of any make including grouting and jointing with adjoining panels, including required fabrication for entry of power cable, control cable and complete vermin proofing, Job includes supply of required bolts, nuts etc.	No	9	0	9	2079.00	18711.00
20	-DO- but Erection of LT panel board & battery charger of any make as per manufacturers instruction manual including grouting, vermin proofing etc.	No	2 (01 each)	0	2	970.00	1940.00
21	Erection of 100AH, 110Volt D.C. battery set on wooden/FRP stand as per instruction manual of supplier, including first filling of battery electrolyte, proper connection of cells and applying, charging/discharging cycles as per manufacturer's instruction manual and instruction of EIC.	Set	1	0	1	6237.00	6237.00

22	Erection of station transformer of 11KV/430V, 63/100KVA on its plinth, grouting of foundation bolts, fixing of channels, D.O. fuse by fabricating str.& its painting, danger board etc. including connection with power cable/LV cable terminations including shifting of all types of materials and equipments.	No	1	0	1	2218.00	2218.00
23	Providing and fixing of 11KV Drop out fuse of rated voltage 12KV ,50Hz frequency and rated normal current of 100 Amps with all required fabrication and IEC	Nos	3	0	3	1200.00	3600.00
24	Providing and fixing of 11KV Pin insulator for Station transformer D.P.Structureas per IEC.with all required B/N .The insulator shall be manufactured as per IS -731/1971	Nos 9		0	9	100.00	900.00
25	Erection of 1 Pole Girder structure for XLPE cable / Neutral Earthig with fixing of channels, angles, necessary fabrication and fixing of Wooden Clamp on it with excavation including back filling work,This items includes painting with red oxide and two coats of silver colour of Asian/British/Nerolac.(Required girders, channels, angles,D.O. switches, etc.shall be supplied by GETCO) a) For XLPE cable inclduing supply of 6 Nos.						
	Wooden clamp for XLPE Cable of station transformer	No	1	0	1	500.00	500.00
	(b)For Neutral Earthing of X'mer	No	1	0	1	500.00	500.00
26	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	0	1	5000.00	5000.00
27	Erection of supporting structure for 11KV Power Cable termination at 11kv bushing for 15MVA transformer and station x'mer(also suitable for erecting DO fuse) including necessary minor fabrication as per DGR. & inst. of E.I.C. and painting with one coat of red oxide and one coat of alluminium paint. Material for supporting structure will be supplied free of cost by GETCO.	No	3	0	3	1000.00	3000.00
28	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 and instruction of EIC. 1) Allu. alloy bus bar of size 75X20x2000 mm: 03 Nos. 2) 11KV Post Insulator of PCD 127 mm - 12 No 4) Copper laminated fusion welded flexible jumper of size 75 X 10 X 600 mm having 2000 Amp capacity: 03 No	Set	2	0	2	27350.00	54700.00
29	Erection of 11KV D.P. Structure (Girder/PSC Pole) including required fabrication in Top Channel, Cross Bracing, Level Piece etc with providing required b/n. Works also includes painting with one coat of Red Oxide, Two coat of approved make alluminium paint. job also includes erection of 11kv LAs	No	6	0	6	2200.00	13200.00

