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GUJARAT MINERAL DEVELOPMENT CORPORATION LTD.

(Khanij Bhavan, 132 feet Ring Road, Near University Ground, Vastrapur, Ahmedabad – 380 052)
PHONE: 2791 35 01 / 2791 32 00 FAX: (079) – 2791 14 54 2791 18 22

Tender No	GMDC: LP: UMARSAR: ELE: 05: 2014-15
Subject:	E-tender is invited to Design, engineering, manufacture, supply, Installation, erection, testing, and Commissioning of 11kV HT Overhead line, two fix 100 kVA substation with HT, VCB, LT distribution Panel, one 500kVA CSS with 50kVA Transformer, LT Distribution line, NGR etc., haul road lighting and civil construction on turnkey basis along with all required statutory/ obligatory approval including 04 years comprehensive operation & maintenance contract. (for the item not specified in this technical specification, rates for addition item / work is to be charge as per Gujarat PWD/ latest Electrical SOR)

ISO 9001: 2008

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E-TENDER NOTICE

TENDER NO. GMDC: LP: UMARSAR: ELE: 05: 2014-15

Sr. No.	Description	Details	
1	Scope of the work	E-tender is invited to Design, engineering, manufacture, supply, Installation, erection, testing, and Commissioning of 11kV HT Overhead line, two fix 100 kVA substation with HT, VCB, LT distribution Panel, one 500kVA CSS with 50kVA Transformer, LT Distribution line, haul road lighting and civil construction on turnkey basis along with all required statutory approval including 04 years comprehensive operation & maintenance contract. (for the item not specified in this technical specification, rates for addition item / work is to be charge as per Gujarat PWD/ latest Electrical SOR)	
2	Location	Lignite Project, Umarsar , Ta. Lakhpat, Dist. Kutch, Gujarat-	
3	Tender Fee (The tender fee is non-refundable.)	Rs.5000/-(Rupees. One thousand &five hundred only) Tender fee must be paid either in Cash or DD/ Pay Order at GMDC Ahmedabad Office.	
4	Earnest Money	Rs.03, 00, 000/- (Rs. Three Lacs Only) in the form of any nationalized bank Demand Draft banks approved by Govt. of Gujarat from time to time (except Co-Operative Bank) in favor of GMDC Limited, Ahmedabad	
5	Security Deposit	10% of the contract value in form of DD/BG of any nationalized bank or banks approved by Govt. of Gujarat from time to time (except Co-Operative Bank) in favor of GMDC Limited, Ahmedabad	
6	Time of Completion of work.	Three (03) months from the date of LOI	
7	Last date & time for submission of TENDER	August 19, 2014	Before 16: 00 Hrs.
8	Last date for submission of Tender fee, EMD and for other documents in person/ post	August 19, 2014	Before 16: 00 Hrs.

9	Verification of submitted documents (EMD, tender fee etc)	August 19, 2014	Before 16: 00 Hrs.
10	Opening of technical bids at GMDC HO, Ahmedabad.	August 20, 2014	Before 16: 00 Hrs.
11	Refund of Security Deposit	After 02 month of successful completion of work.	

The Corporation reserves the right to reject any or all the Bids without assigning any reasons thereof. Only the

DETAILS TO BE FURNISHED ALONG WITH APPLICATION.

1. Complete particulars of the constitution, and main business activities of the prospective BIDDER (Bidder) covering, inter alia, its global operations, including presence in India.
2. Unabridged Annual reports or audited financial accounts for the last three years.
3. A comprehensive list of assignments handled by the firm, providing the required services /for complition of project (for Government, Quasi Government and private sector separately).

GENERAL MANAGER (POWER)

Gujarat Mineral Development Corporation Ltd.(A Govt. of Gujarat Enterprise)
"Kanij Bhavan", 132 Ft. Ring road, Nr. Manav Mandir, University Ground, Vastrapur, Ahmedabad-380 052 Ph: 079 27913200/3502/1662/1665Fax no: 079 27911822/2791 1520
E-mail: power@gmdcltd.com , Visit our web site: www.gmdcltd.com and
https://gmdc.nprocure.com

SUBMISSION OF TENDER:

Tenderer shall submit their offer in electronic format on https://gmdc.nprocure.com after Digitally Signing the same. **Technical documents along with Tender fee & EMD can be accepted in physical form, however technical bid as well as price bid is to be submitted in electronic form only. As per E-tendering process.** Offer of price bid in physical form will not be accepted and any such offer if received by GMDC will be out rightly rejected.

Interested bidders can view these tender documents online but bidders who are interested in bidding in this, tenderers can download tender documents from https://gmdc.nprocure.com. Tender Documents are only available in Electronic Form. The bidder should submit all the forms electronically only. Bidders who wish to participate in this tender will have to register on https://gmdc.nprocure.com. Further bidders who wish to participate in online tenders will have to procure Digital Certificate as per information technology Act 2000 using which they can sign their electronic bids. Bidder can procure the same from (n) code solutions–a division of GNFC Ltd, who are licensed Certifying Authority by Govt. of India and they will assist them in procuring the same at below mentioned address. Bidders who already have a valid Digital Certificate need not procure a new Digital Certificate.

In case, bidder needs any clarification or if training required for participating in on line tender, they can contact following office:

(n) Code Solutions-A Division of GNFC Ltd,

(n)procure cell 301, 3rdfloor, GNFC Info tower, Sarhhej – Gandhinager Highway, Bodakdev, Ahmedabad – 380054.
Toll Free: 1-800-233-1-1-Ext: 501,512,516,517, E mail :- nprocure@gnfc.net

ISO 9001: 2008

INSTRUCTIONS TO THE TENDERER
(To be read & studied before quoting the Tender)

1. All bid documents shall be signed by the authorized person/representative of the candidate.
2. Any changes, notifications, amendments etc related to these tender documents will be issued only on https://gmdc.nprocure.com and such shall prevail.
3. The bidder shall bear all costs associated with the preparation and the submission of the bid. Whether or not, the bid is accepted or even if GMDC withdraws the bid invitation, the bidder shall not be entitled to claim any costs, charges, etc in connection with the bid.
4. It is the bidder's obligation to conform to the scope of the work and work to the best of the efforts to complete the work as per the expected schedule provided by them.
5. GMDC reserves the right to reject any or all of the bids or accept any of the bids in part or full
6. The bid shall be evaluated only for the bidders who meet the eligibility criteria.
7. If required the tenderers may visit at office along with the tender copy, to study the project before submitting the offer.
8. No escalation in price / rate will be allowed on any ground, extension in time limit may be granted with an explicit understanding that no price escalation will be paid.
9. Tenders will be opened in Two Bid system, i.e. Technical or Prequalification Bid and Price Bid. First the Technical or Prequalification Bid will be opened on-line on the date of opening of the tender. The Corporation will scrutinize the same and the Price Bids will be opened only of those tenderers, who qualify themselves in Technical/ Prequalification Bid.
10. The tenderer is required to submit the DD of EMD as per tender notice. It should be noted that if the demand draft of EMD is not submitted, the tender will not be considered for scrutiny and will be summarily rejected.
11. The tenderer will have to submit 'NO DEMAND CERTIFICATE' along with the final bill of the work, as per the Proforma given in this document.
12. Successful tenderer will have to enter in to the agreement with the Corporation on an appropriate stamp paper of Rs. 100/- (to be provided by the contractor) after accepting the Letter of Intent and having agreed to and accepted the terms and conditions of the tender.
13. No page from the tender documents shall be defaced or detached. Also no correction in the tender documents shall be made by the tenderer. Any comments which the tenderer desires to make, shall not be placed on the tender documents, but shall take the form of a separate statement, as brief as possible, and giving reference to pages and clauses of the tender documents.
14. Tender documents consist of:
    1) General Terms and Condition.
    2) Special Terms & Condition, Instructions to Bidders.
    3) Price Bid.
    4) Technical Bid.

5) Annexure—A– Bid Qualifying criteria.
6) Annexure—B – Scope of Work.
7) Annexure—C – Technical Specifications and requirements.
8) Annexure—D – Declaration—1.
9) Annexure—E – Decleration—2.
10) Annexure—f – Articles of Agreement.
11) Annexure—G – Indemnity Bond.
12) Annexure—H – Draft Bank Guarantee for Security Deposit.
13) Annexure—I – Vendor Registration Form.
14) Annexure—J – Performa for EMD.
15) Annexure—K – Solvency Certificate. –if applicable then only
16) Annexure—L – Draft Bank Guarantee for Advance payment.

Note: - These are to be complied by the tenderers, in case their tender is accepted.
Submission of tender will be the conclusive evidence that the tenderer has fully satisfied himself as to the nature and scope of the work to be done, site conditions, and all other factors affecting the performance of the contract and the price and also as to the terms and conditions of the contract.

15. Wherever the tenderer find any discrepancy, omission, ambiguity or conflict in or among the documents forwarded or be in doubt as to their meaning and interpretation; such matter should be called to the attention of the GMDC not later than 7 days period to the date of submission of tender. On receipt of such quarries the GMDC/consulting engineers will issue a clarifying bulletin which will also form a part of the contract. Neither the GMDC nor the Engineer-In-Charge/consulting engineer will be responsible for any oral instructions.
The rates should be written both in figures and in words. In case of any difference between rates in figures and words, the rates in words will prevail.

16. Tenderers must disclose the names of their partners, if any, in the particular contract. Any tenderer failing to do so will render himself liable to have his earnest money deposit forfeited and the contract, if entered into, cancelled at any time during its currency.

17. If it is found that two or more persons who are connected with one another either financially or as principal and agent or master and servant have tendered under different names for the same contract without disclosing their connections, then such tenders will be rejected and the earnest money deposit shall be forfeited. Any contract entered into under such conditions is also liable to be canceled.

18. In case the tenderer is a joint stock company, the contract must be affixed with the seal of the company in the presence of witnesses and signed by two Directors or by persons duly authorized to sign the contract for the company under a power of attorney. The tenderer shall produce a certified copy of such power of attorney at the time of making the agreement.

19. The tenderer must fill in all blank spaces in the form of tender and sign in long hand as and where shown and scan the same. Only the principal authorized to make the contract, should sign the tender, and execute the contract on behalf of the tenderer.

ISO 9001: 2008

20. The tenderer must be very careful to deliver a bonafied tender. Such a tender must propose any other condition than those laid down in this Document.

21. Any tender who proposes alterations to any of the conditions lay down, or which proposes any other conditions of any description whatever is liable to be rejected.

22. Incomplete tenders are liable to be rejected.

23. If rates of current taxes, Sales tax/ duties, sales tax, service tax, VAT etc undergo any revision during contractual completion date, the same shall be allowed as statutory variation. However if any variation take place after contractual date of completion, the same shall not be allowed, even if delayed are accepted by bidder.

24. No statutory variation shall be admitted, if current taxes, Sales tax/ duties, sales tax, service tax, VAT etc become payable because of exceeding the prescribed limit for turnover of the tenderers after the date of offer.

25. Date of start shall be reckoned within 7 days from date of issue of work order.

26. Other terms and conditions of the tender shall be read and considered as a part of the tender documents.

27. The rates/prices quoted by the bidders will be final and any sort of escalation will not be considered.

28. Clarifications/queries if any by the bidder should convey by Fax/ E-Mail well in advance before 7 days of due date as mentioned in Tender Notice at the following addresses (power@gmdcltd.com) in a Cover, super scribing the name of work and due date.

GENERAL MANAGER (POWER),
GUJARAT MINERAL DEVELOPMENT CORPORATION LTD.,
"KHANIJ BHAVAN", 132 FT. RING ROAD,
UNIVERSITY GROUND,AHMEDABAD -380 052.

Signature & Stamp of the Tenderer

Name: _____

Address: _____

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General Terms and Condition

1.0 GENERAL

Wherever the term GMDC is used herein it shall mean Gujarat Mineral Development Corporation Ltd. Where the term Tenderer, BIDDER is used, it shall mean the person or organization responding to GMDC's request for quotation herein contained and shall include his legal representatives, successors and assignees.

