GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED CONSTRUCTION DIVISION, RAJKOT

WEB TENDER

SUB :- Erection of 132KV LILO to proposed 132KV Padavala s/s from existing 132KV D/C Paliyad-Vikram line with Panther conductor.

PARTY'S NAME :

DUE DT. OF TENDER : 10/10/11

GUJARAT ENERGY TRANSMISSION CORPORATION LTD. TRANSMISSION CIRCLE, GONDAL. CONSTRUCTION DIVISION - RAJKOT.

NAME OF WORK : Erection of 132KV LILO to proposed 132KV Padavala s/s from existing 132KV D/C Vikram-Paliyad line with panther conductor

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TENDER INDEX

Name and Address of Party :

_____ Date _____ Tender Fee Receipt No. :

EMD Vide D.D. No. :

_____ Date _____

TECHNICAL/ COMMERCIAL BID

<u>GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED</u> <u>CONSTRUCTION DIVISION – RAJKOT.</u> <u>FAX :- (0281) 2386525</u> <u>PHONE No:- (0281) 2386525</u> <u>E-mail:-eeconstrit@yahoo.co.in</u>

TENDER NO. CDR/11-12/42 (New Tender)

Sealed percentage rate tenders are invited in two separate sealed covers Super scribed technical bid and price bid for "<u>Erection of 132KV LILO to proposed 132KV Padavala s/s from existing 132KV D/C Paliyad-Vikram line with panther conductor</u>" from Registered Contractors in appropriate class with GETCO/Central/State Government / Railway/Semi. Govt. and who has executed similar nature of work and magnitude successfully by <u>Executive Engineer (Const.),GETCO, Laxmingar, Nana Mava Road, Rajkot.</u>

Sr. No.	Name of Work	Estimated Cost Rs.	Time Limit	Tender Fee Rs.	E.M.D. Rs.	Appropriate class
	Erection of 132KV LILO to proposed 132KV Padavala s/s from existing 132KV D/C Paliyad-Vikram line with panther conductor	504337.50	3(Three) Months	510/-	5050/-	E1 & Above.

- Last date of submission of tender: (Technical and Price bids: <u>10/10/11</u> (Only by RPAD / Speed post) (During working Hrs. up to 17.00 Hrs.)
- 2. Due date of opening of Technical bid:<u>10/10/11(at 17.00 Hrs.)</u>
- 3. Validity of tender: 180 Days from the date of opening of Technical Bid.

No tender shall be accepted / opened in case of receipt after due date and time of tender, irrespective of delay due to postal services or any other reasons and the GETCO shall not assume any responsibility for late receipt of tender.

The tenders are to be submitted by the intending bidders in single envelop with two separate sealed and super scribed envelopes as listed below:

Envelope No.1: Technical bid and pre qualification requirement, bid data, details specification. **Envelope No.2:** Price Bid.

Technical and pre qualification requirement bid details specification (envelope No.1) will be opened first and subject to evaluation based on the qualification criteria contained in the individual bid document.

Price bids (Envelope No.2) of bidders who are assessed and declared as substantially technically responsive on evaluation of the technical bid will be opened for further commercial evaluation.

The Earnest Money Deposit and tender fee will be accepted by Demand Draft on any Nationalized Bank only situated at "RAJKOT", drawn in favor of "GUJARAT ENERGY TRANSMISSION CORPORATION LTD.,". Tender without EMD and tender fee shall be rejected. Two separate demand draft for Tender fee and EMD should be submitted with technical bid.

Tender document can be down loaded from our web site <u>WWW.gseb.com</u>

Interested party requested to visit our Web Site as mentioned above.

The Tenderer should have to submit with Tender on letter pad along with attested copies of the certificate of (1) PAN No. (2) Registration from GETCO (3) Solvency Certificate from Schedule Bank / Revenue Bank, (4) Partnership deed, (5) Latest Registration Certificate for provident fund of Employees / Labors and P.F. Code No. and its latest receipt, (6) Experience Certificate (7) Payment of Tender Fee & EMD in D.D. in favour Of GETCO, Rajkot. (8) VAT and SERVICE TAX registration proof (9) Electrical License **&**(10) Copy of work order of such type of work carried out.

<u>Note: -</u> Small scale units & large scale units are not exempted from paying tender fee, EMD. Also they are not entitled to get waiver of security Deposit and any type of Price Preference.

The GETCO reserves the rights to reject any or all tenders or accept any tender without assigning any reason thereof.

Executive Engineer Construction Division GETCO, RAJKOT.

<u>GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED</u> <u>TRANSMISSION CIRCLE, GONDAL.</u> <u>CONSTRUCTION DIVISION OFFICE – RAJKOT.</u>

SPECIAL INSTRUCTION TO THE TENDERER.

- Tenders shall have to be down loaded in two parts.

 Technical and Commercial bid. (2) Price Bid.
 The two bids shall be submitted in two separate envelopes to be sealed in the one envelope supplied by the Company. The price bid of only those Tenderers will be opened who are considered technically acceptable.
- 2. The tenders will have to be down loaded two copies of blank Tender on payment of Tender fees (non refundable) as per Tender Notice. However, additional copies of Tender Specification can also be had on payment as per the Tender Specification.
- The tenderers shall have to return the Tender duly filled in two separate envelope kept in a printed cover given by the Company without any additions/ alterations & duly signed page by page.
 The Tenderers are forbidden from furnishing their own printed/ typed commercial and other terms and conditions.
- 4. All commercial terms and conditions except rates shall be indicated in the technical & commercial bid only.
- 5. The Tenderers shall specifically note that the Tenders are invited on percentage basis only.
- 6. The Tenderers 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 order rates for the changed quantities, if any, without any extra compensation whatsoever.
- 7. The Tenderers shall have to submit 1 copy of bidding schedule forming a part of price bid as called for in the Tender Specifications for distribution at the time of opening to other participant Tenderer's.
- 8. The tenderers will ensure submission of the Tenders duly filled in before the due date and time.
- 9. The price bid of those tenderers shall only be opened at the time and date to be informed by E.E.(Const), Rajkot which are found technically acceptable and satisfying the requisite qualification & parameters.

SIGNATURE & SEAL OF THE BIDDER.

<u>GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED</u> <u>TRANSMISSION CIRCLE, GONDAL.</u> <u>CONSTRUCTION DIVISION_OFFICE – RAJKOT.</u>

DETAILS TO BE FURNISHED BY THE TENDERER.