30	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 1:3:6 respectively. The rates are inclusive of supply of sand, metal, water & cement, Muffing and with smooth cement mortar (1:6) finish.	Cmt	22	0	22	5707.80	125571.60
31	Excavation in Hard Rock for excavation of Earthing Pits/trnchs, Yard Light Poles etc.	Cmt	0	0	0	525.00	0.00
32	Loading, Transporting & Unloading of all SS material like SS Structure,indoor & out door SS Equipments, DP Structure,earthing materials etc.for Ss & opposite end feader bay -Store to SS Site	Job	1	0	1	54400	54400.00
33	Supply & laying of 1 CoreX25mm2, armroured 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	0	45	200.00	9000.00
34	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	0	1	25000.00	25000.00
	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 colour03 Nos.						
	Single line diagram size 5' x 3' Digital with Alluminium frame with fitting and as per approved diagram given by IEC01 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 language25 Nos.						
	Safety Slogen Board size 2" x 6" in side control room05 Nos.						
	Various type of control room equipment sticker size-24 cms x 5cms18 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 arrengement 30 Nos.						
35	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 work includes cutting, drilling, welding of pipe as required. Fabrication and supply of 16mm dia meter hook required size for buckets. 4 Nos.of fire buckets are to be provided fire stand should grouted with excavation of pit size 300mm x 300mm-2 Nos. of 600mm depth with 1:3:6 mix muffing 300mm in height including leveling of stand. The fire stand is to be painted with post box red colour of approval quality as per instruction of EIC. All required approved material including cement, sand, metal etc are to be provided by contractor.	Job	1	0	1	5000.00	5000.00
36	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	0	1	1500.00	1500.00
37	Labour charge for fixing of 11KV XLPE Indoor cable kit of any make for size 95 to 300mm2. Cable kit provided by GETCO.	No	13	0	13	750.00	9750.00
38	Providing & Fixing of RAYCEM/MSEAL/CABSEAL make heat shrinkable type 11KV XLPE Outdoor cable Termination kit suitable for 11KV, 3C x 95 sqmm to 300 sq.mm XLPE power cable by using adequate capacity of Al. lugs.	No	13	0	13	6150.00	79950.00
39	Providing & Fixing of Aquaguard Total 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 You have to provide guarantee for the 12 month from the installation.	No	1	0	1	6900.00	6900.00

40	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 : 11KVAC proof voltage : 22KVDielectric strength : 45KVLeakage current : < 10 micro ampereColur RED/BLUEMake : Vardhman or equivelent (Rubberhouse India)Width :1 mtr.Thickness :2.5 mm.Surface :Chequred 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	17	0	17	4500.00	76500.00
41	Providing & fixing of reputed make ISI mark Fire Extingusher.with leatest ammendment Dry chemical powder 10 kg Capacity Note: Contractor shall submit Test certificate for routine test as per relevant IS.	No	2	0	2	1900.00	3800.00
42	- Do - but CO2 type - 6.5Kg	No	2	0	2	6930.00	13860.00
43	- Do - but CO2 type - 22.5Kg	No	2	0	2	13860.00	27720.00
44	- Do - but Mechanical foam type - 50Ltr	No	1	0	1	7508.00	7508.00
45	Providing and fixing Phase plate on 66KV Gantry and Bus supporting structure including supply.	Set	3	1	4	200.00	800.00
46	Applying two coat of ISI mark Asian/ Nerolac oil paint of black colour to all earthing strip (50x6mm) From TRF to ground level as per instruction of EIC.	Job	1	0	1	500.00	500.00
47	Providing and fixing of P.I.Support Clamps for single Panther.	Nos	6	1	7	300.00	2100.00
			TOTAL	1 (SC	HEDL	ILE B-1)	912255.60

	SCHEDULE B - 2 : CONTROL WIRING										
Sr No	Description of work/Supply	Unit	S/S Qty	Opposite end F/B Qty	Total Qty	Rate	Amount				
48	Preparing of complete schedule of wiring for line/ transformer bay for 66KV bays in triplicate. necessary drawing will be provided by the GETCO. Schedule should be approved by EE. or DE in charge.	Bay	2	0	2	2000.00	4000.00				
49	Laying of Up to 7 Core Control Cable, 1.1KV PVC, armored copper/aluminum control cable in readymade cable trench and inside Hume pipe including binding / clamping of cable with GI wire or saddles as per the requirement including the supply and fixing of identification tags at both ends in between if required to following size (Cable will be supplied by GETCO at free of cost	Mtr	1700	400	2100	6.30	13230.00				
50	As above but for, Above 7 Core Control Cable	Mtr	700	200	900	10.45	9405.00				
51	Laying of Up to 7 Core Control Cable, 1.1 KV PVC armored copper /aluminum cable in ground by digging trench of suitable width and 450 mm depth in any type of soil including supply and fixing of identification tag on both end and at distance every 100 mtrs for	Mtr	70	30	100	20.90	2090.00				
52	As above but for, Above 7 Core Control Cable	Mtr	70	30	100	25.30	2530.00				
	Providing and fixing 'B' class G.I. pipes of following size for cable protection including fixing with the structures.(Non SOR) including required 'L' & 'T' band, coupling for CT,PT, Transformer, M.K.Box cabling on structure including required fabrication.(weight of pipe-25kg/meter)										
53	{a} 40mm dia	Mtr	50	20	70	255	17850.00				
54	{b} 50mm dia	Mtr	30	10	40	285	11400.00				
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	90	30	120	200.00	24000.00				
56	As above but for Above 7 Core Control Cable. ,	End	30	10	40	350.00	14000.00				
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	Job	1	0	1	6500.00	6500.00				