2.0 ACKNOWLEDGEMENT OF NOTICE INVITING TENDER AND CLARIFICATION:

- In case of any clarification on Tender, the BIDDER shall approach GMDC in writing by fax, email or by letter and GMDC will provide the information required in writing. However, failure to receive any addendum or clarification shall not relieve the BIDDER of any of the obligations stipulated in the Tender. Any amendments made to TENDER shall be intimated to the bidder by E-mail or post/fax.
- The BIDDER will acquaint himself with the conditions / limitations and official regulations under which or conforming to which the services are to be performed and should carefully examine all the information as may be furnished to them in writing from time to time. Failure to comply with above requirement will not relieve the BIDDER of his obligations in the event of his BID being accepted. Unless otherwise specifically stated in the BID, it will be assumed that all terms and conditions of TENDER are accepted by the BIDDER without any reservations.

3.0 Submission of BIDS

- Bidder should submit price bid as well as Technical bid in electronically only. However Technical Document can be submitted physically along with Tender Fee and EMD.
- The BIDS should be in English.

4 Technical BID

4.1 *The BIDDER shall submit following details in the Technical Bid:*

The technical bid should contain the following,

- Scope of work which shall confirm to the details mentioned above under the title "Scope of work"
- List of exclusions/deviations and reasons thereof as per the format provided
- Documents to demonstrate the eligibility of the bidder as per the criteria listed under "Eligibility"
- Time schedule – Bidder shall provide the time schedule detailing out the implementation of each of the activities.
- Any other information required for the evaluation of the bid

4.2 Tender Fees

As mentioned in Tender Notice Sr. No- 3

Note: - *Tender Fee is non refundable*.

4.3 Earnest Money Deposit
As mentioned in Tender Notice Sr. No- 4

Note: - Offer received without EMD will not be considered for evaluation.

5.0 PRICE BID
Tenderer shall submit their offer in electronic format shown on website as per clause no- Part II offer in physical format will not be accepted and any such offer if received by GMDC will be out rightly rejected / not consider for evaluation.

5.1 TENDER with Annexure and all attachments will be considered to be read, understood and accepted by the BIDDER unless specifically stated by them otherwise in writing.

6.0 BID OPENING

6.1 BIDs will be opened in 3 stages

Stage I—Verification of Tender Fee, EMD and technical documents
Stage II—Technical Bid (Electronically)
Stage III—Price Bid (Electronically only)

6.2 The technical BIDS (Stage-I) will be opened on date fixed by GMDC.

6.3 The price BID shall be opened after the corresponding technical BIDS are scrutinized and possible clarifications obtained from all BIDDERs for bringing all of them acceptable technically and at par commercially.

6.4 Validity of BIDS

All BIDS should be kept valid for acceptance for **120 days** from the closing date of bid submission. Bid with lower validity will be rejected.

7.0 INFORMATION REQUIRED IN THE BID

BIDS should include the following information.

7.1.1 Technical BID (Part I)

7.1.1.1 Scope of Work which shall conform to Technical Bid with details.

7.1.1.2 Certificate that the technical BID is in total conformity with TENDER and if not the list of exclusion/deviations & reasons thereof. All Deviations shall be listed at one place under "Schedule of Deviations" as per format given in Annexure C and shall comprise as under:
Should the BIDDER consider that compliance with any requirements of the Specification would render the SCHEME unsuitable, he shall submit a proposal or proposals for modifying the requirements and shall include these in the "Schedule of Deviations" from the specification. Deviation mentioned elsewhere/in any other form will not be considered.

8.0 ***Following are the essential requirements for the bid, failing of which, the BID shall be rejected:***

1. BIDDER shall submit the time schedule for completion of the project.
2. A Commercial Proposal as stated under Clause;
   The BIDDER shall submit the following documents along with technical bid.
   - Balance Sheet of last three years;
3. The work shall be carried out in best workmanship manner as per the technical specifications. Qualified and experienced engineer shall carry out the electrical work under his control.
4. The work shall have to be completed within the time limit, failing which, GMDC will impose penalty as clause.
5. All testing equipments, tools, tackles and workmen required for carrying out the job shall be arranged by the contractor.
6. All safety precautions necessary shall be taken by the contractor for his work force working at site and transportation. GMDC in any way shall not be responsible for any compensation arising out of any damage caused to any of contractor during the work and transportation.
7. Any damage done to the property of GMDC by the contractor or his men while carrying out the work shall be made good by the contractor at his own cost.
8. If the contractor abandons the work or does not work as per schedule, GMDC shall get the work completed by any other agency at the risk and cost of the original contractor.
9. The validity of the offer for the work shall be 120 (One hundred twenty) days from the date of opening of Bid.
10. The tender received without Earnest money will be summarily rejected. The Earnest Money Deposit will be refunded to the unsuccessful tenderers after an award has been finalized. The Earnest Money Deposit (E-Tender Guarantee) will be forfeited in the event, the successful tenderer fails to accept the contract and fails to submit the “Security Deposit" to the GMDC as stipulated in this e -Tender documents within ten(10) days after receipt of notice of award of contract.
11. This job being directly related to immediate use after the installation, completion time is essence of the contract. Penalty will be levied for delay in completion of work. The amount of penalty will be as per rule.
12. GMDC is at his own discretion may divide the job into more than one party.
13. The conditional offer will liable to be rejected.
14. The successful tenderer shall have to pay the security deposit at the rate of 5% of contract value in favor of "Gujarat Mineral Development Corporation Ltd-Ahmedabad " in form of DD of any Nationalized Bank or ICICI, IDBI. AXIS, HDFC Bank valid for the contract period and enter into an agreement on stamp paper of Rs.100/- as per prevailing norms under labor contract. It shall be incumbent on the Contractor to pay the stamp duty and the legal charges for the preparation of the contract agreement.

15. The rates shall be firm throughout the period of contract inclusive of supply of material, labor, loading, unloading at site and workshop. No price escalation will be given.

16. As per rules, TDS will be deducted from the bills.

9.0 BID PREPARATION AND SUBMISSION EXPENDITURE

The BIDDER shall bear all costs associated with the preparation and submission of the BID including any visits to the site. Whether or not the BID is accepted or even if GMDC withdraws the BID invitation, the BIDDER shall not be entitled to claim any cost, charges, expenses etc, in connection with the submission of the BID.

10.0 SIGNING OF BIDS

10.1 The BIDS shall be signed by legally authorized principal officer of the BIDDER.

10.2 On the BID being accepted by the GMDC, Letter of Intent will be issued by GMDC. The GMDC will also issue detailed work order indicating detailed terms and condition of the work after receipt of security deposit during which BIDDER has to commence the job..

11.0 GMDC'S RIGHTS

GMDC will exercise unrestricted right to reject any or all the BIDS or accept any of the BIDS in full or part.

12.0 BID EVALUATION

BID shall be evaluated only for prequalified bidders. The pre-qualification criteria shall be as follows.

- Scope of work which shall conform to the details mentioned above under the title "Scope of work"
- List of exclusions/deviations and reasons thereof as per the format provided
- Documents to demonstrate the eligibility of the bidder as per the criteria listed under "Eligibility"
- Time schedule – Bidder shall provide the time schedule detailing out the implementation of each of the activities.
- Any other information required for the evaluation of the bid

For required discussion, in such case bidder has to visit GMDC at his own cost.

13.0 TECHNICALBID EVALUTION CRITERIA

The evaluation of the technical proposal shall be based upon its responsiveness to the scope of work, eligibility and time schedule.

14.0 The Commercial BID shall be evaluated on the following basis:

The Bidder whose evaluated cost to GMDC is lowest, will qualify for the award of LOI by GMDC subject to other conditions as evaluated by GMDC on completeness as acceptable to GMDC.

15.0 **GMDC reserves right to split work in to 2 (two) or more parts to speed up the work at L-1 Rates**

Signature & Stamp of the Tenderer

Name & Address: _____

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Special Terms & Condition, Instructions to Bidders

- **Experience of the Bidder**
  A comprehensive list of past projects implemented, by the bidder indicating clients, dates, size of projects and any other relevant material should be included in the offer.

- **Time Schedule**

  The bidder should complete the work in three (03) Months. And contract period will be for Three Months.

- **Payment Terms**
  The bidder shall receive the payment under the work order as follows. Within 30 days from the receipt date of receipt of bill after completion of milestones.
  The breakup of the payment shall be as follows,

Sr	Activity	Payment structure
1	Advance payment will be released against submission of BG of equivalent amount valid up to 3 Months.	10 %
2	On successful commissioning of 500kVA CSS as well as 250 kVA DG Set.	20%
3	On successful commissioning of 2 nos of 100 kVA Switch yard including civil work as well as 2 nos of 100 kVA DG Set commissioning and testing of 11 KV HT Over head Line work	20%
4	On successful commissioning of LT Distribution cable network	5%
5	On successful commissioning of haul road lighting (lignite transportation)	10%
6	On successful commissioning of haul road lighting (OB Transportation)	10%
7	On successful commissioning of High Mast.	10%
8	On successful completion all project and after obtaining all related statutory and obligatory approval	15%

- Variation in taxes, work contract taxes, duties, levies etc after award of job but within Time schedule mentioned in TENDER shall be to the account of GMDC. Any variation in taxes, work contract taxes, duties, levies etc beyond Time schedule shall be to BIDDER's account.

- **Penalty.**
  For any delay in completion of WORK solely attributable to BIDDER beyond the agreed time schedule at the time of award of job, penalty shall be levied at the rate of 0.5 % per week with cap of 10% of order value.

- **ASSIGNMENT**

  BIDDER shall not assign the WORK or any part thereof or any share or interest therein without the prior written consent of the GMDC. BIDDER shall not sub-contract the whole or any part of WORK without the prior written consent of GMDC. On concurrence of GMDC, BIDDER may sub-contract any part of WORK to any of its affiliates, in which event BIDDER shall remain fully responsible

LEGAL JURISDICTION AND ARBITRATION

a. The matter relating to any differences arising out of this agreement shall be subject to the exclusive jurisdiction of Ahmedabad only.

b. All questions, disputes , differences whatsoever which may at any time arises between the parties to this contract in connection with the contract or any matter arising out of or in relation thereto, shall be refereed to arbitration as per the provision of Arbitrations and Conciliation Act. 1996 and the venue of the arbitration proceedings shall be at Ahmedabad only.

FORCE MAJEURE

(a) Force majeure is herein defined as any cause which is beyond the control of the contractor or the Corporation as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

i. natural phenomena such as flood, draughts Cyclone, earthquake and epidemics, declaration of war

ii. Acts of any government, including but not limited to war, declared or undeclared priorities, quantities, embargoes, providing either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such cases.

(b) The contractor will advise, in the event of his having resort to this clause by a registered letter duly certified by the statutory authorities, the beginning and end of the cause of delay, within fifteen days of the occurrence and cessation of such Force Majeure condition. In the event of delay lasting over two months, if arising out of Force Majeure, the contract may be terminated at the discretion of the Corporation.

(c) For delay arising out of Force Majeure, the contractor will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of force Majeure and neither company nor the Contractor shall be liable to pay extra costs (like increase in rates, remobilization, advance, idle charges for labour and machinery etc.) provided it is mutually established that the Force Majeure conditions did actually exist.

(d) If any of the Force Majeure conditions exists in the place of operation of the contractor even at the time of submission of bid he will categorically specify them in his bid and state whether they have been taken into consideration in their quotations

(e) The contractor or the Corporation shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/ or defined above. The date of completion will, subject to hereinafter provided, be extended by a reasonable time given though such cause may occur after contractor's performance of his obligations has been delayed for other causes.

COMPLETION OF WORK

When the Contractor fulfills all its obligations under the contract to the satisfaction of General Manager (P)/Head of the department (**as applicable**) and subject to terms and conditions of the Contractors, it shall be eligible to apply for completion certificate. The General Manager (P)/Head of the department (**as applicable**) shall formally issue completion certificate after verifying from the completion documents and satisfying himself that the work has been completed in accordance with all the provisions of this contract and instructions issued to the contractor by the GMDC and (**concerned authorities**) from time to time. The contractor after obtaining the completion certificate is eligible to present the final bill for the works executed by him/ it under the contract.

Within completion of the work in all respects as defined in the tender document, the contractor shall be required to obtain from the General Manager (P)/Head of the department (**as applicable**) such completion certificates as to the (clearing of the areas on the downhill side of site of all rubbish dirt, rock overburden materials, structures etc..)(**may be modified as per the scope/requirement**)

i. If the contractor fail to comply with the requirement of this clause on or before the date fixed for the completion of the work the General Manager (P)/Head of the department (**as applicable**) may at the expenses of the contractor carry out such work and the contractor shall forth with pay the amount of all such expenses so incurred and shall have no claim in respect of any such work.

ii. For purpose of this clause the following documents are required by the GMDC subject to the conditions that General Manager (P)/Head of the department (**as applicable**) for his satisfaction.