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

1) Whether the Tenders submitted is on percentage basis as called for.	Yes / No.
2) Whether rebate furnished is in percentage basis as called for.	Yes / No.
3) Whether the tender is submitted by Registered Post.	Yes / No.
 Whether all pages of Tender Specifications are sealed and signed by the Contractor. 	Yes / No.
 5) a) Whether the Tenderer is registered with GETCO or Transmission Line Erection. b) In case of Yes in above, please furnish following details:- 	Yes / No.
i) Registration Letter No. & Date:-	
ii) Class of Registration	
iii) Validity c) Whether Tenderer is having PF Code No.	Yes / No.
6) a) Whether EMD Paid.	Yes / No.
b) In case of Yes, Please furnish details	Yes / No.
7) Whether following documents of Section-E-IV Part B are submitted.	
a) Human Resources Details	Yes / No.
b) Availability of tools, equipments 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.
SIGNATURE & SEAL OF THE BIDDER.	

(h) Company's Article Of Association.	Yes/No
(i) Details Of Partners/Directors.	Yes/No
(j) B R /P A Authorized Person.	Yes/No
(k) Power Of Attorney of Consortium Members.	Yes/No

Signature of Authorized representative Of Company/Agency

NAME :-----

STATUS :-----

Name of tendering Company

SEAL/STAMP

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED, CONSTRUCTION DIVISION, RAJKOT

DATE:-:

INTIGRITY PACT OUR ENEAVOUR

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

GETCO COMMITMENT

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

PARTY'S COMMITMENT

- * Not to bring pressure/ recommendations Outside GETCO to influence its decision.
- * Not to use intimidation, threat, inducement or pressure of any kind on GETCO or any of it's employees under any circumstances.
- * To be prompt and reasonable in fulfilling the contract, agreement, legate obligations.
- * To provide goods and / or services timely as Per agreed quality and specifications at minimum cost of GETCO.
- * To abide by the general discipline to be maintained in our dealings.
- * To be true and honest in furnishing information including payment to agents/ sub-agent.
- * Not to divulge any information, business details available during the course of business relationship to others without the Written consent of GETCO.
- * No to enter into carter/syndicate/ understanding whether forma/non-formal So as to influence the price.

Seal & Signature (GETCO Authorized Signatory) Name: Designation: Seal & Signature (Party's Authorized Person) Name :

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	Above1 Lac to \rightarrow 10 Lacs	Rs.25000/-
3	10 to→ 100 Lacs	Rs.100,000/-
4	> 100 Lacs	1.0 %

2. Reporting;

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

3. Safety Requirement:

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

Such records are mandatory for clearing first erection bill.

- 3.2 During site visit by GETCO official of Executive Engineer and above rank, the following checks during execution of work shall be covered.
 - 3.21 Safety equipments available and utilize.
 - (a) Helmet.
 - (b) Safety belt.
 - (c) Safety shoes.
 - (d) Live line Voltage detector
 - 3.22 Safety procedure adopted.
 - (a) Permit to work
 - (b) Earthing at the place of work.
 - (c) Adequate supervision.

- (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.

SPECIAL CONDITION TO THE TENDERER

TAKING DELIVARY AND INSURANCE:-

- 1.1 The contractor has keep tower materials & line materials in safe custody and transport to the respective sites and will be reasonable for any damages to or loss of all materials at any stage during transportation or erection or taking over of the line by GETCO.
- 1.2 The Contractor has to open site store nearby the route of the line and ensure for safe Custody of all the stored materials at his own cost.
- 1.3 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, equipments 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.

1.4 STORAGE-CUM-INSURANCE:-

The contractor shall make suitable storage-cum-erection insurance cover at his cost to the extent of 60% cost of line material, which are required to complete the line. 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 transmission line by the Board. 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 Engineer-in-Charge, in absence of the above insurance policy. R.A.Bill payment will be with held.

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

2.0 **PENATLY FOR DELAY**:

2.1 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 on delayed work(supply and erection work) with a ceiling of 10% of the total contract value.

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED Transmission Circle, GONDAL. Construction Division Office, RAJKOT.

GENERAL CONDITION FOR ERECTION OF 132 KV TOWER LINE.

1. The erection work should be carried out according to the specification and as per Instructions & programmed laid out by the D.E. / Executive Engineer-in-charge of the work.

2. The quantities mentioned in the accompanying schedule only approximate, Actual quantities will be decided after detailed survey and same may decrease or increase according to the local condition; the department reserves the rights for revising or omitting any of the quantities. The quantities actually executed by the contractor will be calculated at the rate given in the contract schedule of the rates.

- 3. The tender shall remain open for acceptance at least for a period of six month from date of tenders.
- 4. The Gujarat Energy Transmission Corporation Ltd. does not bind itself. to accept the lowest or any tender the Executive Engineer (const) Rajkot reserve the right to reject any or all tender without signing any reasons whatsoever.
- 5. The contractor should employee as Engineer as supervisor with sufficient qualification and experience who could supervise the execution of work throughout He should always be present on the site as far as possible.
- 6. The contractor shall be responsible for breakages, losses & thefts of material during transit or erection after the materials are issued from stores will, the completed work is taken over by the GETCO.
- 7. The erection work should be commenced within seven day from the date of receipt of instructions from an office of the GETCO and should be completed within stipulated time limit.

8. WORKING MONTHS:

In case, if it is not possible for the contractor to continue, the work either due to heavy rains or other reasonable causes, such facts should be immediate reason to the notice of the Executive Engineer in writing. If the reasons for stopping the work are genuine, the Engineer may ask the contractor in writing to stop work be cases (for such stoppage) are overcome and the Engineer will ask the Contractor to start the work again in written, the period of such stoppage will not be considered as a part of working month moreover the contractor cannot claim compensation for such work.

- 9. As regard damages to the materials equipment and none of the contractor, be himself will be responsible. If there is any compensation to be paid in respect of "Workman" Compensation Act. Or any other statutory the same will have to be paid by the contractor direct if he thinks fit he may be taken but necessary insurance cover at this cost.
- 10. Tenderers have to produce experience certificate along with tenders. Tender submitted Without experience certificate will not be considered valid.

11. TERMS OF PAYMENT:

Bills will normally be prepared according to the progress of the work and payment will be made as under.

 90% of the payment will be made on submission of the bills in triplicate and after recording the measurement provides the work as done satisfactorily 1st & 2nd R.A Bill shall be prepared

only after satisfactory completion 30 % & 60 % of the tota work respectively.

- 2. 10% payment will be made after the entire work is completed in all respect.
- 3. Payment will be made through account payee Cheque.

12. SECURITY DEPOSIT:

The successful tender will have to pay the security deposit of 2.5 % value of the work order in case, within seven days from the date of receipt of the order, & further 2.5 % will be deducted from the two R.A bills & higher percentage of security may be fixed at the discretions of the Executive Engineer/Superintending Engineer.