	19/27 core x 2.5 sqmm cable supply by GETCO.							
58	Providing & Fixing of all weather proof, cold rolled sheet steel Main AC Dist. Box (MDB) having 1 Nos. of 100 Amp. MCCB & 2 nos. of 63Amp MCB for O/G feeders with copper bus bar as per drawing enclosed.	No	1	0	1	29950.00	29950.00	
59	Providing & Fixing of all weather proof, cold rolled sheet steel Yard AC Dist. Box having (1) one no 63A, 4P MCB as main I/C (2) 09 Nos. of 32A, 4P, MCB as O/G feeders (3) 6 nos of 32A, DP MCB as O/G feeders as per drawing enclosed	No	1	0	1	24250.00	24250.00	
60	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	4	1	5	11000.00	55000.00	
	TOTAL - 2 (SCHEDULE B - 2) 214205.00							

	SCHEDULE B -	3 : Y	ARD	LIGHTIN	<u>IG</u>		
Sr No	Description of work/Supply	Unit	S/S Qty	Opposite end F/B Qty	Total Qty	Rate	Amount
61	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	0	1	24775	24775.00
62	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	120	0	120	295	35400.00
63	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	105	0	105	185	19425.00

64	do4C x 4mm2 Copper cable - Armoured, from yard-light AC panel-2 to all yard-light fixture junction boxes on LM & street light pole & Station transformer to Colony & LT panel to watchman cabin.(Only laying. Cable will be supplied by GETCO)	Mtr	650	0	650	19	12350.00
65	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	0	125	19	2375.00
66	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	0	60	180	10800.00
67	Providing & erection of swaged type welded GI tubular street light pole, by excavating as per inst. of E.I.C. in any type of soil confirming to relevent IS made of GI tubes of following size For Pole having Over all length 9-0 Mtr. Effrective length of section. Bottom 5 Mtr. long, 114.2mm outer dia and 3.5mm thick, middle 2 mtr long, 88.9mm outer dia & 3.25mm thick, top 2 mtr long, 76.1 mm dia (outer) and 3.25mm thick with 1 Mtr long Single arm fixed by fixing bolts (4 Nos) and cap as per specifications and to be so erected that Total tilting angle for the flood light luminare provided on pole is considered as maximum of 45 degree,looking to the tilting angle 20 degree available with luminare it self & supporting pipe should be fabricated & wedled accordingly.	No	8	0	8	10000	80000.00
68	- Do - As above but for Pole having Over all length 5.0 Mtr. Effrective length of section. Bottom 3 Mtr. long, 88.9mm outer dia and 3.5mm thick, middle 1 mtr long, 76.1mm outer dia & 3.25mm thick, top 1 mtr long, 60 mm dia (outer) and 3.25mm thick. as shown in drawing	No	3	0	3	7000	21000.00
69	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 cablesAmp. of standard make like MDS/HAVELLS & 2 Nos. of stud type connector of standard make like Connectwell. The cable glaneds & lugs are also included for both incoming & out going cables.	No	28	0	28	750	21000.00