(a) Certificate of the satisfactory completion of the work as per the terms and conditions of the tender/agreement.

(b) A Certificate to the effect that no outstanding claim / payments are due to the persons employed by the contractor or his sub contractor if permitted by GMDC including the Statutory payments, which have fallen due.

(c) "No claim/demand" and "No dues" certificates.

(d) Proof of depositing P.F. and other applicable statutory dues from time to time.

Immediately on completion of the work, the contractor shall submit his final bill indicating the gross and net amount payable. On receipt of this, the GMDC shall verify the same, determining the total value of the work done of the contract and after adjusting all the sums already paid to him/ it and / due to the company on any account and such further sums as the GMDC is already authorized or required to reserve or retain as per the terms of the contract or otherwise make over to the contract as his / its final payment.

CONSTITUTION OF THE COMPANY / FIRM / PROPERIOTARY CONCERN (AS APPLICABLE)

The Contractor shall not change the constitution of the company // firm / proprietary concern (as applicable) during the currency of the contract except same is necessary due to statutory provisions or permitted by GMDC..

Other clauses like scope of work, SD, advance payment, payment of RA bills etc. may be incorporated as per the actual requirement with respect to the nature of contract/work. However the special attentions required with respect to SD, the same should be issued by the Nationalised banks and banks approved by Govt. of Gujarat from time to time only (except co-operative banks).

In case of statutory variation in taxes, duties etc.. the following clause may be incorporated:

"Any statutory increase / decrease in duties, taxes, cess etc and / or introduction of any new duties, taxes, cess, other levies etc., after the last date of submission of tender till scheduled date of completion of work shall be to GMDC's account subject to submission of documentary proof of having remitted / adjusted the same and to the extent directly related to the services rendered by the contractor.

In case of delay beyond scheduled date of completion of work, any statutory increase in duties, cess etc. and / or introduction / levy of any duty, tax, cess after scheduled date of completion of work shall be in the contractor's account and reduction in such duties, taxes, cess and levy shall be passed on to GMDC's Accounts and the order value shall be reduced accordingly."

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TAX LAWS

CONTRACTOR TO ABIDE BY FOLLOWING TAX LAWS:

(a) General Taxes: The Contractor shall be responsible for and shall pay out of his own, moneys, all taxes, dues, fees, ceases, octroi and charges payable to Central or State Governments or dues payable on material purchased by him or constructional plant provided by him for the works, and on all materials brought by him on the site and used for the works and shall indemnify the purchaser against any liability on account of any such taxes, dues, fees, cess, octroi and charges.

(b) Income-Tax: The Contractor and his employees shall bear and pay all Income-Taxes, corporate and personnel, super tax or any other Indian tax as may be payable by him on the amounts payable to him under the contract. If for any reason whatsoever the purchaser is called upon to pay in respect of the Contractor's or his employees income, any income-tax, supertax, or any tax under Income-tax Act or any tax under any other law in force in India, then the Contractor shall be bound and liable to reimburse and pay to the Purchaser the amount of such tax so paid by the purchaser and the Contractor shall further agrees that the Purchaser will also be entitled to recover and reimburse to himself the amount of such tax out of the fees, remuneration or any other sum payable by him to the Contractor under the Contract.

(c) Taxes in respect of Workmen:
The Contractor shall provide and maintain workmen's compensation insurance coverage to provide compensation benefits in the event of injury of employees in the course of work under the contract. Liability under the Workmen's Compensation Act:

(I) The Contractor shall at all times identify the Purchaser against any claims which may be made under the Workmen's Compensation Act, 1923 or any statutory modification thereof or otherwise for or in respect of any damages or compensation payable in consequence of any accident or injury sustained by any workman or other person whether in the employment of the Contractor or not.

(II) Liability under the employee's State Insurance Act 1948: Where the Contract is in connection with the Purchaser's work office coming under the purview of the Employee's State Insurance Act, 1948, the Contractor shall make necessary deduction from the monthly emoluments of his staff employed on the Contract at the prescribed rate and remit the aggregate amount monthly to the Purchaser together with the Employer's (Contractor's) contribution as required under the Act and together with the standard form duly filled in as required under the Act.

(III) Liability under the Employees Provident Fund Act, 1951: Where the contract is in connection with the purchaser's works office coming under purview of the employees provident Fund Act, 1951, the Contractor shall make necessary deduction from the monthly emoluments of his staff employed on the Contract at the prescribed rate and remit the aggregate amount monthly to the purchaser together with the Employer's (Contractor's) Contribution as required under the Act, and together with the standard forms duly filled in required under the Act.

(D) You will abide by the provision of labour laws , contract labour regulations and Abolition act (contract Act-37 of 1970) pertaining to the employment of the labour and shall get yourself register with regional provident fund commissioner and infirm the corporation about the registration number by submitting the copy of the number allotted to you by RPFC . You have to submit the copy of labour license from the competent authority for the subject work

Signature & Stamp of bidder

NON FULFILMENT OF TERMS & CONDITION AND TERMINATION OF THE CONTRACT.

a. If the Contractor fails to carry out the work as per terms and conditions of the contract to the satisfaction of the CORPORATION, CORPORATION shall be entitled to forfeit the security deposit paid by the Contractor. This however, shall not absolve the Contractor from his obligation to fulfill the contract. In such event, the CORPORATION shall have a right to complete and / or to get the work completed at the cost & risk of the Contractor and the Contractor shall be responsible to pay such cost incurred by the CORPORATION to complete the work and / or to get the work completed.

b. Likewise, if the Contractor does not fulfill the terms and conditions of the contract and does not carry out the work up to the entire satisfaction of CORPORATION, CORPORATION has the right to forthwith terminate the contract at its sole discretion, without assigning any reason, Under such events, the CORPORATION shall be entitled to forfeit the security deposit paid by the Contractor and the CORPORATION shall have a right to complete the work and / or to get the work completed at the risk and cost of the Contractor.

c. For any reasons, if it is required, the CORPORATION reserves rights to cancel terminate. amend and / or alter the contract and / or bifurcate and / or reduce the contract work at any time without giving any notice to the Contractor and without incurring any responsibility. For such cases, Contractor shall have to take away his labour, tools, tackles, machinery, equipment etc. and shall leave the site at once or shall have to carry out the instructions of the CORPORATION.

SUB-CONTRACT

The Contractor shall not assign or sub-contract any portion of this work without the prior written consent of Corporation.

ISO 9001: 2008

GUJARAT MINERAL DEVELOPMENT CORPORATION LTD.

(Khanij Bhavan, 132 feet Ring Road, Near University Ground, Vastrapur, Ahmedabad – 380 052)

PRICE BID

Tender No	GMDC: LP: UMARSAR: ELE: 05: 2014-15
Subject:	E-tender is invited to Design, engineering, manufacture, supply, Installation, erection, testing, and Commissioning of 11kV HT Overhead line, two fix 100 kVA substation with HT, VCB, LT distribution Panel, one 500kVA CSS with 50kVA Transformer, LT Distribution line, NGR etc., haul road lighting and civil construction on turnkey basis along with all required statutory/ obligatory approval including 04 years comprehensive operation & maintenance contract. (for the item not specified in this technical specification, rates for addition item / work is to be charge as per Gujarat PWD/ latest Electrical SOR)

PHONE: 2791 35 01 / 2791 32 00 FAX: (079) – 2791 14 54 2791 18 22
GUJARAT MINERAL DEVELOPMENT CORPORATION LTD.
(Khanij Bhavan, 132 feet Ring Road, Near University Ground, Vastrapur, Ahmedabad – 380 052)

ISO 9001: 2008

Price Bid

Sr. no	Description	Bidder should quote fix firm price in INR to carry out whole turnkey work
1	Design, engineering, manufacture, supply, Installation, erection, testing, and Commissioning of 11kV HT Overhead line, two fix 100 kVA substation with HT, VCB, LT distribution Panel, one 500kVA CSS with 50kVA Transformer, LT Distribution line, NGR etc., haul road lighting and civil construction on turnkey basis along with all required statutory/ obligatory approval including 04 years comprehensive operation & maintenance contract. As per detail scope of work and given technical specification	
2	For the item not specified in this scope of work or technical specification, rates for these item / work is to be charge as per Gujarat PWD/ latest Electrical SOR	

Note:- (1) Bidder should quote price inclusive of all applicable taxes, duties, vat tax etc. But Only service will be reimbursed on submission of proof.

(2) Bidder should calculate all required material, equipment etc to carry out whole turnkey project before quote and shall visit site for survey

(3) Bidder should quote price inclusive of sundry electrical item, required tools tackles, equipment, manpower, nut bolt, and all miscellaneous / necessary item required to carry out the turnkey project

(4) Bidder should ensure the whole turnkey project will be completed by the period of three months from the date of LOI

ISO 9001: 2008

Deviation Sheet

Clause in which deviation is requested	Deviation	Reason for deviation

Signature & Stamp of the Tenderer

Name: _____

Address: _____

ISO 9001: 2008

DECLARATION SHEET

.....
Bidder's Name

I... certify that all the above typed-in data and information pertaining to this specification is correct and is true representation of the equipment covered by our formal Proposal dated. …… I hereby certify that I am duly authorized representative of the Bidder whose name appears above my signature.

Bidder's Name : …….

Authorised Representative's
Signature and Stamp : …….

ISO 9001: 2008

GUJARAT MINERAL DEVELOPMENT CORPORATION LTD.

(Khanij Bhavan, 132 feet Ring Road, Near University Ground, Vastrapur, Ahmedabad – 380 052)

TECHNICAL BID

Tender No	GMDC: LP: UMARSAR: ELE: 05: 2014-15
Subject:	E-tender is invited to Design, engineering, manufacture, supply, Installation, erection, testing, and Commissioning of 11kV HT Overhead line, two fix 100 kVA substation with HT, VCB, LT distribution Panel, one 500kVA CSS with 50kVA Transformer, LT Distribution line, NGR etc., haul road lighting and civil construction on turnkey basis along with all required statutory/ obligatory approval including 04 years comprehensive operation & maintenance contract. (for the item not specified in this technical specification, rates for addition item / work is to be charge as per Gujarat PWD/ latest Electrical SOR)

PHONE: 2791 35 01 / 2791 32 00 FAX: (079) – 2791 14 54 2791 18 22
GUJARAT MINERAL DEVELOPMENT CORPORATION LTD.
(Khanij Bhavan, 132 feet Ring Road, Near University Ground, Vastrapur, Ahmedabad – 380 052)

ISO 9001: 2008

TECHNICAL BID

PROPOSAL PARTICULARS

- Bidder's Name :
- Bidder's Complete Address :
- Bidder's Complete Company Name :
- Bidder's Proposal Number :
- Bidder's Proposal Date :
- Bidder's Proposal Validity Period :
- Bidder's Phone number :
- Bidder's E-Mail :
- EMD Detail :
- Tender Fee Detail :

Bidder's Name: ……..

Bidder's Signature: …….

ISO 9001: 2008

Technical Deviation Sheet

Clause in which deviation is requested	Deviation	Reason for deviation

Signature & Stamp of the Tenderer

Name: _____

Address: _____

ISO 9001: 2008

TECHNICAL DECLARATION SHEET

.....
Bidder's Name

I... certify that all the above typed-in data and information pertaining to this specification is correct and is true representation of the equipment covered by our formal Proposal dated. …… I hereby certify that I am duly authorized representative of the Bidder whose name appears above my signature.

Bidder's Name : …….

Authorised Representative's
Signature and Stamp : …….

ISO 9001: 2008

Annexure—A

Bid Qualification Criteria

1) The Bidder should have executed this type of supply, erecting and commissioning work in large Township, industrial large estate, mines and should have executed three such orders out of three one order value not less than Rs. One crore successfully. The bidder should be approved Gujarat of Gujarat contractor

2) The Bidder should furnish copies of satisfactory performance certificates issued in the name of bidder/company.

3) The Bidder has to visit actual site situation before participate in tender.

4) The evaluation of offers will be made on the basis of the lowest offer received for the works.

5) The bidder is required to quote the rate strictly as per the terms and conditions mentioned in the tender documents. **The conditional tender will not be entertained and will be rejected**. The rate quoted should be inclusive of all items.

6) GMDC will not be responsible for any postal delay whatsoever

7) The bidder must have sound financial position so as to buy and deploy additional manpower so as to meet the targets as per the given schedule.