- 13. Contractor will be required to produce a SOLVENCY CERTIFICATE FOR AN AMOUNT AS DECIDED BY E.E. & also to produce his income tax clearance certificate and latest P.F receipt.
- 14. The tender includes all minor accessories & items of work which may not have been specifically mentioned in the specification schedule etc. but are essential for completeness of work the contractor will no be eligible for any extra payment in respect of such minor accessories and o item of work.
- 15. The contractor will be governed by the GETCO's general conditions work contract. The booklet will be available in the concerned office on any working days. In the even of placing of order, the contractor will have to sign this booklet along with other documents, and agreement, all the usual terms and condition of the GETCO. Through the same might have not been mentioned in this specification or contract booklet will applicable to this contract and the decision of the Executive Engineer / Superintending Engineer shall be finding on the contractor.

16. PROGRESS OF WORK:

If it is found that the work is unsatisfactory or not progressing as per the programme, any action taken by the GETCO, as may be deemed fit, to see that work is completed as required by the GETCO, would be at the risk and cost of the contractor. If the work is not completed within time limit penalty of 1/2% of the contract value per week will be levied, Maximum 10% of order value unless time quotation as granted for valid reasons by the competent authority.

17. GUARANTEE:

It is the responsibility of the contractor to handover the line free of all defects on completion of the work. If within a period of twelve months from the date of handing over the line it is noticed that any defects occurs due to bad workmanship like slanting of cross arms. Bad painting of poles, defects in guy sets conducting etc. It is the duty of the contractor to rectify the same at his own cos if within seven days from the date of receipt of such notice. The contractor does not take-up the work, the work will be carried out at his own risk and cost.

- 18. The contractor will be responsible for loss, distribution or deterioration of the materials, store or articles supplied to him by the GETCO, even if such a less distribution of deterioration has occurred under any circumstances whatsoever beyond his control as if the materials, stores or articles so supplied were his property.
- 19. The contractor shall see the line route before quoting the rates.
- 20. The contactor shall co-operative with the GETCO in recording measurement etc. as expeditiously as possible and he shall fulfill the all the requirement which are necessary to finalizes the accounts on the basic of its records and pay him such amounts as if found due to him, together with the amount of security deposit if any remaining payable to him after deduction there from the amount due by him to the GETCO. The GETCO shall not entertain further claim from thereafter.
- 21. The competent authority can delete any items in schedule of the tender, if he feels that the rate quoted by contractor act. That item is abnormally high completed to the estimated rates.
- 22. Contractor has to submit work completion certificate of 66 KV line satisfactory under any Construction Division of GETCO at least for 15 Km.
- 23. Contractor has to submit their working schedule along with tender to complete the line in view of time limit given in tender Bar chart is also to be submitted.
- 24. Time limit extension will be given if line material is not supplied in time and farmer' objection not cleared in time but if material given in time and farmer's objection cleared in time, then no time limit extension will be grant and penalty will be imposed as per rules.

25. DELIVARY OF MATERIAL:

All material / equipment required for this work as per schedule shall be delivered at any store center of Const. Dn. Rajkot jurisdiction & contractor has to take delivery from these stores at his own cost only.

- 26. In case of any farmer's objection, contractor has to mobilize his all efforts to clear the objection in consultation with GETCO authority No. extra Charge will be paid for such effort.
- 27. The contractor shall not refuse to execute this work order at any time & it will be his sole responsibility to execute & complete this work as per the instruction of Engineer-in-charge.

Above Terms & condition are part and partial of tender & will be observed strictly.

28. SPECIAL TOOLS:-

No special tolls and tackles such as compression joint machine, jointing dies, come along clamps, dynamo meter etc. shall be given by GETCO.

29. GENERAL TERMS FOR ERECTION OF TRANSMISSION LINE:-

- 1. The bidder shall have the experience of erection of 66KV line.
- 2. The tenderer should quote for complete erection work, testing and commissioning of line as indicated in the Schedule "B" and as per terms and conditions.
- 3. It will be bidder sole responsibility for erection of complete line in all respect, accordance with latest rules under Electricity Act and approved by Electrical Inspector.
- 4. Above terms and conditions are part and partial of tender and will be observed.

30. TESTING AND COMMISSIONING :

- i. The contractor after completion of erection work will ensure that all works connected with line have been completed correctly as per Indian Electricity Rule and procedure, any extra cost involved due to incompleteness of work or bad workmanship found out subsequently shall be set right forth with by the contractor at his cost.
- ii. After the erection is completed in all respects, the line should be thoroughly patrolled and checked for continuity and clearances. The line should be meggared to check its insulating level. Afterwards, a line clear should be given to the Engineer-in-charge that the lie is clear and free of men and materials and is fit to be charged. If on charging the line is found not to hold, the contractor should arrange to patrol the line and find out the causes for the tripping and rectify the defects.

31. TECHNICAL PARTICULARS :

The general technical details of the type of towers to be erected conductors and earth wire to be strung and relevant loading particulars for the same are given in section –II of the specification.

32. ELECTRICITY RULES :

All works shall be carried out in accordance with the revised and latest providing under Indian Electricity Act-2003 and Rules made the rounder.

33. ERECTION TOOLS:

Erection tools required during construction of lines shall be arranged by the contractor at his own cost. Adjustable stub templates will however be supplied by the GETCO which shall be returned by the contractor in Good condition on completion of the works.

34. **WASTAGE :**

You shall make every effort to minimize the breakage/Looses and wastage of line materials, etc. supplied "Free of cost" by the GETCO for erection of line. The ceiling for wastages permitted is as under :-

i) Conductor and Earth wire. :a) 0.5% (For jumpering/sag/sisterwire).

:b) 0.5% (For credit length upto 30 Mtr.):c) 2% (For credit in pieces as good conductor from 30 Mtr. To 100 Mtr.)

ii)	Insulators.	
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: 0.25%

iii) Bolts & Nuts

: NIL (No extra Bolts/Nuts will be supplied). : NIL.

35. PROGRESS REPORT :

V)

Fortnightly progress reports in DUPLICATE shall be regularly submitted to the GETCO Executive Engineer(Const.) Rajkot and the Engineer-in-charge with a copy of Superintending Engineer (TR) C.O. Gondal.

36. **INSPECTION BY GETCO REPRESENTATIVES :**

Hardware & Accessories.

The Engineer-in-charge OR his representatives will be free to visit the contractor's work, their stores site and erection sites and also verify the GETCO's materials in the custody of the contractor as and when required.

37. **PRESENTATION OF BILLS :**

All the bills for erection, separately for each line should be presented with the following information on each bill.

(i) 90% bills for erection should be serially numbered giving the work done under each item up to period of billing, work done for which the claim is made in the bill and up to date work so for done. Items in erection bill should correspond to items mentioned in schedule of A/T.