70	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 solil by using salt/ coke (charcole) 16 kgs each & remaining filling with BC soil & clamping the earth wire with pole & Junction box.	No	19	0	19	400	7600.00
71	Providing and fixing of Single Piece Cast Alluminium with full frame with Acrylic Cover integrated luminaries Energy Efficient flood light luminaries on swaged pole / GI structure by providing required fabrications, of Philips/CGL/Bajaj/GE/Osram make, suitable for 1 x 250 Watt HPSV/T with allied accessories such as Capacitor igniter, ballast, control gear box etc, 4 core 2.5 sq mm double insulated flexible stranded wire should be used from control gear fitting to junction box.	No	13	0	13	7500	97500.00
72	Providing & fixing of Energy efficient Street Light Luminaire on control room / sewedge pole / GI structure by providing required fabrications ofPHILIPS/CGL/HAVELLS/GE/OSRAM make suitable for 4 X 24 Watt T-5 Type Energy Efficient Lamp with allied accessories such as T-5 Lamp,capacitor igniter, ballast, control gear box etc, 4- core 2.5mm2 double insulated flexible strended wire should be used from control gear fitting to approved SMC type junction box as per inst. of EIC.	No	8	0	8	5000	40000.00
73	Providing & fixing of Post Top Lantern on Main Gate / Pole of PHILIPS/CGL/HAVELLS/GE/OSRAM make suitable for 1X 125 Watts HPMV lamp with allied accessories such as Lamp, Ballast, Control gear box etc complete fitting in all respect and 4 core x 2.5 mm2 double PVC flexible copper cable from control gear fitting to SMC junction box as per instruction of EIC. (4 no are to be provided on Main gate & 3 No are to be provided on 5Mtr Tubular pole)	No	7	0	7	3500	24500.00
		TO	ΓAL -	3 (SCHE	DULE	B - 3)	396725.00

	SCHEDULE B - 4 : CONTROL RO	NOC	DOM INDUSTRIAL ELECTRIFICATION						
Sr No	Description of work/Supply	Unit	S/S Qty	Opposite end F/B Qty	Total Qty	Rate	Amount		
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, Heggar 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	0	1	6750	6750.00		
75	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 AC Panel-1 in Control Room.	Mtr	30	0	30	185	5550.00		
76	Supplying & Laying Sub-main lines of 3X2.5 mm2 (two for P & N and one for Earthing)copper PVC insulated wier of ISI brand in suitable standard make steel conduit pipe having minimum 1.5 mm thickness of approved brand with ISI brand with clmpes with it's associated accessories for various circuits amanating from AC panel 1.as per inst. of E.I.C.	Rmtr	150	0	150	125	18750.00		

77	Point wiring for control room tube lights, fans, exhaust fans, fency lights, water tight bulck head lights with PVC insulated 660 V grade standard copper wire in ISI make GI conduct pipe 20 mm dia and 1.6 mm wall thickness size fitted with sadles 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 guage 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.conduct pipe , sadles , swithces , 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	60	0	60	1300	78000.00
78	Providing, fixing & termination for imaregency D.C. supply arrangment. This job includs supply & laying of 2C x 2.5 mm2 Copper arrmoured 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	0	1	4500	4500.00
79	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	8	0	8	1215	9720.00
80	Do as above but with singal 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	8	0	8	815	6520.00
81	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	11	0	11	200	2200.00

82	Fixing of Ceiling Fan of 1400mm sweep Havells/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	0	8	1800	14400.00
83	Providing and fixing of 4X24W ceiling mounted Indoor decorate flurocent luminaries as per Drg No GETCO/E/06-STD/S-015of CGLHavells/PHILIPS/GE/OSHRAM as per instruction of EIC.	No	13	0	13	4200	54600.00
84	Providing and fixing of 1X28W ceiling mounted Indoor decorate flurocent luminaries as per Drg No GETCO/E/06-STD/S-015of CGL/HAVELLS/PHILIPS/GE/OSHRAM as per instruction of EIC.	No	12	0	12	1000	12000.00
85	Providing and fixing of approved make indoor fancy ceiling fitting 30mm dia including 1 X 100 Watts 250 volts Lamp as per instruction of Engineer in charge	No	2	0	2	560	1120.00
86	Providing & fixing of industrial bulk head luminaries on out side C/R building and inside cable trench in C/R of Crompton Greaves make Model IBH1110BC or equivalent Havells/Philips/GE make with supply of 40Watts GSL Lamp including wiring from ceiling rose to fixture with suitable size of PVC insulated ISI marked copper wire only as per Instruction of EIC.	No	12	0	12	450	5400.00
87	Providing and fixing of heavy duty exhaust fan in battery room size 18" of Make GEC/KHAITAN/ CROMPTON/ Havell 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	1	0	1	3500	3500.00
88	Same as item No.1 but with Fixing of Electric bell with bell switch near officer's table. All materials must be ISI mark and approved by Engineer I/C	No	1	0	1	150	150.00
89	Providing and fixing of 24 watt CFL lamp for toilet and other amnities of any standard ISI make and as per instruction of EIC	No	3	0	3	150	450.00
TOTAL - 4					DULE	B - 4)	223610.00