8) Copy of electrical contractor license must be attached along with technical bid

9) Copy of Bank Solvency must be attached along with technical bid

10) Copy of Pan Card must be attached along with technical bid

11) Copy of Service Tax Registration must be attached along with technical bid

12) Copy of EPF Registration must be attached along with technical bid

13) **Copy of Similar types of work completions from mines must be attached along with technical bid.**

14) Copy of Turn over Certificates certified by CA for minimum Value of 80 laces for last 3 years must be attached along with technical bid.

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Annexure—B

Scope of Works

E-tender is invited to Design, engineering, manufacture, supply, Installation, erection, testing, and Commissioning of 11kV HT Overhead line, two fix 100 kVA substation with HT, VCB, LT distribution Panel, one 500kVA CSS with 50kVA Transformer, LT istribution line, NGR etc., haul road lighting and civil construction on turnkey basis along with all required statutory approval including 04 years comprehensive operation & maintenance contract. (for the item not specified in this technical specification, rates for addition item / work is to be charge as per Gujarat PWD/ latest Electrical SOR)

Comprehensive Operation and Maintenance for the period of four year :-

The Contractor shall have to provide comprehensive Operations and Maintenance (O&M) service for the first four years of operations from the date of commissioning. Subject to site requirement.

The Contractor shall make the necessary arrangements for a 'comprehensive' Operations, maintenance, security and spares and shall provide manpower of one gang consisting of three electricians and two helper with operation and maintenance service provider(s) and bidder shall paid 0.5% of total contract value per year for the period of four year.

The scope covers supply of items / accessories / system supplied though specifically not indicated in the specification. (For the items not specified in this technical specification, Rates for additional items/works is to be charged as per Gujarat PWD / GEB latest SOR.)

Codes and Standards:

The equipment / materials supplied shall confirm to the latest edition of Indian / International Standards, **REC Standards**, Indian Electricity Rules, relevant code of practices and requirements of chief Electrical Inspector of Govt. of Gujarat.

Equipment and Service Required.

This scope intends to cover following activities, services and works.

i) Complete design and engineering of all the systems, sub-systems, equipment, material and services.

ii) Providing engineering data, drawings and O&M manuals for Owner's review, approval and records.

iii) Manufacturing, supply, testing, packing, transportation and insurance from the manufacturer's work to the site.

iv) Receipt, storage, insurance, preservation and conservation of equipment at the site.

v) All civil and structural works as required.

vi) Fabrication, pre-assembly (if any), erection, testing and putting into satisfactory operation of all the equipment/material including successful commissioning.

vii) In addition to the requirements indicated in this section (Technical Specifications), all the requirements as stated in other sections shall also be considered as a part of this specification as if completely bound herewith.

viii) The Bidder shall be responsible for providing all material, equipment and services specified or otherwise which are required to ensure operability, maintainability and the reliability of the complete work covered under this specification.

ix) All services & activities required to be given contractually, by the bidder, during warranty period and O&M period of four (04) Years

(1) High Mast Tower

Supply installation, testing and commissioning of 08 (eight) nos of 30 Mtr. high mast tower. Each high mast tower containing 12 X 800w sodium lamps inclusive of two nos of earth pit as per technical specification given in tender document

Bidder has to install the said 8 nos of high mast tower as per GMDC requirement at different location within the mines area.

Bidder should quote rate inclusive of transportation charges up to mines location, all applicable taxes, loading unloading, insurance etc only service tax will be paid extra. All applicable statutory / obligatory approval to be obtained by the bidder.

The steel shall have the following characteristics:

Minimum Yield Strength : 355 N/sq. mm for thickness < 30 mm
Tensile Strength : > 490 N / sq. mm.
Minimum Elongation for thickness between 3 mm and 30 mm : 22%

(2) D.G. Set.

Supply installation, testing and commissioning of one (01) nos of 260 kVA DG set and two (02) nos of 100 kVA DG set as per technical specification given in the tender documents

Bidder should quote rate inclusive of transportation charges up to mines location, all applicable taxes, loading unloading, insurance etc only service tax will be paid extra. All applicable statutory / obligatory approval to be obtained by the bidder.

(3) 7.5 KM of 11 kV Overhead HT Line considering aprox 3 road crossing with 14 Mtr Pole and 10.5 Km LT Distribution line/ caballing as per Table –A (three Phase plus one earth wire)

I. Supply, installation, testing, commissioning and statutory and obligatory approvals for 7.5 KM 11 kV overhead line at span of 50mtr including required all accessories as per given specification (all material / equipments should be BIS approved) and LT Lines/ caballing and Finalization of Distribution Terminal Location.
II. Construction of new 11KV & LT Lines / caballing.
III. LT extension using XLPE double GI armored mining overall FRLS cables.

Table –A approximate calculation for LT Line/ Cable

Sr. No.	SubStation	From	To	size in sq mm of 4 core cable	distance in Mtr.
1	100 KVA S/S Near ADMN Office	Main LT Distri. Panel	S/S Distribution Board	10	25
	100 KVA S/S	Main LT Distri. Panel	ADMN Office	25	300
	100 KVA S/S	Main LT Distri. Panel	Contractor Camp	70	1000
	100 KVA S/S	Main LT Distri. Panel	Out Side Lighting panel	10	25
2	250 KVA W/B Substation	Main LT Distri. Panel	Truck In Gate	25	500
	250 KVA W/B Substation	Main LT Distri. Panel	Truck Out Gate	25	400
	250 KVA W/B Substation	Main LT Distri. Panel	Lignite Haul Road Lighting	35	1000
	250 KVA W/B Substation	Main LT Distri. Panel	OB Haul Road Lighting	70	900
	250 KVA W/B Substation	Main LT Distri. Panel	Weigh Bridge	95	800
	250 KVA W/B Substation	Weigh Bridge	Time Office	95	500
	250 KVA W/B Substation	Weigh Bridge	Parking Plot	35	250
3	250 KVA Mine Area Substation	Main LT Distri. Panel	Power Point for Contractor	300	1000
	250 KVA Mine Area Substation	Main LT Distri. Panel	Haul Road Lighting	70	700
	250 KVA Mine Area Substation	Main LT Distri. Panel	High Mast 2	70	1000
	250 KVA Mine Area Substation	High Mast 2	High Mast 1	70	500
	250 KVA Mine Area Substation	High Mast 1	High Mast 3	50	700
	250 KVA Mine Area Substation	High Mast 3	High Mast 4	35	500

Bidder should quote rate inclusive of transportation charges up to mines location, all applicable taxes, loading unloading, insurance etc only service tax will be paid extra. All applicable statutory / obligatory approval to be obtained by the bidder.

Bidder should consider and calculate for all or any type of required material, equipments, tools etc. to carry out above HT/ LT work including Total no of PSC pole, ACSR. 50 sq mm O.H. conductor in km. (Rabbit), Nos of DPs cross arm, 11 KV V cross arm for PSC pole size 45 x 45 x8 mm with complete hard ware, HT Top clamp with hardware, Complete Guy set 38 mm with all hardware and perform fittings, Concreting of guy, Coil type earthling PSC pole pole with material and labour cost, 22 KV silicon rubber PIN insulators with all hardware, 22 KV silicon rubber shackle insulators with all hardware, AB Switch, ACB, Cross arm for AB Switch / DO fuse, 11 kv Dos set, LA, NGR, silicon insulator, Sundry materials like clamps, GI earthing wire, bolts,nuts spring washer etc.

(4) Two 100/250 kVA switch yard and Substation including construction of substation room at different location including battery charges and batteries.

Bidder should carry out suitable room with civil work for two nos of 100 kVA substation at the location decided by GMDC

Bidder should supply, installation , commissioning, erecting and testing for all related materials, equipments to put two nos of 100/250 kVA switch yard and substation in operation as per mines requirement

Following table showing major equipments/ material for one switchyard. bidder should consider any other equipments / materials is to be required to put said switch yard in operation.

Sr No.	Installation	Item description	Specifications	Qty
Two Pole structure				
1		PSC Poles	8 Mtrs. X 200 KG PSC pole	2
2		Cross Arms for DP		8
3		LA set of 3 Lightening Arrester		1
4		Air Break Swich	200 AMPs with all hardware	1
5		A set of 3 nos of DOs	200 AMPs with all hardware	1
6		Shackle Insulators with Hard ware		6
7		NGR	Neutral Ground Resistor of suitable rating and size.	1
8		HT armoured Cable of 30 meters length with Heat shrinkable End terminations	HT armoured Cable of 30 meters length with Heat shrinkable End terminations	2

9	Earthing systems	50 mm dai pipe earthing as per IS 3043	50 mm dai pipe earthing as per IS 3043 with civil work and CI top coframe and cover	9
10		GI Strip earthing network of complete substation	Hot deep GI Earthing system of substation including switch yard, Htand LT panels transformer etc.	
11	Transformer	11 /0.415 KV,250 KVA transformer with all standard accessories		
12	HT Panel with Circuit breaker	HT Panel as per specifications		1
13	LT Distribution panel	LT distribution panel as per anexure	Amps. LT distribution panel as per anexure	1
14	Change over switch	Off load change Over switch		1

Bidder should quote rate inclusive of transportation charges up to mines location, all applicable taxes, loading unloading, insurance etc only service tax will be paid extra. All applicable statutory / obligatory approval to be obtained by the bidder.

(5) One 500kVA Compact Portable Switchyard substation (CSS) with separate 50kVA lighting transformer for lighting of mining area (Three phase 4 wire 200V line to line and 110 V Line to earth) with NGR of suitable rating.

Design, manufacturing, supply installation , testing and commissioning of one 500kVA CSS at mines are to cater power in mining working area.

Bidder should carry out civil work for platform with shade of suitable size for supplied 500kVA CSS.

Bidder should quote rate inclusive of transportation charges up to mines location, all applicable taxes, loading unloading, insurance etc only service tax will be paid extra. All applicable statutory / obligatory approval to be obtained by the bidder.

(6) Panels

Bidder should Design, manufacturing, supply installation , testing and commissioning of suitable HT Panel, LT Panel, Distribution Panel, MCCB Panel, VCB Panel as per specification.

(7) Equipments

Bidder should calculate and Design, manufacturing, supply installation, testing and commissioning all equipments which mentioned in above scope of work. However if any equipments which not mentioned in tender but it will be required to carry out this turnkey job then same will be in bidder scope. Hence bidder should carefully study the total turnkey project before participation.

(8) Materials

Bidder should calculate and Design, manufacturing, supply installation, testing and commissioning all material which mentioned in above scope of work. However if any materials which not mentioned in tender but it will be required to carry out this turnkey job then same will be in bidder scope. Hence bidder should carefully study the total turnkey project before participation

(9) Haul road lighting

Supply, installation & erection of street lighting system using 9 mtr. Steel tubular swaged pole with single arm bracket and double arms, 250Watt HPSV luminaires, Distribution boxes, cable, MCB, ELCB and earthing etc. As per REC guideline / IS Standard. The route for the lighting and location of poles shall be as per the instruction of site official officer. The cabling and wiring should be such that both luminaires installed on each pole can be control with one Two pole MCB from the same pole itself

Pole box :
Supplying & erecting Sintex or approved make SMC press moulded composite FRP (plastic) loop-in, loop-out box complete with bakelite connector strip 4 way & hinged doors having locking arrangements with mounting clamp with nuts, bolts & washers suitable for erection on pole with cable clamps & earth bolt of 250 x 200 x 200 mm size of box.

Pole Foundation:

Providing cement concrete foundation including excavation for the pole with 60 x 60 x 120 cms deep in 1:3:6 cement concrete (20 to 2 mm stone metal) with 4 cms x 45 cms (or 45 cms dia) x 45 cms high cement concrete plinth with necessary curing and finishing in approved manner.

Bidder should take care during designing of haul road lighting system such as that minimum level of light intensity any where is more than 0.6 lux. On Horizontal plane. Maximum distance between two poles should not increase 40 Mtr.

(10) Civil work

Bidder should carry out two building for 100 kVA switch yard and substation at location decided by GMDC and one room for LT Distribution panel.

Bidder should carry out all suitable civil work , foundation work, construction of walls, RCC roof, shad, internal building wiring with T5 tube and fans.

The CONTRACTOR shall take all statutory approvals/ Clearances like DGMS/ any other statutory body.