(ii) Balance payment bills should be prepared at the end of the job for each line section under the jurisdiction of the concerned Deputy Engineer which should give the complete information of work carried out, total payment due, actual payment received up to date and the balance amount claimed, It should also accompany a statement of reconciled material account tower wise and line wise.

38. FORCE MAJEURE:-

Force majored is defined as "Any cause which is beyond control of contractor or the GETCO as the case may be, natural phenomena like floods, draught, - earthquake, epidemics etc. acts of any Government Authorize domestic or foreign including but not limited to war, declare or undeclared, priorities quarantine, embargoes Licensing control or production or distribution restrictions accidents like Fire, Explosions, Break-Downs etc.".

39. **QUANTITY OF WORK :**

The quantities of various items of erection indicated in Schedule-A are tentative, final quantities shall be determined after completion of the details route surveys. The contractor has to carry out the work according to quantities as determined at site for which the rates quoted in the Tender shall be valid.

40. LIQUIDATION DAMAGES :

The date stipulated for completion of work shall be strictly adhered to except for the provision of clause No.1.21. Above If the work is not complete by the schedule date of completion, the GETCO recover amount of Liquidated Damages at the rate of $\frac{1}{2}$ % per every week's delay in completion of the line based on the value of the order amount of the work with a ceiling on such recoveries at 10% of order value.

41. The contractor has to return all surplus material after reconciliation of material account in good & useable condition. The contractor shall settle the final bill including signature on all relevant papers required of passing of final bill, excess/saving statement & time limit extension proposal if any, within three (3) months from the date of charging/ commissioning or taking over by GETCO of line.

42. RETURN OF EMPTY CONDUCTOR DRUMS :

The empty wooden drum of earth wire and conductor as well as insulator crates will not be required to be returned back by the contractor to the GETCO stores.

Signature of Contractor

(S.D.CHEKHALIA) Executive Engineer (Const.) GETCO, RAJKOT.

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED TRANSMISSION CIRCLE, GONDAL. CONSTRUCTION DIVISION: RAJKOT.

SPECIFICATION FOR ERECTION OF 132 KV D/C TOWER LINE :

- 1. The tenderers should note that completion of lines is important and should positively guarantee under penalty clause. The GETCO will not be responsible for any delay on account of correspondence etc. it may be assumed by the Tendered that the orders will be placed within the validity period (in the form of advance order) to proceed with the work.
- 2. The tenderers must ensure that the bidding schedules enclosed herewith are completely filled up in their Tenders and that complete information called for is given. Failure to furnish full and complete details or furnish full and complete details of furnish vague information \ would make the Tenderer liable for rejection.
- 3. The complete specification comprises of

Sections – 1.

Technical requirements for erection of lines.

Section-2.

Schedule of quantities for erection.

Section-3.

Bidding Schedule.

All above sections are supplementary of each other,

4. The works covered by this specification shall be carried out in accordance with and shall be

governed by the (Tenderer and contractor for work) GETCO which is appended herewith. Offer should be valid for a minimum period of 180 (One Eighty zero) days.

1.1 GENERAL TECHNICAL PARTICULARS FOR ERECTION OF 66 KV LINES.

1.1.1 SCOPE :

The erection work covered under these sections consists mainly of

- (i) Taking delivery of tower materials/line materials from the GETCO's store Centre situated at Wankaner/Gondal & storing the same in safe custody.
- (ii) Distribution of all materials to erection site.
- (iii) Stub setting.
- (iv) Tower Erection.
- (v) Stringing.
- (vi) Testing and commissioning and Guarantee of Line.
- 1.1.2 The contractor shall be fully responsible for completing all the above works and till them are taken over by the GETCO.
- 1.1.3 The methods of erection are dealt within details, but are left to the contractor who shall exercise his own judgment with regards to actual handling of materials and in deciding upon the best methods to be adopted in the erection of the towers, conductors and other materials.

1.2 WAY LEAVE/TREE CUTTING AND OTHER CONSTRUCTION :

- 1.2.1 The GETCO will arrange for write off way and for tree cutting clearance, the contractor will instruct his laborers & staff to use minimum area while doing the work where there are standing crops. No person of the contractor should pick in items from standing crops of fruits. The contractor should take all possible steps to avoid or minimize damage to standing crops etc.
- 1.2.2 The contractor should immediately notify and obstruction or hindrance from local villages or the local authorities in the prosecution of the work to the concerned Engineer-in-charge, but should not deal directly in the matter. The Engineer-in-charge will arrange to remove the obstacles as soon as possible.

1.3 ACCESS TO LOCATIONS :

1.3.1 It will be the contractor's sole responsibility to take the materials up to the locations required. Any path way, temporary road or temporary bridge required will have to be provided by the contractor at his cost. If for any reasons the above is not feasible the contractor at his own cost shall have to arrange transportation by Head roads.

1.4 **DISTRIBUTION OF MATERIALS :**

- 1.4.1 The contractor has to take delivery of tower materials/lines materials from the GETCO's store Wankaner/Gondal and transport it to the respective tower erection sites and will be responsible for any damages to or loss of all materials at any stage during the Transportation or erection. The materials that will be issued by the GETCO will be in 'AS IS WHERE IS' conditions at the store centre of the GETCO in the area during working hours days. All the materials received by the contractor shall be got insured for storages and erection risk by the contractor at his own cost. An indemnity Bond/Bonds have to be issued by the contractor for the materials take over by him for erection.
- 1.4.2 On completion of the work all surplus tower and line materials including the excess Bolts & Nuts and stub materials shall be returned by the contractor to the nearest respective stores of the GETCO as per the instructions of the Engineer-in-charge of the works at no extra cost to the GETCO.
- 1.4.3 The contractor shall submit the complete material account immediately after the works is completed and in case not late than one month of completion and Handing over of the line.

1.5 STUB SETTING AND FOUNDATIONS :-

- 1.5.1 The contractor shall be fully responsible for correct setting of stubs in accordance with approved methods at the exact locations and alignments and in precisely correct level; stub setting templates to the supplied by the GETCO should be used for proper setting of stubs. The contractor will be responsible for constructing the foundations in accordance with the design of each type of foundations supplied to him by the GETCO and as per approved final schedules.
- 1.5.2 The foundation work includes stone revetment, concrete or earth filling above ground level where necessary and stacking and tamping on the site of all surplus excavated soil. Surplus stone should be stacked within the tower base.

- 1.5.3 Classification of Soil :
 - 1. Normal soil : Which can be readily removed ordinary spades, shovels viz Normal Soil, Black cotton soil, Hard & Soft Morrum and Yellow clay.
 - 2. Soft Rock : Literate, line stone or rock which break away chips or slabs.
 - 3. Hard-Rock : Rock which may need chiseling or blasting.
 - 4. wet Soil : Soil encounters in wet location.