SCHEDULE B - 5 : QUARTER RESIDENTIAL ELECTRIFICATION									
Sr No	Description of work/Supply	Unit	S/S Qty	Opposite end F/B Qty	Total Qty	Rate	Amount		
90	Providing and fixing of open type full point wiring with OVEL shape pvc pipes with accessories with 2.5mm2 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 1.5mm2.	Point	30	0	30	270	8100.00		
91	As per Item No.1 but for 5 pin 5 Amp. Point wiring	Point	12	0	12	200	2400.00		
92	As per Item No.1 but for 5 pin 15 Amp. Point wiring	Point	6	0	6	700	4200.00		
93	As per Item No.1 for call bell including fixing of approved call bell.	Point	2	0	2	300	600.00		
94	Circuit charges for individual circuit with 2.5mm2 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.	СКТ	12	0	12	270	3240.00		
95	Providing and fixing of 1200mm celling fanCGL/ORIENT/USHA/HAVELLS 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 delear deppo. Note: This is the approximate quantity, after getting net requirement of tubelight & fan it is to be purchased.	No	4	0	4	1600	6400.00		
96	Providing and fixing of Domestic tubelight 40W with electronic chock and all the required accessories of Philips, Crompton, Havells. It should be got approved from EIC by showing sample of each tubelight.	No	8	0	8	350	2800.00		
97	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	0	2	3000	6000.00		
98	Providing earthing to quarter with 10SWG copper earth wire connecting to required installement. This work include preparation ofearth 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	0	2	500	1000.00		

99	Providing & fixing of surface mounted 12-way distribution box of L&T/STANDARD/MDS/INDOASIA make for electric power supply to staff quatrs. It includs 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 2.5mm2 copper, insulated wire of POLYCAB/AVOCAB make.	No.	1	0	1	2000	2000.00
100	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	0	1	1600	1600.00
101	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	0	0	0	120	0.00
TOTAL - 5 (SCHEDULE B - 5) 38340.00							

GUJARAT ENERGY TRANSMISSION CORPORATION LTD CONSTRUCTION DIVISION, NAVSARI.

NAME OF WORK: ERECTION WORK OF 66KV SWITCHYARD STRUCTURE & EQUIPMENT, YARD LIGHTING, CONTROL & ELECTRIFICATION WIRING AT 66KV AMBATALAT S/S AND ONE NO OF 66KV FDR BAY AT 66KV ANKLACHH S/S

ERECTION PART SUMMARY

Part	Item	Erection in Rs.
Α	Equipment	912,255.60
В	Yard Lighting	396,725.00
С	Electrification Work	223,610.00
D	Control Wiring	214,205.00
E	Quarter Wiring	38,340.00
	Total	1,785,135.60
	12.36 % Service Tax	220,642.76
	Grand Total	2,005,778.36

Service Tax will be reimbursed on production of proof paid chalan on actual execution of work. Please quote TIN no along with registration certificate (Xerox copy) otherwise Tender will not be consider.

I am / we are	willing to carry	out the	work	stated	above	total	at	(in
fig.)	%(in wo	rds)						
percentage BELO	W / ABOVE the	estimated o	cost for	all the	items s	tated t	here	ein.
The amount of ter	nder works out wi	th above 1	percent	age is I	Rs			
(in figures)	(in v	words.)						
I am / we are to co	nfirm that our abo	ve quoted	rates a	re <u>FIR</u>	M PRIC	CES		
			Si	gnature	of			
			A	uthorize	d represe	entative	3	
			Co	mpany /	Agency			

Executive Engineer (Const) Navsari