The CONTRACTOR shall provide statutory supervision of mine workings, as per the norms prescribed by DGMS, in consultation with the Mines Manager

The CONTRACTOR shall have to observe and comply with the applicable mining and Labour laws and will be solely responsible for the breach of any of these provisions. Day to-day overall supervision of the works shall be carried out by the Mines Manager and by persons authorized by him. Instructions in respect of the work shall be issued by them from time to time, which the CONTRACTOR shall have to obey and carry out.

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Annexure—C
Technical Specifications and Requirements

(1) High Mast Tower

1. Preamble

1.1 The scope of this specification covers the design, manufacture, supply, transport, installation, testing and commissioning of the complete lighting system, using Raising and Lowering type of High mast Towers, luminaries having Stainless Steel reflectors and including the Civil Foundation Works.

1.2 The area to be illuminated is 200 mtr. Diameter using 12 Nos. of 2 x 400 watt Flood lights. Luminaries should produce 6900 lux at a distance of 10 mtr. when measured along the axis.

The required minimum horizontal illumination level should be – 2 lux, - 5 lux. Or better when measured at ground level. Illumination design to be submitted.

1.3 To achieve the illumination level as given in para 1.2 above, 12 number of 400 Watt, 30 meter high masts are to be installed. Tenderers are advised to visit the site to assess by themselves the requirements of the project including locations of the high mast & constraints in placing the high masts.

However, the tenderers are requested to calculate the number of High Masts, No. of Light Fittings & wattage of fittings required depending upon their own lighting design considering the design parameters stipulated. The Direct and Indirect Glare should be minimum. **The tenderers are also requested to submit his computer-aided lighting design indicating the lux levels available at different grids along with their offer**.

1.4 The tenderer should guarantee the required illumination levels, which will be measured after completion of work. The measurements of illumination level will be done in the presence of the Engineer's representative for the areas indicated in the computer aided design furnished by the tenderer. Any deficiency in the illumination levels will have to be corrected by the tenderer, if required, by providing additional Luminaries, cable etc. The additional cost has to be borne by the Tenderer.

1.5 The tenderer should guarantee the performance of illumination scheme along with material supplied and used for a period of 12 months from date of successful commissioning of the High Masts.

1.6 The successful tenderer should execute the work without hindering the normal functioning of the plant.

1.7 The incoming power supply to the control panel/feeder pillar catering power to High Mast will be given by the plant. The further interconnections, cable required from the control panel outgoings to the High mast is included in the scope of the tenderer. However, all items required for the safe and efficient operation and maintenance of the lighting system, including the high mast, whether explicitly stated in the following pages or not, shall be

included by the tenderer.

1.8 The tenderers are requested to visit the site before quoting to acquaint themselves of site conditions. No extra claims shall be entertained later.

3. Applicable standards:

The following shall be the Reference Standards for the loading of the High Mast :

Sr.no.	**Code No.**	**Title**	Must be fill up by Party (YES/ NO)
a)	I.S. 875 (Part – III, 1987)	Code and practice for design loads (other than Earthquake) for Building and Structures.	
b)	BSEN 10025 / IS 2062	Grades of MS Plates	
c)	BS ISO 1461	Galvanizing	
d)	IS 800 – 1984, Second Revision	Code of Practice for General Construction in Steel	
e)	TR. No. 7 2003 of ILE, UK	Specification for Mast and foundation	

4.0 Specifications of the high mast.

4.1 Dynamic Loading for the Mast

The tenderers should consider the following for the design of the lighting mast towers.

Sr.no.	Requirements	Specification details	Must be fill up by Party
a)	Regional Basic Wind speed	50 m/sec (180 km/hr)	
b)	Gust Factor	1.15 (as specified in IS 875 (Part 3) –1987)	
c)	Topography configuration	To be taken for Plain Area as specified in IS 875 (Part 3) - 1987	
d)	Mean probable design life	25 years	
e)	Terrain Category	Category 1 Class A as per IS 875 (Part 3) - 1987	
f)	Height Variation factor	The values for different heights viz 10m, 15m & 20m depending upon the height of the mast from ground level to be taken from IS 875 (Part 3) – 1987 for the category and class specified.	
g)	Wind Frontage Area	To be calculated by the manufacturer based on the size of their luminaire. To design with minimum one third of the	

		lights facing one direction	

4.2 Structure:

The Lighting Mast shall be of continuously tapered, polygonal cross section, at least 20 sided, presenting a good and pleasing appearance and shall be designed as per TR7, IS 800 & IS 875 Part 3 1987 and other relevant standards to give an assured performance and reliable service. For design of the structure the allowable stresses should be calculated taking into consideration Pt 3.9.4 of IS 800 1984 (amended upto date).

4.3 Construction

The mast shall be fabricated from steel plates conforming to IS 2062 or equivalent, cut and folded to form a polygonal section and shall be telescopically jointed and welded. The mast shall be delivered in 3/6 sections (in view of transportation cost). Each section shall be fabricated out of individual plates duly folded and welded. The dimensions of the mast shall be decided based on proper design and **structural design calculations** for the same would be submitted for verification.(along with Technical bid) At site the sections shall be joined together by slip-stressed-fit method. No site welding or bolted joint shall be done on the mast. The minimum overlap distance shall be 1.5 times the diameter at penetration. The welded connection of the base flange shall be fully developed to the strength of the entire section.

The base flange shall be provided with supplementary gussets between the bolt holes to ensure elimination of helical stress concentration. For environmental protection of the mast, the entire fabricated mast shall be hot dip galvanized, internally and externally having a uniform thickness as per the relevant standards.

4.4 Door Opening

An adequate door opening shall be provided at the base of the mast and the opening shall be such that it permits clear access to equipment like winches, cables, plug and socket, etc. and also facilitate easy removal of the winch. The door opening shall be complete with a heavy-duty double internal lock with special paddle key. The door opening shall be carefully designed and reinforced with welded steel section, so that the mast section at the base shall be unaffected and undue buckling of the cut portion is prevented. Size of door shall be minimum to avoid the buckling of the mast section under heavy wind conditions.

4.5 Lantern Carriage:

4.5.1 Fabrication:

A fabricated Lantern Carriage shall be provided for fixing and holding the flood light fitting and control gear boxes. The Lantern Carriage shall be of special design and shall be of steel tube construction, the tubes acting as conduits for wire, with holes fully protected by grommets. The Lantern Carriage shall be so designed and fabricated to hold the required number of flood light fitting and control gear boxes, and also have a perfect self balance. The Lantern Carriage shall be fabricated in two / three halves and joined by bolted flanges with steel nuts to enable easy installation or removal from the erected mast. The entire lantern carriage shall be hot dip galvanized after fabrication. The inner lining of the carriage shall be provided with protective PVC arrangement, so that no damage is caused to the surface of the mast during raising and lowering operation of the carriage.

4.5.2 Junction Box:

Weather proof junction box, made of cast Aluminum shall be provided on the Carriage Assembly as required, from which the inter-connections to the designed number of the flood light luminaries and associated control gears fixed on the carriage, shall be made.

4.5.3 Raising and lowering mechanism:

For the installation and maintenance of the luminaries and lamps, it shall be necessary to lower and raise the Lantern Carriage Assembly. To enable this, a suitable Winch Arrangement shall be provided, with the winch fixed at the base of the mast the specially designed head frame assembly at the top.

4.6 Winch:

The winch shall be of "Integral Power Tool" type with motor. The winch shall have provision for manual operation in case of failure of the motor. The winch shall be double drum and completely self sustaining type, without the need for brake shoe, springs or clutches. Each driving spindle of the winch shall be positively locked when not in use. The capacity, operating speed, safe working load, recommended lubrication and serial number of the winch shall be clearly marked on each winch.

The winch drums shall be grooved to ensure perfect seat for stable and tidy rope lay, with no chances of rope slippage. The rope termination in the winch shall be such that distortion or twisting is eliminated and at least 5 to 6 turns of rope remains on the drum even when the lantern carriage is fully lowered and rested on the rest pads. It shall be possible to remove the hoisting mechanism after dismantling through the door opening provided at the base of the mast.

The winch shall be type tested at a reputed institution and the test certificate shall be furnished before supply of materials. The test certificate shall include the maximum load operated by the winch.

4.7 Head Frame:

The head frame is to be designed as a capping unit of the mast, shall be of welded steel construction, galvanized both internally and externally after assembly. The top pulley shall be of appropriate diameter, large enough to accommodate the steel wire ropes and the multi-core electric cable. The pulley block shall be made of non-corrodible material, and shall be of die cast Aluminum Alloy (LM-6). Pulley made of synthetic materials such as plastic or PVC are not acceptable. Self-lubricating bearings and steel shaft shall be provided to facilitate smooth and maintenance free operation for a long period. The pulley assembly shall be fully protected by a canopy galvanized internally and externally. The head frame shall be provided with guides and stops with PVC buffer for docking the lantern carriage.

4.8 Stainless Steel Wire Ropes:

The suspension system shall essentially be without any intermediate joint. The steel wire ropes shall be of suitable construction, the central core being of the same material. The overall diameter of the rope shall not be less than 6 mm. The breaking load of each rope shall not be less than 2400 Kg. giving a factor of safety of over 5 for the system at full load as per the relevant standard. The end constructions of ropes to the winch drum shall be fitted with talurit.

The thimbles shall be secured on ropes by compression splices. Three/Four suspension ropes of stainless steel wire ropes shall be used in the system with a provision of compensating disc.

There shall be a separate torque- limiting device to protect the wire ropes from over stretching. It shall be Mechanical with suitable load adjusting device. The torque limiter shall trip the load when it exceeds the adjusted limits. There shall be suitable provision for warning the operator once the load is tripped off. The torque limiter is a requirement as per the relevant standards in view of the over all safety of the system.

4.9 Electrical System, Cable and Cable Connections:

A suitable terminal box shall be provided as part of the contract at the base compartment of the high mast for terminating the incoming cable. The electrical connections from the bottom to the top shall be made by special trailing cable. The cable shall be EPR / PVC insulated and PCP sheathed to get flexibility and endurance. At the top there shall be weather proof junction box to terminate the trailing cable. The system shall have in-built facilities for testing the luminaries while in lowered position. Also, suitable provision shall be made at the base compartment of the mast to facilitate the operation of internally mounted, electrically operated power tool for raising and lowering of the lantern carriage assembly. The trailing cables of the lantern carriage rings shall be terminated by means of specially designed, metal clad, multi pin plug and socket provided in the base compartment to enable easy disconnection when required.

4.10 Lightning finial

One number heavy duty hot dip galvanized lightning finial shall be provided for each mast. The lightning finial shall be minimum 1.2 M in length and shall be provided at the center of the head frame. It shall be solidly bolted to the head frame to get a direct conducting path to the center of the earth through the mast. The lightning finial shall not be provided on the lantern carriage under any circumstances in view of the safety of the system.

4.11 Aviation obstruction lights

Suitable aviation obstruction lights of approved make shall be provided on top of each mast.

4.12 Earthing Terminals

Suitable earthing terminals using 12 mm diameter stainless steel bolts shall be provided at a convenient location on the base of the mast, for lightning and electrical protection of the mast.

4.13 Feeder pillar Panel.

The control panels shall be outdoor type, stand mounted, dust and vermin proof with IP-55 protection. The same shall be fabricated out of 14 SWG CRCA sheet steel. The panels shall be given pre-treatment and powder coated to Seimens Grey colour. The stand shall be painted black with synthetic paint. Cable entry shall be at the bottom. The panels shall have knockouts of the required cable:

Laminated circuit diagram shall be pasted inside of the door. Feeder pillar shall have pad locking arrangement. 2 Nos. earth terminals by 12 mm dia. bolts shall be provided. Panel shall have a sloping cover to avoid accumulation of dust.

The panel shall consist of MCBs and contactors of approved makes and suitable ratings. Timer for automatic ON & OFF of lights with pilot lamps shall be provided and Toggle

Switch for AUTO/OFF/MANUAL mode. Busbars shall be of copper. Any other accessories for the safe and efficient operation of the system shall be included by the tenderer.

5.0 Technical Requirement (Luminaries)

The luminaries shall be long range, high intensity, antiglare, energy saving HPSV/MH flood cum search light, dust, moisture and vermin proof and shall have IP-65 protection. The luminaries should be complete with highly polished mirror finish stainless steel reflector, pilfer proof and captive bolting system, incorporated vibration isolators, toughened front glass of minimum 5 mm thickness, focusing arrangement, neoprene rubber gaskets and steel inserts at threaded portions.

The luminaries should be suitable for use with both tubular & elliptical lamps but should not in any way infringe with performance of the luminaries.