1.5.4 EXCAVATION FOR FOUNDATION :

1.5.4.1 The tenderer should quote different rates for different types of soil. The contractor will be intimated the alternative that will be operated, the payment for excavation will be limited to guaranteed volume as per approved excavation drawings that will be furnished by the GETCO to the contractor even though the contractor may excavates more the sake or his own convenience. If the excavated depth is more than the depth shown in approved drawings, the additional depth should be filled in with lean concrete (1:4:8) at contractor's cost.

1.5.5 <u>CONCRETE :</u>

- 1.5.5.1 The cement required shall be supplied by the contractor. A list of suppliers are as under.
 - 1. Narmada cements Company Ltd.
 - 2. Gujarat Ambuja Cement Co. Ltd.
 - 3. Saurashtra Cement \$ Chemicals.
 - 4. Siddhi Cement.
 - 5. J.K.Cement
 - 6. L&T Cement (Uitratech)
 - 7. Shri Digvijay Cement Co.Ltd.
 - 8. Sanghi Cement.
 - 9. Binani Cement.
 - 10. Laxmi Cement.
- 1.5.5.2 All cement is used shall be accountable. If the quantity of cement utilized in the work is observed to be more than the permissible quantities worked out bases on the finally approved foundation drawings and subject to the maximum as per the guaranteed volumes, irrespective of the fact that the cost of cement is recovered from the contractor's Bills.

The cement consumption for difference types of concrete shall be considered as follows:-

- 1. M-20 Mix (1:1.5:3) 8.2 bags.
- 2. M-15 Mix (1:2:4) 6.5 bags.
- 1.5.5.3 The sand shall be of best quality containing hard siliceous materials, clean and of snap angular grit type and free from earth or organics matter of salts and to the satisfaction of the Engineer-in-charge. The sand shall be washed before use. No. salty or Darkish water shall be used for concreting.

- 1.5.5.4 The aggregate shall be of the best quality to the satisfaction of the Engineer-incharge and brakes to maximum size of 40mm for thick concrete and 20mm thin concrete section. It should also be free from grit and dirt.
- 1.5.5.5 The mixture of concrete to be used shall be such as to produce a sound : compact and water proof concrete and shall not be weaker than 1:2:4 ratio with 20mm stone metal for chimney portion and 40mm stone metal for mass concreting pyramid portion or slab portion, unit rates may be quoted for concrete of M-15 Mix ratio. The concrete shall be mixed as stiff as the requirements of placing the concrete in the form of moulds with case and degree to which concrete resists segregations will permit. Hence the quantity of water used should not be too much.
- 1.5.5.6 Proper forms or moulds adequately braced to retain proper shape while concreting should be used for chimney or pyramid and slab portions. Form boxes should be water tight so as not to allow cement cream to come out leaving only sand and jelly to form money coml. in concrete. Form excess boxes should be cleaned and oiled before using for concreting.
- 1.5.5.7 All wet locations must be kept completely dewatered both during the placing of concrete and for 24 hours after completion. There should be no disturbance of concrete by water during this period.
- 1.5.5.8 Form boxes should not be removed before 24 hours after concreting. Concrete surface where required should be set right with tick cement and mortar immediately after removal of the forms.
- 1.5.5.9 After 24 hours of pouring, the concrete should be cured by keeping it continuously wet for 14 days. The pit may be back filled with selected earth sprinkled with necessary amount of water and well consolidated layers not exceeding 150mm after 48 hours and thereafter both the exposed top and the fill shall be kept wet for the remainder of the prescribed time.
- 1.5.5.10 Payment for the quantity of excavation and concreting for each type of tower shall be made on prorate basis of actual work done subject to the maximum of guaranteed volumes as per the approved drawings to be furnished by the purchaser.
- 1.5.5.11 The supply of steel for reinforcement, if required is to be supplied by the Contractor.

1.5.6 EXCAVATION IN ROCK :

1.5.6.1 Where towers are to be planted in rock, suitable holes should be drilled, but if drilling is difficult, blasting may be resorted to, but sufficient care should be taken to eliminate the possibility of serious cracking of the rock. Care should also be taken to minimize the concreting for filling blasted areas. Stubs may

Care should also be taken to minimize the concreting for filling blasted areas. Stubs may be shortened suitably in case of drilled holes as per design drawings.

1.6 ERECTION OF TOWERS :

1.6.1 The superstructure of towers should be erected on foundations after 14 days of concreting. However, the method adopted for erection of towers is left to the decision of the contractor subject to the condition that be takes responsibility for any damages to materials. No. tower member should get strained or bent during erection. The tower must

be truly vertical after exaction and no straining would be allowed to bring it in alignment. Maximum tolerance in verticality that will be permitted is one mm per 360mm of tower height. All bolts and nuts shall be made fully tight and finally the bolt threads shall be centre purchased to avoid nuts becoming loose, punching of bolts shall be made by chamfering the threads with centre punch at least at three places equally spaced on contact surface of bolts and nuts.

- 1.6.2 Tower erection shall includes erection of all accessories and fittings including attachment for step bolts, ladders, platform, 'U' Bolts shackles, Hangers, strain plates etc. and punching of bolts and nuts so that towers are completed in all respect.
- 1.6.3 Suitable tower extension shall be erected to get desired ground clearance whenever required. Which have been determined at the time of final survey.

1.7 <u>GROUNDING :</u>

1.7.1 It is necessary that in no case tower footing resistance should be more than 10 ohms. During dry weather.

1.7.2 <u>PIPE TYPE EARTHING :</u>

1.7.2.1 At location where footing resistance does not exceeds 10 ohms the pipe type earthing as per method shown under drawing No.<u>TR/TL/TCJ/339</u> would be followed. The contractor will have to supply all materials required for grounding including salt, finely broken coke/charcoal, G.I. Pipe G.I. Wire clamp & Nuts-Bolts etc.

1.7.3 COUNTERPOISE EARTHING :

1.7.3.1 In place of high receptivity soil conditions, counterpoise earthing shall be adopted as shown in under drawing No.TR/TL/TCJ/340 to bring down the tower footing resistance below 10 ohms. The counterpoise earthing shall be buried 600mm below ground level and for this purpose some space should be left out in chimney coping portion at the time of stub setting. Coping should be complete after installation of counterpoise earthing. All materials are to be supplied by the contractor.

1.8 INSULATOR HOISTINGS:

- 1.8.1 Suspension Insulator strings shall be used on all tangent type towers with deviation up to 2 and tension insulator string on all shall medium, large angle and dead end type towers on all lines.
- 1.8.2 Insulators string shall be assembled on ground. These shall be cleaned and examined for their cracks ships or defective glazing (not exceeding half centimeter square) and then hoisted by careful handling, the work will include fitting of all hard wares and fitting in their proper places and order.