The luminary should be complete with HPSV lamp as per designed rating and its control gear, as laid down in IS:9974 Part-I and Part-II, 1981.

The firm should guarantee for specified level of light from the luminary without decay in illumination of 3% per year for 5 years. If the system is found to have less illumination than specified on any day from the date of installation till 5 years then the firm has to replace/ repair the system free of cost.

5.1 Test Certificate

The flood lights / luminaries should meet the requirements as laid down in IS:10322(Part-5 – Sec. V) and IS 13383, Part-3, 1992. The fittings offered should have type test certificate for all the parameters laid down in relevant IS code. The luminary should have IP:65 protection. The Tenderers shall submit type test certificates for all the parameters laid down in relevant IS codes for the luminaries from a Government Test House having NABL (National Accreditation Board for testing and calibration Laboratories, India) approval.

6.0 Foundation

The foundation shall be as per the drawing approved by the department. Foundation bolts to be suitably covered to prevent corrosion. And to be designed as per soil test.

(2) DG Set

- **260 kVA DG Set along with suitable AMF Panel**

Sr.No.	Description of work
	Sub-head 'A' (Equipments)
1	Providing, Installing, Testing and Commissioning of 'Silent Type' Diesel Generating set Including obtaining of statutory approvals required for installation and operation of DG set. along with having Prime Power Rating of 260 KVA, 415 volts at 1500 RPM, 0.8 lagging power factor at 415V suitable for 50 Hz, 3 phase system & for 0.85 Load Factor and consisting of the followings:

a)	Diesel Engine:
	Diesel engine 4 stroke water cooled, electric start, of suitable BHP at 1500 RPM suitable for above output of alternator at 40 Degree C, 50% RH & at 1000 Meter MSL and conforming to BS 5514, BS 649, IS 10000, capable of taking 10% over loading for one hour after 12 hours of continuous operation. The engine will be fitted complete with all the required accessories. E.g. Fuel piping, Exhorts piping
	Supplied DG Set along with acoustic insulation with fire-redundant acoustic foam to batter the statutory norms of 75 db at 1 meter distance under free field condition.
	ii) Water temperature indication
	iii) Lubrication oil pressure indication
	iv) Lubrication oil temperature indication
	v) Battery charging indication
	vi) RPM indication
	vi) RPM indication
	vii) Over speed indication
	viii) Low lub. Oil trip indication
	ix) Engine Hours indication
	Diesel consumption at (Type test certificate of engine is to be attached). Loading of excess energy consumption shall be done
c)	Alternator :
	Synchronous alternator rated at 260 KVA, 415 volts 1500 RPM, 3 phase 50 Hz, AC supply with 0.8 lagging power factor at 40 Degree C, 50% RH & at 1000 Meter MSL. The alternator shall; be having SPDP enclosure, brushless, continuous duty, self-excited and self-regulated through AVR conforming to IS: 4722/BS 2613 suitable for tropical conditions and with class F/H insulation.
d)	Base Frame & Foundation :
	Both the engine and alternator shall be mounted on suitable base frame made of MS channel with necessary reinforcement which shall be installed on suitable cement concrete foundation and vibration isolation arrangement as per recommendations of manufacturer.
f)	Exhaust System :
	Dry exhaust mainfold with Residential exhaust silencer and catalytic convertor
g)	Starting System :
	12V/24V DC starting system comprising of starter motors : voltage regulator and arrangement for initial excitation complete with suitable nos. of batteries (25 plates, 180 Amp. Hour capacity lead acid type) as required as per specifications. Charging of battery set is in scope of bidder.
h)	Accoustic and weather proof enclosure with arrangement for fresh air intake for cooling of the engine & alterenator, extraction, discharging hot air in to the atmosphere as per specifications.
2***	Fabricating, Installing, Testing & Commissioning of control panel, suitable for 260 KVA silent type DG Set complete with relays, timers, set of CTs for metering & protection and energy analyser to indicate currents, phase and line voltages, frequency, power factor, KWH, KVARH & provision for overload, short circuit, restricted earth fault, under frequency, control cabling from panel to diesel engine and elsewhere if required, all complete and inter locking including the following.
a)	1 Nos, 600A 4 pole MCCB with Thermo magnetic relay, microprocessor relay, auxiliary switch and alarm switch. (Panel Drawing to be attached with Bid)
b)	Auto/Manual/Test/Off selector switch
c)	2 Nos. over voltage relay, 2 Nos. reverse power relay and 2 Nos. under voltage relay.
d)	3 Sets of current transformers 15 P 10 accuracy for protection and 15 VA class-I for metering.
e)	Energy analyser unit to indicate current voltage frequency power factor and KWH.
f)	Indicating lamps for load on mains and load on set
g)	Fuse for instruments

h)	Battery charger, complete with transformer/rectifier, D.C. voltmeter and ammeter, selector switch for trickle, off and boost and current adjustment.
i)	Main supply failure monitor
j)	Supply failure timer
k)	Restoration timer
l)	Control unit with three impulse automatic engine start/stop and failure to start lockout.
m)	Impulse counter with locking and reset facility.
n)	ON/OFF/Control circuit switch with indicator
o)	Audio/Video annunciation for :
	i) High water temperature
	ii) Low lubricating oil pressure
	iii) Engine over speed
	iv) Engine fails to start
	v) Full load/maximum load warning
3	Supplying and fixing exhaust gas piping of suitable dia. Welded black MS, B Class pipe conforming to IS:3589 cut to required lengths and installed with necessary bends, supports and clamps, anti-vibration mountings, insulation of exhaust system with mineral wool/Rockwool, 50mm thick wiremesh and aluminum cladding etc. as required as per specifications.
	Total of Sub-head 'A'
	Sub.Head 'B'
9	Copper cable suitable for interconnector of DG set with panel
	Total of Sub-head 'B'
	Sub-head 'C' Earthing
1	Earthing with GI/ earth plate 600mmx600mmx6mm/600mmx600mmx3mm thick** including accessories, providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required.
3	Providing and Fixing 25mm x 5mm GI/Copper strip** in 40mm size medium class G.I. Pipe from earth electrode in ground, as required.

- **Two Nos of 100kVA DG Set along with AMF Panel**

Sr.No.	Description of work
	Sub-head 'A' (Equipments)
1	Providing, Installing, Testing and Commissioning of 'Silent Type' Diesel Generating set Including obtaining of statutory approvals required for installation and operation of DG set. along with having Prime Power Rating of 100 KVA, 415 volts at 1500 RPM, 0.8 lagging power factor at 415V suitable for 50 Hz, 3 phase system & for 0.85 Load Factor and consisting of the followings:
a)	Diesel Engine:
	Diesel engine 4 stroke water cooled, electric start, of suitable BHP at 1500 RPM suitable for above output of alternator at 40 Degree C, 50% RH & at 1000 Meter MSL and conforming to BS 5514, BS 649, IS 10000, capable of taking 10% over loading for one hour after 12 hours of continuous operation. The engine will be fitted complete with all the required accessories. E.g. Fuel piping, Exhorts piping
	Supplied DG Set along with acoustic insulation with fire-redundant acoustic foam to batter the statutory norms of 75 db at 1 meter distance under free field condition.
	ii) Water temperature indication
	iii) Lubrication oil pressure indication
	iv) Lubrication oil temperature indication
	v) Battery charging indication
	vi) RPM indication
	vi) RPM indication
	vii) Over speed indication

	viii) Low lub. Oil trip indication
	ix) Engine Hours indication
	Diesel consumption at (Type test certificate of engine is to be attached). Loading of excess energy consumption shall be done
c)	Alternator :
	Synchronous alternator rated at 100 KVA, 415 volts 1500 RPM, 3 phase 50 Hz, AC supply with 0.8 lagging power factor at 40 Degree C, 50% RH & at 1000 Meter MSL. The alternator shall; be having SPDP enclosure, brushless, continuous duty, self-excited and self-regulated through AVR conforming to IS: 4722/BS 2613 suitable for tropical conditions and with class F/H insulation.
d)	Base Frame & Foundation :
	Both the engine and alternator shall be mounted on suitable base frame made of MS channel with necessary reinforcement which shall be installed on suitable cement concrete foundation and vibration isolation arrangement as per recommendations of manufacturer.
f)	Exhaust System :
	Dry exhaust mainfold with Residential exhaust silencer and catalytic convertor
g)	Starting System :
	12V/24V DC starting system comprising of starter motors : voltage regulator and arrangement for initial excitation complete with suitable nos. of batteries (25 plates, 180 Amp. Hour capacity lead acid type) as required as per specifications. Charging of battery set is in scope of bidder.
h)	Accoustic and weather proof enclosure with arrangement for fresh air intake for cooling of the engine & alterenator, extraction, discharging hot air in to the atmosphere as per specifications.
2***	Fabricating, Installing, Testing & Commissioning of control panel, suitable for 100 KVA silent type DG Set complete with relays, timers, set of CTs for metering & protection and energy analyser to indicate currents, phase and line voltages, frequency, power factor, KWH, KVARH & provision for overload, short circuit, restricted earth fault, under frequency, control cabling from panel to diesel engine and elsewhere if required, all complete and inter locking including the following.
a)	1 Nos, 300A 4 pole MCCB with Thermo magnetic relay, microprocessor relay, auxiliary switch and alarm switch. (Panel Drawing to be attached with Bid)
b)	Auto/Manual/Test/Off selector switch
c)	2 Nos. over voltage relay, 2 Nos. reverse power relay and 2 Nos. under voltage relay.
d)	3 Sets of current transformers 15 P 10 accuracy for protection and 15 VA class-I for metering.
e)	Energy analyser unit to indicate current voltage frequency power factor and KWH.
f)	Indicating lamps for load on mains and load on set
g)	Fuse for instruments
h)	Battery charger, complete with transformer/rectifier, D.C. voltmeter and ammeter, selector switch for trickle, off and boost and current adjustment.
i)	Main supply failure monitor
j)	Supply failure timer
k)	Restoration timer
l)	Control unit with three impulse automatic engine start/stop and failure to start lockout.
m)	Impulse counter with locking and reset facility.
n)	ON/OFF/Control circuit switch with indicator
o)	Audio/Video annunciation for :
	i) High water temperature
	ii) Low lubricating oil pressure
	iii) Engine over speed
	iv) Engine fails to start
	v) Full load/maximum load warning

3	Supplying and fixing exhaust gas piping of suitable dia. Welded black MS, B Class pipe conforming to IS:3589 cut to required lengths and installed with necessary bends, supports and clamps, anti-vibration mountings, insulation of exhaust system with mineral wool/Rockwool, 50mm thick wiremesh and aluminum cladding etc. as required as per specifications.
	Total of Sub-head 'A'
	Sub.Head 'B'
9	Copper cable suitable for interconnector of DG set with panel
	Total of Sub-head 'B'
	Sub-head 'C' Earthing
1	Earthing with GI/ earth plate 600mmx600mmx6mm/600mmx600mmx3mm thick** including accessories, providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required.
3	Providing and Fixing 25mm x 5mm GI/Copper strip** in 40mm size medium class G.I. Pipe from earth electrode in ground, as required.

(3) SUPPLY TESTING, AND ERECTION OF 50 KVA LIGHTING TRANSFORMER

GENERAL TECHNICAL SPECIFICATION AND MAKE OF PHASE TO PHASE TRANSFORMER:

A General

1) Insulation : in door in CSS
2) Service : Continues
3) Type of cooling : Air cooled with fully resin cast
4) Ambient Temperature : Max. 50 deg.C
5) Allowable Temp.rise : Winding, Max.90 deg.C
6) Frequency : 50 Hz
7) Phase : 3
8) Voltage ratio : 415/230 Volt with mid neutral earthed
9) Rating in KVA : 50 KVA
10) Cable entry : suitable of supplied CSS

B Tap Changer

1) Tapping : Primary Side
2) Tap Changer : Off circuit breaker
3) Tapping range : -5% to +5% in steps of 2.5%

C. Terminal Arrangement

1) Primary : Top of transformer
2) Secondary : Top of transformer

D. Fitting to be provided with transformers

1) Rating & Diagram plate : 01 Nos
2) Earthing terminals : 02 Nos
3) Lifting hook : 02 Nos
4) Bi-directional plain roller : 04 Nos

5) Primary & secondary bushing: 1.1 KV Class

(4) **Design, Supply, Installation, Testing and commissioning of NGR for 11KV/415 V Transfromer.**

Technical Specification:

DETAIL SPECIFICATION OF OUT DOOR WEATHER PROOF NGR PANEL
Fabrication, supply, erection & commissioning of NGR panel with 450 mm high Stand and rain water protection canopy suitable for restricting 750 mA leakage Current at voltage level 430 v of the transformer
Ni-Cr Wire Wound Type NGR in Sheet Steel / Weld Mesh Enclosure having following brief Technical particulars:-

1- Rated Voltage: 433/√3 Volt.
2- Rated Current: 750 mlAmp.
3- Rated Resistance: 330 Ohms
4- Time Rating **:** 30 Sec.
5- Temperature Rise **:** 375 Deg. C.
6- Location: Outdoor.
7- Tolerance: + / - 10 %
8- Degree of Protection: IP – 23
9- Applicable Std. **:** IEEE – 32 Std.
10- With 1 No. Resistor Monitoring Relay.
& with 1 No. Earth Leakage Relay.
11- Max. Approx. Overall Dimensions L X B X H in mm
850 X 800 X 655
12- Terminal Bushing for Item No. 1

(5) SUPPLY AND ERECTION OF LIGHTING DB PANEL

SUPPLY AND ERECTION OF LIGHTING DB PANEL				
Description	**Unit**	**QTY**		

125 AMP. OUT DOOR TYPE FOR LIGHTING SUPPLY PDB PANEL WITH SUITABLE STAND BY M.S. CHANEL- 2 FEET HEIGHT.	**Nos.**	**4**		

THE LGHTING SUPPLY PDB SHALL CONSIST OF FOLLOWING:-

(A) INCOMER FEEDER

125 A FP MCCB WITH MICROPROCESSOR BASED O/L (SETTIN RANGE STEP 0.4 TO 1%), S/C Release & Shunt Release 230V AC [35KA]
WITH

(1) ELR(SETTING RANGE STEP 0.1 TO 30 AMP.) WITH CBCT, AUX. SUPPLY PHASE TO PHASE 230 V AC.

(2) VOLT METER RANGE (O -300 V) WITH 3 PHASE SELECTOR SWITCH, VOLT METER SIZE 96 X96 MM.

(3) A METER RANGE (O – 200A) WITH 3 PHASE SELECTOR SWITCH CT OPERATED RATIO 125/5 , SIZE 96 X96 MM.
WITH NECESSARY ALL CONTROL FUSEWITH LINK AND INDICATION LAMP.

(B) OUTGOING FEEDER

(1) 63 A TP MCCB - **2 NO.**

WITH MICROPROCESSOR BASED O/L (0.4 TO 1%), S/C Release & Shunt Release 230V AC [35KA]

(a) ELR (SETTING RANGE STEP 0.1 TO 30 AMP.) WITH CBCT, AUX. SUPPLY 230 V AC.

(b) AUTOMATIC LIGHT CONTROL SWITCH (PHOTOCELL) WITH THREE POLE 40 AMP. POWER CONTACTOR. COIL SUPPLY 220 V A.C. ONLY. WITH ALL ACCESSARY

(2) 32 A TP MCCB – **4 NOS**.

WITH MICROPROCESSOR BASED O/L (0.4 TO 1%), S/C Release & Shunt Release 230V AC [35KA]

(a) ELR (SETTING RANGE STEP 0.1 TO 30 AMP.)WITH CBCT, AUX. SUPPLIES 230 V AC.

(b) AUTOMATIC LIGHT CONTROL SWITCH (PHOTOCELL) WITH THREE POLE 32 AMP. POWER CONTACTOR. COIL SUPPLY 220 V A.C. ONLY. WITH ALL ACCESSARY

(3) 16 DP MCB – **4 NOS**.

GENERAL TECHNICAL SPECIFICATION .

lighting supply PDB panel suitable for outside application with suitable stand by M.S. Channel- 2 feet height. Metal clad switchgear with base frame double front type, Modular construction with fixed type module, having degree of protection of IP-55 With double door construction, 440/230 volts (phase to phase 230 volts), 3 phase, 4 wire Distribution board (with heat shrink & colour coded insulated sleeved, aluminum bus bar) suitable for bottom entry of cables. The PDB panel shall be designed to withstand 50 KA Amp. For 01 second. Outgoing supply cable connector shall be suitable for aluminium cable size 16, 35, 70sq.mm (terminals Elmex only. –with nut-bolt only, suitable for above cable size).

Note-(1) Re-Set and testing of ELR push-button arrangement shall be on front Side of Panel only.

(2) Shunt release and all control and indication supply shall be suitable Phase to phase 230 V Only.

(3) All MCCB operate only front side (one side) of panel

(4) Cable gallery space shall be sufficient for easy and safe out going cable Connection.

Earthing shall be provided as per Regulation,2010.

General :-

1) LT DIST. PANEL ROUTING TEST CERTIFICATE, VOLTMETER/ AMETER CALIBRATION TEST CERTIFICATE.
2) CONTROL WIRING DIAGRAME.
3) FEBRICATION DRG. OF PANEL SHOULD BE APPROVED BEFORE MFG. OF PANEL.
4) INSPECTION & TESTING WORK SHOULD BE CARRIED OUT IN PRESENCE OF GMDC ENGINEER.
5) PANEL SHALL BE SUITABLE FOR OUTDOOR APPLICATIONS (IP55)
6) CONSTRUCTION OF PANEL SHALL BE 2MM / 1.6MM. CRCA SHEET
7) PANEL SHALL BE POWDER COATED WITH SIEMENS GRAY RAL 7032 SHADE
8) CABLE ENTRY SHALL BE BOTTOM
9) BUSBAR SHALL BE ALUMINIUM
10) SYSTEM 3P, 4W, 230/415V, 50HZ
11) SUITABLE MS STAND- 2 FEET HEIGHT.

HT Panel :-

Vacuum Circuit Breaker shall be incorporated in H.T. Panel wherever specified. VCB's shall conform to IEC 298 and 694 IS 3427, BS 5227 and VDE 0670, part 6 as well as the regulations mentioned therein. VCB's shall be suitable for operation on 11kV, 3 phase, 50Hz, AC supply.

The metal clad panel shall be fully extensible and compartmentalized to give.

i) Circuit Breaker Compartment
ii) Busbar Compartment
iii) CT and Cable Compartment

The compartments shall be safe to touch and compartments thus formed shall be dust proof & vermin proof. A separate metering chamber for fixing the necessary instrumentation metering and protective equipment shall be mounted on the top and bottom of the panel at the front.

The VCB shall consist of three air insulated poles incorporating mechanism of interrupters. The body of interrupters shall be made of nickel chromium steel supported on insulators made out of metalized aluminum oxide. The contacts shall be of chromium copper and butt shaped.

Vacuum circuit breaker shall be mounted on truck or a carriage mechanism. In case of truck mechanism, the breaker shall be on a trolley while in a carriage mechanism, shall be separate door and it shall be possible to perform all operations with front door closed. The draw out carriage shall have two positions for the circuit breaker viz isolated/test & service position. Bus bars shall be insulated type made of high conductivity copper(Copper conductivity should be greater than or equal to 95% in all cases) supported on cast epoxy mono bloc designed to withstand full short circuit currents and shall be provided all along the length of the H.T. board.
It shall be horizontal isolation, horizontal draw out type, fully interlocked, with dust and vermin proof construction, suitable for indoor installation. The panel shall be supplied with the manufacturer's test certificates.

The switchgear constructions shall be such that breaker operation and internal explosions do not endanger the operating personnel, and the front of the panel shall be specially designed to withstand these. Pressure relief flaps shall be provided for

safely venting out gases produced inside the high voltage compartment, bus bar compartment and termination compartment. These flaps shall be vented upwards and cannot be opened from outside. These relief flaps shall be of such construction as not to permit ingress of dust/water in harmful quantities under normal working conditions. Enclosure shall be constructed with sheet steel of at least 2.0mm thickness. It shall have a rigid, smooth, leveled, flawless finish.

On the incoming breaker panel, a 50VA burden and Class I accuracy potential transformer 11kV/□3 /110V/□3 with LT fuses shall be provided. These shall be three single-phase PTs cast resin insulated type. Adequate space at the rear of the panel shall be provided for termination of power & control cables. The panel shall be provided with suitable terminating arrangement for termination of cables.

Safety shutters shall be provided to cover up the fixed high voltage contacts on bus bar and cable sides when the carriage is moved to Isolated/Disconnected position. The shutters shall move automatically with the movement of the draw out carriage. It shall, however, be possible to open the shutters of bus bars side and cable side individually.

Mechanically operated circuit breaker auxiliary switches of minimum 4 NO + 4 NC ways(Or as per requirement), shall be provided for control and indication purposes. Control wiring shall be done by 1.5 sq. mm; 1.1kV grade stranded copper PVC insulated cable. All control fuses shall be HRC link type.

Terminal blocks shall be clamp type suitable for connection of only 2 wires per terminal and shall be 650 V grade. The L.T. control circuit shall be routine tested to withstand 1.5kV for one minute.

Busbar compartment shall be provided at the rear. Electrolytic copper busbars shall be of rectangular cross section and insulated and covered with standard sleeve. Busbars shall be supported properly by cast epoxy resin insulators so as to withstand thermal and dynamic stresses during system short circuits. Busbars shall be provided with necessary color coding for phases indication. The busbars shall be designed to withstand a temperature rise of 60 deg. C above and ambient temperature of 50C.

Contact surface at all joints shall be properly cleaned and No-oxide grease applied to ensure an efficient and trouble free connections. All bolted joints shall have necessary washers for maintaining adequate contact pressure. All connection hardware shall have high corrosion resistance.

Busbar insulators shall be of track-resistance, high strength, and nonhygroscopic, non-combustible type & shall be suitable to withstand stresses due to over voltages and short circuit current. Busbar shall be supported on the insulator such that the conductor expansion and contraction are allowed without straining the insulators. The temperatures of the busbars and all other equipments, when carrying the rated of relevant Indian Standards, duly considering the specified ambient temperature.

EARTHING AND PROTECTIVE EARTHING

Copper earthing bus shall be provided. It shall be bolted/ welded to the framework of each panel. The earth bus shall have sufficient cross time fault currents to earth without exceeding the allowable temperature rise. Suitable arrangement shall be provided at each end of the earth for bolting. Earthing conductors and earth bus shall run inside at the back of the panel for entire length. Facilities shall be provided for integral earthing of busbars & feeder.

Maintenance free Earthing with Copper plate 600mmX600mmX3mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. , having soil treatment material(but without charcoal or coke and salt) complete as per general specifications for electrical works Part-1, Internal - 2005 and IS:3043- 1987. Earthing shall be continuously less than 2 ohms throughout the Warrantee period. Copper plate should have conductivity greater than 95%.

Providing & Fixing 25mm x3mm copper strip in 40mm X 5mm size medium class G.I.Pipe from earth electrode in Ground to desired equipments/panel, as required.

Copper strip should have conductivity greater than 95%

METERING AND PROTECTION

The VCB Panel Board shall be provided with epoxy resin current transformers for metering and protection. The CT's shall conform in all respects to IS 2705. These shall have accuracy class of 1.0 for metering of 5P10 for protection. Potential transformers shall conform to specifications of IS: 3156. Ammeter and voltmeter to be installed on panel shall be of Digital type. All meters shall be tested for phase to phase isolation of 2000V for 1 minute, input overload withstanding of 1000V for 5 second, and shall be 96mm square pattern, flush mounting type with necessary selector switches. Necessary indicating lamps of low voltage type with built in resistors shall be provided (maximum wattage 2.5W).

OPERATING MECHANISM

Vacuum Circuit Breaker shall be equipped with motorized spring charge. These operating mechanisms shall be of the stored energy type. In the closed state of the breaker, the energy stored in the springs shall be suitable for O-C-O duty. Interlocking and Safety Arrangement Vacuum Circuit Breaker shall be provided with the following safety and interlocking arrangements:

a. The draw out carriage cannot be moved from either test/disconnected to service position or vice versa, when the circuit breaker is 'On'.

b. The circuit breaker cannot be switched 'ON' when the carriage is in any position between test & service position.
c. The front door of the panel cannot be opened when the breaker is in service position or in an intermediated position.
d. The low voltage plug & socket cannot be disconnected in any position except test/isolated position.
e. The door cannot be closed unless the LV plug has been fitted.
f. It shall be possible to mechanically close and trip the circuit breaker through push buttons with the circuit breaker in service position and the door closed.
g. Individual explosion vents shall be provided for breaker, busbar, cable chambers on the top of the panel to let out the gases under pressure generated during an unlikely event of a fault inside the panel.
h. Circuit Breaker & sheet metal enclosure shall be fully earthed.
i. Self locking shutters shall be provided which close automatically and shall be interlocked with the movement of the draw out carriage mechanism.