1.9 STRINGING OF CONDUCTOR AND GROUND WORK :

1.9.1 Before commencing of stringing work, contractor must obtain approval of sag tension charts showing initial and final sags and tensions for various temperature and spans.

1.9.2 The contractor shall be responsible and will take care of proper handling of drums from stores to site, sufficient numbers of aluminum sketch blocks shall be used for laying out the A.C.S.R. Conductors. Necessary precautions shall be taken to avoid conductor rubbing on the ground by providing adequate ground rollers on supports. Additional rollers shall also be provided to cross thorny hedges, forcing and other obstructions to avoid scratching of conductors. The conductor and ground wire shall be made to sag correctly as per stringing charts before they are finally transferred to the hard wares for conductors and to clamps for ground wire, No joints should be made at less than 30 meters from the tower and that no joint shall be permitted in Railway., River & Road crossing spans. There shall not be more than one joint in a span of each conductor. All conductors shall be stressed to their maximum working load at the time of stringing. The minimum clearance between the lowest point of conductor and ground shall not be

The minimum clearance between the lowest point of conductor and ground shall not be less than required those. All compression joints should be carefully made and a record of initial and final length of the joints, jointly signed by contractor's and GETCO's representatives should be maintained. Dynamometer shall be used in tensioning the conductors, check for sag should also be made at intervals when conductors are drawn up. Over stressing, causing damage to towers, should be avoided care should be exercised not to over tension the conductor. An extra sag if 150mm should be allowed at all important tension points like Railway and River crossing.

- 1.9.3 After being pulled the conductor/ground wire shall not be allowed to hang in the stringing sheaves for more than 72 hours before being pulled to the specified sag. During the time the conductor/ground wire is on the stringing sheaves before sagging in, it shall be ensured that the conductors/ground wire is not damaged to wind, vibration vehicles or other causes.
- 1.9.4 The conductor shall be pulled up to desired sag, and left in Arial stringing sheaves for at least one hours after which the sag shall be rechecked and adjusted, if necessary, before clipping in an transferring the conductors from the Arial stringing sheaves to the suspension clamps.
- 1.9.5 Conductor shall be clamped within 24 hours of sagging in. The sag will be checked the first and last span of the section in case of sections up to eight spans and in one intermediate open also for section with more than eight spans.
- 1.9.6 The stinging sheaves, when suspended on the transmission structure for sagging, shall be so adjusted that the conductor will be on the sheaves at the same height as the suspension clamp to which it is secured.
- 1.9.7 All the line conductors shall be terminated at sub-station structures whose details shall be furnished by the GETCO, at the appropriate times, The contractor shall fix strain insulators on the sub-station structures.
- 1.9.8 P.A Rods and Vibration Dampers shall be fitted at each suspension towers before final clamping of conductor with insulator string. Vibration damper are to be fixed using aluminum tape with each clamping bolt and in correct vertical position in relation to conductor. Compression type joints are to be used for jointing of conductors. Each part connected with joints shall be perfectly cleaned by wire brush and properly greased before final compression. All the joints of conductors and earth wire shall be made in the

best workmanship manner and shall be perfectly straight and having maximum possible strength.

1.9.9 Stringing work includes the hoisting insulators, fixing hardware, lifting amour rods, and vibration dampers, making joints, repair sleeve etc. All stringing tools and hydraulic compressor machine should be arranged by the contractor.

1.10 SUPPLY OF MATERIALS BY GETCO :-

- 1. G.I. Tower Material & Nut-Bolts & ACD excluding barbed wire.
- 2. Conductors, Earth Wire, Disc Insulators, Hardware for ACSR Dog and Earth Wire as the case may be.
- 3. All jointing materials and accessories for `Dog conductor.
- 4. Any other items required to complete the work. The above materials will be supplied from Wankaner/ Gondal store center of Const. Division, Rajkot.

1.11 MATERIALS TO BE SUPPLIED BY THE CONTRACTOR:-

- 1. Cement, Sand, Stone, and Crusher, metal, gravels and morrum.
- 2. DP/NP/PP/CIP Including supply of G.I. Nut Bolts and Barbered wire for fixing of anticlimbing devices complete.
- 3. Coke, Salt and G.I. wire and all earthing requirements.
- 4. Heavy duty G.I. Earthing pipe 32 mm dia, 3 mtr. Long and 50x6 mm. G.I. Flat with nut-bolt for pipe type earthing and G.S.S. Wire, Lugs, Bolts, Nuts etc for CP type earthing as per specification.
- 5. Any other materials which shall be required to complete the work satisfactorily in all respects and not specified in above for supply of materials by the GETCO.
- 6 Steel bars required for reinforcement.

SIGNATURE OF CONTRACTOR

EXECUTIVE ENGINEER (Const.), GETCO, RAJKOT.

GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED CONSTRUCTION DIVISION, RAJKOT

** SPECIAL CONDITION FOR ERECTION OF 132 KV TOWER LINE **

- 1. The erection 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.
- 2. The quantities mentioned in the accompanying schedule are only approximate. Actual quantities will be decided after detailed survey and the same may decrease or increase according to the local conditions, the department reserved the rights for revision or committing any of the quantities. The quantities actually executed by the contractor will be calculated at the rate given in the contract schedule or the rates.
- 3. The tenders shall remain open for acceptance at least for a period of Six Months, from the date of opening of tenders.
- 4. The Gujarat Energy Transmission Corporation Limited does not bind itself to accept the lowest or any tender. The Executive Engineer (Const.), Rajkot reserve the right to reject any or all tender without signing any reasons whatsoever.
- 5. The contractor should employee as Supervisor with sufficient qualification and experience who could supervise the execution of work thought. He should always be present on the site.
- 6. The erection work should be commenced immediately from the date of receipt of instructions from office and should be completed within thereafter.
- 7. As regard damage the materials, equipment and worker of the contractor, he himself will be responsible. If there is any compensation to be paid in respect of "WORKMAN" compensation act of any other statutory provisions, the same will have to be paid by the contractor direct. If he thinks fit he may take necessary insurance cover, at his cost.
- 8. Security deposit:- The successful tenderor will have to pay the Security Deposit of 5% of the order value. On placing the order 2.5% will have to paid in cash or demand draft in favor of GETCO LTD. within seven days from the date of receipt of intimation given by the office and the remaining 2.5% will be recovered from the first two R.A. Bills.
- 9. The tender includes all minor accessories and items of work which may not have been specifically mentioned in the specification schedule etc. but are essential for completion of work. The contractor will not be eligible for any extra payment in respect of such minor accessories and items of work.
- 10. The time allowed for completion the work is **3(Three)** Months from the date of the commencement of the work, failing which the penalty ½% per week or part there of on delayed portion of work and / or supply value subject to ceiling of 10% of the total contract value will be imposed.
- 11. Guarantee: It is the responsibility of the contractor to handover the complete work free of all defects. If within a period of one year from the date of handing over the work it is noticed that any defects occurs due to bad workmanship. It is the duty of the contractor to rectify / replace the same at his own cost. If within seven days from the date of receipt of such notice. The contractor do not take up the work, same will be carried out at his risk and cost.
- 12. Tender should be issued to those contractors who have P. F. Registration, Service tax registration, Vat registration & Work registration.
- 13. Service tax will be paid as per prevailing norms on production of service tax registration.

Executive Engineer (Const.) GETCO RAJKOT

<u>GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED</u> <u>TRANSMISSION CIRCLE, GONDAL.</u> <u>CONSTRUCTION DIVISION – RAJKOT.</u>

TERMS & CONDITIONS REGARDING INDUSTRIAL LAWS AND OTHER RELATED MATTERS

- (1) Wages to be paid at time of payment etc. by the contractor.
- (A) The contractor shall pay minimum prevailing rates per day or as may be specified hereafter or rates fixed under the minimum wages Act. Whichever is higher. The wages or very contract labour employed by him under this contact shall be paid by him before the expiry of 7th day of the month in respective of which the wages are payable (i.e. wages of a month have to be paid by him in the first week of the next month). The payment shall be disbursed in the presence of management representative during the working hours in factory premises and the contractor shall get the entries certified in the register of wages by the representative of the GETCO. Any default will result in cancellation of contract forthwith or also the contractor shall be paid punishable to the extent of Rs.100/- fine per each day.
- (B) The contractor shall give his telephone number and address to the GETCO so that in case of labour troubles etc. the contractor can be contacted. The contractor shall arrange to have his office outside the factory premises and the contractor shall keep himself present through out the working hours.
- (2) Labour Laws:-
- (A) Person below the age of 18 years shall not be employed for the work.
- (B) No. female worker shall be employed in the night shift between 7 p.m. to 6 a.m.
- (C) Contractor shall maintain a valid labor license under the contract labour (Regulation and Abolition) Act for employing necessary manpower to be required by him. In the absence of such license the contract shall be liable to be terminated without assigning any reason thereof.
- (D) The contractor shall at his own expenses comply with all labour laws and keep the GETCO indemnified in respective 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 charge etc. at the rates make applicable from time to time by Government of Gujarat/Government of India or other statutory authority.
- (ii) Payment of deposit in respect of each contract labour at the rate as per admissible 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 employed by the contractor.
- (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) Identify cards as prescribed under the factories Act with photo at fixe there to the same identification. Liabilities as per industrial Disputes Act any payment to the contractor's employees arising out of any claim or disputes under the industrial Disputes Act, 1947 or any other labour laws.
- (vi) Payment of compensation in case accidental inury.
- (vii) 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) Provident fund & Family pension Scheme:-

The contractor shall submit along with his bill (month wise) a statement regarding deduction against employees provident fund and family pension scheme in respective of each concerned employee, provident fund and family pension scheme at the rate at admissible (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.

- (4) Deposit Linked Insurance Scheme:-The contractor shall have to deposit ½% of the wage 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.
- (5) Administrative Charges:-

Administrative charges for maintaining provident fund A/C shall be deposited by the contractor with Regional Provident Fund Commissioner, Ahmedabad at the rates applicable.

(6) 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 and approved/certified by the authorized officer of the GETCO.

(7) Workmen's compensation fund & Employer's Liability Insurance:-

The contractor shall cover all his employees under workmen's compensation fund and under the liability insurance.

- (8) The contractor shall employ adequate number of experienced staff at site for dial supervision and for maintenance of various register and records required under the law and contract No. payment for supervision shall be admissible.
- (9) Contractor to Identify the GETCO:-

The contractor shall indemnify the GETCO and every member officer and employees of the GETCO also, engineering in charge and his staff against all actions, proceeding, claims demands, costs and expenses which may be made against the GETCO or Government for or in respective of formance of his obligation under the contract documents. The GETCO shall not liable for or in respective of or in consequence of any accident or injury to any workman or other person in the employment of the contractor or his sub-contractor and the contractor shall indemnify and keep indemnified the GETCO against all such damage and compensation and against all claims, demands, proceedings costs, charges and expenses whatever in respective thereof in relation thereto.

(10) Workmen's compensation and employer's liability insurance:-

Insurance shall be affected for the entire contractor's employee engaged in the performance of this contract. If any of the work is subject the contractor shall require the sub-contractor to provide workmen's compensation and employer's liability insurance for the latter's employees unless such employees are covered under the contractor's insurance.

- (11) The GETCO reserves the right to terminate this rate contract at any time during its tendency without giving notice of termination or any reasons thereof.
- (12) The GETCO will be entitled to deduct directly from the bills, to be paid to the contractor any sum or payable by you and which sum/sums the GETCO is required to pay as principal employer on account of your default in respect of all liabilities referred to in above clauses.
- (13) All other condition as per work & contract booklet abide by contractor.
- (14) All the work related to the transmission line like detailed survey, check survey, tower/D.P. foundations, material testing, tower/D.P. erection, stringing, final testing etc should be carried out ads per GETCO's standard FQP for transmission line.
- (15) Successful bidder has to appoint site Engineer to maintained site register & FQP as per ISO.
- (16) All work should be done accordingly to ISO & FQP and all require documents including Filled FQP, testing results etc should be submitted while handing over the line.

Signature of Contractor With rubber stamp.

Executive Engineer (Const.) GETCO, RAJKOT.

<u>GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED</u> <u>CONSTRUCTION DIVISION OFFICE - RAJKOT</u>

WORK & SAFETY REGULATIONS

- 1. The contractor shall ensure proper safety of all the workmen, materials, equipment & plant & belonging to him or to GETCO or to others, working at the site. The contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislations and Engineer, as he may deem necessary.
- 2. 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.
- 3. 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 property maintained by the contractor and will be promptly produces as and when desired by Engineer or by the person authorized.
- 4. The contractor shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need.
- 5. 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. The contractor only shall use good and standard quality of material.
- 6. The contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the owner / other contractors under any circumstances, whatsoever, unless expressly permitted in writing to handle such fuses, wiring or electrical equipment.
- 7. 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 max. current rating & voltage of the appliances;
- c. Obtain permission of the Engineer detailing the sockets to which the appliances may be connected.
- 8. 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, ones of which shall be an earthed metal sheath surrounding the cores.
- 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.
- 10. 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 sufficiently quantity of tools will have to he provided by the contractor to electricians/ workmen/ officers.
- 11. In case any accident occurs during the construction/ erection or other associated activities undertaken by the contractor thereby causing any minor or major fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the contractor

provide medical facility / treatment & to promptly inform the same to the Engineer in prescribed form and to also to all the authorities envisaged under the applicable laws.

- 12. 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.
- 13. 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.
- 14. 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 himself & his fellow employees.
- c. Employee 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 gumboots for working in slushy or in inundated conditions are essential requirements to be fulfilled.
- 15. The contractor shall follow and comply with all GETCO safety Rules, relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservations. In case of any discrepancy between statutory requirement and GETCO safety rules referred above the latter shall be binding on the contractor unless the statutory provisions are more stringent.

a.	Fatal injury or accident Causing death	Rs. 1,00,000/- per person for death/		These are applicable
b.	Major injuries or accident cau 25% or more permanent disal To workmen or employees	•	Rs. 20,000/- per person	injury to any person,

Permanent disablement shall have same meaning as indicated in workmen's compensation Act. The compensation mentioned above shall be in addition to the compensation payable to the workmen/ employees under the relevant provisions of the laws as applicable from time to time. In case the owner is made to pay such compensation then the contractor is liable to reimburse the owner such amount in addition to the compensation indicated above.

GUJARAT ENERGY TRANSMISSION CORPORATION LTD CONSTRUCTION DIVISION RAJKOT.

NAME OF WORK : ERECTION OF 132KV LILO TO PROPOSED 132KV PADAVALA S/S FROM EXISTING 132KV D/C PALIYAD-VIKRAM LINE WITH PANTHER CONDUCTOR

PRICE BID Sr. No. Description of Item Qty Rate Per Amount Original Survey, preparation & submission of profiles in 4 copies including excavation in any type of soil. Upto 3.00 mtr of depth for trial pits. 2 Nos of such pits in 1 KM length & providing pre-cast permanent concrete blocks/ stones of 600mm x 300mm x 1 100mm on each deviation points on entire line with 2.00 5100.00 KΜ 10200.00 chain age painted on its. The work includes excavation of trial pit of 1x1x3 Mt. in any type of soil for classification of the sait pit. The rate is inclusive of back filling of the pits so excavated after classification of soil for foundation. (SOR-PART-A-1) 2 Check Survey (SOR: A-2) 2.00 3105.00 KM 6210.00 Excavation excluding back filling but including, shoring shuttering, dewatering tree cutting for tower 0.00 footings etc (SOR: A-3) {A} Normal Soil either Dry or Wet/ Sandy Soil 14.00 90.00 Cu.M. 1260.00 3 {B} Black cotton soil either dry or Wet 9.00 180.00 Cu.M. 1620.00 {C} Soft Rock 25.00 270.00 6750.00 Cu.M. {D} Hard Rock 42.00 525.00 Cu.M. 22050.00 Instllation of steel reinforcement in concrete foundation including supply of MS bars binding wire 4 0.45 40000.00 MT 18000.00 & their cutting, bending, binding & laving in position as per drawing. (SOR: A-4) Stub Setting including back filling but excluding excavation and concreting etc, for all types of towers/extensions except speical towers. (Weight of 5 6.50 2475.00 MT 16087.50 stub. cleat & templte with bolt & nuts of stub & template shall be counted).for up to 6 mtr. ext. (SOR: A-5) Concreting of foundation by 1:1.5:3 mixture including shoring, shuttering, dewatering etc for normal 6 42.00 4220.00 Cu.m 177240.00 tower/tower with extension upto 21 Mtr (Rates are with cement)(SOR: A-6) Grounding of towers with pipe type earthing including excavation and back filling and supply of all materials like 32mm dia heavy duty 3 mtr long GI 7 2 2475.00 Set 4950.00 Pipe & 50x6 mm GI flat, bolt-nuts salt, coal/charcoal etc as per drawing (SOR: A-7) Grounding of tower with COUNTER POISE TYPE earthing including excavation and back -filling and 8 supply of all materials like GSS wire, lugs, flat, bolt-5 4560.00 Set 22800.00 nuts, salt, cock /charcoal as per drawing. (SOR : A-

8)

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9	Erection of Super Structure Upto 6 Meter extension including tree cutting, fixing of tower accessories, attachments except ACD/ DP/ NP/ CIP/ PP and excluding tack welding of bolts. This includes taking delivery of tower materials and bolt-nuts from Board's stores etc for normal, extension & special towers at destination and keeping them in safe custody and transporting the same to erection site.(SOR: A-13)	30.00	2790.00	MT	83700.00
10	Fixing of Anti climbing devices including supply of barbed wire (except special towers). (a) 132KV (SOR: A-17b)	5	780.00	Loc	3900.00
11	Fixing of DP/ NP/ PP/ CIP including supply of plates and supply of GI bolts- nuts & tack welding as per drawing. (SOR: A-18)	5	1350.00	Loc	6750.00
12	Tack welding of nuts upto Approx 10 Mtrs height or two bottom- most panel from ground level at three places on nuts diametrically and applying zinc rich paint immediately of EIC(SOR: A-19)	2500	7.50	Per Bolt	18750.00
13	Stringing of one ground wire including laying,jointing,tensioning,and sister wire earth bond etc. including tree cuting.(SOR-PART-B-1)	2.00	4935.00	Route KM	9870.00
14	Stringing of ACSR/AAAC 6(SIX) conductors for double circuit including laying, jointing, tensioning, clamping with armour rods, hoisting of insulator string fixing of jumpers, dampers etc. & with required tree cutting on entire length for adequate clearness/safe charging of line(SOR-PART-B-4)	2.00	31350.00	Route KM	62700.00
15	Termination and connection for making LOOP - IN - LOOP - OUT arrangement with existing line during specified outage(SOR-PART-B-11)	1	31500.00	Job work	31500.00
TOTAL RS.				504337.50	

Note

- 1) While calculating the weight of stub-setting, the weight of stub, cleat & templetes shall also be added in stub weight.
- 2) Red oxide & zinc rich paint shall be applied after tack welding of nuts.
- 3) The above rates are with supply of cement by the contractor.
- 4) All above item at Sr. No. 13,14,15 are to be executed on normal towers & normal towers with extension upto 21 mtr.
- 5) The rate indicated above includes taking delivery of all stringing material Board's stock at destination keeping them in safe custody and transporting the same to erection site.

EXECUTIVE ENGINEER (Const.) GETCO, RAJKOT

<u>CERTIFICATE</u>

I We am / are willing to carry out the above work at______ % above

/ below (percentage) should be written in figures and words.

percentage above / below the tender amount work out Rs. ______ Rupees in words

Signature of Contractor, (With Rubber Stamp & Date)

Supdt. Of A/c D.O. Rajkot

Dy.Eng.(Tech) D.O. Rajkot. Exe. Eng. (Const.) D.O. Rajkot.

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