The rating of the vacuum circuit breaker shall be as per Bill of Quantity. The rated/breaking capacity of the breaker shall be 250 MVA at 11 kV. The rated making capacity shall be as per the relevant standards.

Circuit Breakers shall be provided with the following accessories.
i. Auxiliary Switch with minimum 4 NO+ 4 NC auxiliary contacts.
ii. Tripping Coil
iii. Mechanical Operation Counter
i v. Spring Charging Handle

Additional Accessories
The loose items to be supplied with the 11kV VCB Panel Board shall comprise of the following:
i. Instruction Book.
ii. Maintenance Manual.
iii. Reaching in/out handle.
iv. Handle for spring charging mechanism.
v. Foundation bolts.
vi. Busbar Earthing & Circuit Earthing Trolley

Mounting Vacuum Circuit Breakers shall be mounted as per manufacturer's standard practice.

Auxiliary Supply

The tripping shall be at 24 Volt D.C. through a power pack unit. Space heater indication & other auxiliary supply requirement shall be at 230 V AC. Necessary

termination arrangements complete with isolating switch, control fuse & link shall be provided at one place in the panel for receiving the purchaser's cable.

TESTS

Factory Tests :-

The circuit breakers/panel shall be subjected to routine tests at manufacturer's works in accordance with the details specified in the relevant IS specifications. NO panel/equipment will be accepted witout factory acceptance test(FAT) These shall however necessarily comprise of the following.

a. Power frequency voltage test on the main power circuit.
b. Verification of the correct wiring/Functional Test.
c. Dielectric test at 1.5kV on the control circuit. Apart form above, the vendor shall submit the routine test certificates for the following equipments:
i. Circuit Breakers
ii. Current Transformers
iii. Voltage Transformers

The vendor shall submit the type test certificate for following along with the offer.

a. Temperature rise test.
b. Impulse & power frequency voltage test
c. Short time current test on circuit breaker.

Site Test :-

i. General

a.Verification for completion of equipment, physical damage/deformities.
b.Alignment of panel, interconnection of busbars & tightness of bolts & connection etc.
c. Interconnection of panel earth busbar with plant earthing grid.
d. Inter panel wiring between transport sections.
e. Cleanliness of insulators and general Cleanliness of panel to remove traces of dust, water etc.

Circuit Breaker & Panel

a.Check for free movement of circuit breaker, lubrication of moving part & other parts as per manufacturers manual.
b.Manual/Electrical operations of the breaker and Functional test as per requirement.
c. Meggar before the Hi Pot test.
d.H.T. Test - Hi Pot test (Power frequency withstand test for one minute at 28kV RMS). At site Hi Pot test is carried out at 80% of 28kV RMS value.
e. Meggar after the Hi Pot test.
f. CT/PT ratio/polarity primary injection test.
g. Secondary injection test on relays to practical characteristics

LT Panes :-

(1)LT Distribution panel switchyard near Project office . (100kVA SS)

Panel incomer consisting of voltmeter, ammeter with selector switch and static energy meter. incomer with 250 Amp. MCCB (35 kA) with microprocessor based relay with all protection and same shall be mounted on front side of the panel. Re-set and testing of microprocessor based relay push-button arrangement shall be on front side of Panel only

Outgoing :- panel with 6 nos of outgoing feeder with MCCB , on/off indication lamp

I. Outgoing -1 with 160 Amp. RCBO
II. Outgoing-2 with 100 Amp RCBO
III. Outgoing-3 and 4 with 63 Amp. RCBO
IV. Outgoing -5 and 6 with 50 Amp. RCBO

modular construction with fixed type module, having degree of protection of ip-65 with double door construction, 440 volts, 3 phase, 4 wire distribution board (with heat shrink & color coded insulated sleeved, aluminum bus bar) suitable for bottom entry of cables

(2)LT Distribution panel switchyard near weighbridge area. (100kVA SS)

Panel incomer consisting of voltmeter, ammeter with selector switch and static energy meter. incomer with 250 Amp. MCCB with microprocessor based relay with all protection and same shall be mounted on front side of the panel. Re-set and testing of microprocessor based relay push-button arrangement shall be on front side of Panel only

Outgoing: - panel with 6 nos of outgoing feeder with MCCB, on/off indication lamp

I. Outgoing -1, 2 and 3 with 50 Amp. RCBO
II. Outgoing-4 with 100 Amp RCBO
III. Outgoing-5 with 160 Amp. RCBO

IV. Outgoing - 6 with 80Amp. RCBO

modular construction with fixed type module, having degree of protection of ip-65 with double door construction, 440 volts, 3 phase, 4 wire distribution board (with heat shrink & color coded insulated sleeved, aluminum bus bar) suitable for bottom entry of cables

(3)LT Distribution panel weighbridge . (100kVA SS)

Panel incomer consisting of voltmeter, ammeter with selector switch and static energy meter. incomer with 100 Amp. MCCB with microprocessor based relay with all protection and same shall be mounted on front side of the panel. Re-set and testing of microprocessor based relay push-button arrangement shall be on front side of Panel only
Outgoing: - panel with 4 nos of outgoing feeder with MCCB, on/off indication lamp

V. Outgoing -1 with 80 Amp. RCBO
VI. Outgoing-2 with 50 Amp RCBO
VII. Outgoing-3 with 100 Amp. RCBO
VIII. Outgoing – 4 with 80Amp. RCBO

modular construction with fixed type module, having degree of protection of ip-65 with double door construction, 440 volts, 3 phase, 4 wire distribution board (with heat shrink & color coded insulated sleeved, aluminum bus bar) suitable for bottom entry of cables

SUPPLY AND ERECTION OF ERTHING PIT and system WITH ACCESSARIES				
Description	**Unit**	**QTY**		
SUPPLY AND ERECTED EARTHING PIT WITH SAFE EARTHING ELECTRODE. AND HOT DEEP G.I. STREEP , SIZE 40 X 5MM	**Nos.**	**As required**		
SUPPLY AND ERECTED HOT DEEP G.I. STREEP , SIZE 40 X 5MM	**KG**	**As required**		

SUPPLYING OF APPROVED MAKE SAFE EARTHING ELECTRODE CONSISTING PIPE -IN-PIPE TECHNOLOGY AS PER IS 3043-1987 MADE OF CORROSION FREE G.I. PIPES HAVING OUTER PIPE DIA OF 50 MM HAVING 80-200 MICRON GALVANISING , INNER PIPE DIA OF 25 MM HAVING 200-250

MICRON GALVANISING ,CONNECTION TERMINAL DIA OF 12 MM WITH CONSTANT OHMIC VALUE SURROUNDED BY HIGHLY CONDUCTIVE COMPOUND WITH HIGH CHARGE DISSIPATION SUITABLE FOR ELECTRICAL INSTALLATION UP TO 11 KV IN NORMAL SOIL. LENGTH OF PIPE : 3.00 MTRS. BACK FILLING COUMPOUND: 2 NO. BAG OF 25 KG

Bidder should provide identification on each earth pit for its function and purpose and equipment it is for.

SUPPLY AND ERECTION OF – HT/LT CABLE WITH ACCESSARIES

- 1.1Kv grade, stranded H2 grade Aluminum (As per requirement) conductor, XLPE insulated, color coded, laid up, extruded thermoplastic inner sheathed, GI wire double armored, overall FRLS PVC sheathed cable of size as per requirment.

- The PVC compound used for outer sheath shall be resistant to termites, fungus and rodent attacks and shall have in addition. The properties mentioned above and shall pass through the following factory test

1. Type test as per IS: 7098 (Part-I)—88 ISI

2. Acceptance test in respect of each length of cable as per IS: 7098 (Part-I)

3. Routine tests in respect of each length of cable as per IS: 1554 (Part-I)

4. Flammability test

5. Smoke generation test by sheath under fire:

   When tested as per ASTMD 2843. The cable shall meet the requirement of minimum 40% light transmittance. However, performance shall be given for higher values.

6. Oxygen Index
   The oxygen index when tested under ASTM D 2863 shall be minimum 29

7. Acid Gas Generation Test

   When tested as per IEC 754-1, the Maximum acid gas generated should not be more then 20% by weight.

- Marking on length shall be at every meter interval on the outermost PVC sheath of cable.
- The cable shall be supplied in non-returnable wooden drums of heavy construction. The standard length of each size of cable on a drum shall be 500 M ± 5% except in the case of final length of cable. Which could be as per actual requirement at site.

ISO 9001: 2008

Annexure—D

DECLARATION –I
(On Company's letterhead)

Letter No. Date

From:

To,
THE MANAGING DIRECTOR,
GUJARAT MINERAL DEVELOPMENT CORPORATION LTD.,
"KHANIJ BHAVAN",132 FT. RING ROAD,
UNIVERSITY GROUND,
AHMEDABAD-380 052.

SUB: -

Dear Sir/ madam,

I/we have carefully gone through and clearly understood the Tender Notice and Tender Form and have tendered to execute and satisfactorily complete the whole of the work strictly in accordance with the said Tender Form.

I/we hereby solemnly declare that any of our partners severally and/or individually or our firm/company have not been put any time in the past on the black list either by the Government of India/Government of Gujarat/Government of India Undertaking / Government of Gujarat Undertaking/Any other State Government Undertaking. I/we hereby further agree that if the Corporation come to know subsequently, after awarding the work under this tender to me/us to our firm/our company that any of our partners either individually or severally, or our firm/company was black listed by any of the states agencies, the Corporation shall be entitled to take any actions against us severally or individually or our firm/company in this regard in any manner that may be deemed fit by the Corporation.

Yours faithfully,

Signature & Stamp of the Tenderer

Name: _____

ISO 9001: 2008

Address: _____

Annexure—E

DECLARATION -II
(On Company's letterhead)

Letter No. Date:

From:

To,
THE MANAGING DIRECTOR,
GUJARAT MINERAL DEVELOPMENT CORPORATION LTD.,
"KHANIJ BHAVAN",132 FT. RING ROAD,
UNIVERSITY GROUND,
AHMEDABAD-380 052.

SUB: -

Dear Sir/ Madam,

I/we having carefully gone through and clearly understood the Introduction, Tender Notice, documents to be enclosed and sent along with this tender, plans, specifications, conditions of contract etc. for the above mentioned work, do hereby tender to execute and complete the whole of the work strictly in accordance with the said plans and specifications and conditions of contract at the rates set out in the priced schedule and quantities attached hereto.

I/we have deposited as Earnest Money Rs. _____ (Rs. _____) by demand draft in your office which amount is not to bear any interest and I/we do hereby agree that this sum shall be liable to be forfeited by the Corporation at its sole discretion, in the event of your accepting my/our tender and I/we fail to execute the contract, when called upon to do so.

It is understood by me/us that the lowest or any tender will not necessarily be accepted and that no reasons shall be given for such non-acceptance.

I/we agree to keep our offer open for 120 days or for a further period as would be desired by the Corporation from the date of opening of the tender. We agree to all the terms and conditions of the tender.

Yours faithfully,

Signature & Stamp of the Tenderer

Name: _____

Address: _____

ISO 9001: 2008

Annexure—F

ARTICLES OF AGREEMENT

(DRAFT)

(NOTE: These Articles of Agreement shall be signed by the successful Tenderer (contractor) and the GMDCs on a Non-Judicial Stamp Paper of Rs.100/-; the Stamp Paper shall be bought by the Contractor).

ARTICLES OF AGREEMENT made at _____ on this _____ day of _____ BETWEEN _____ (hereinafter referred to as the GMDC which expression shall include his heirs, executors, administrators and assignees) of the one part and _____ (hereinafter referred to as the "Contractor" or the "Tenderer" which expression shall include his heirs, executors, administrators and assignees) of the other part.

WHERE AS the GMDC is desirous of constructing/Executing the work and have caused drawings, Specifications and Bills of Quantities describing the work to be done, to be prepared by or under the guidance and WHEREAS the said Tender Documents (as detailed in Para 13 of Instructions to Tenderers) inclusive of the Specifications and the Priced Bills of Quantities have been signed by or on behalf of the parties hereto, and WHEREAS the Contractor has agreed to execute upon and subject to the conditions set herein, the works shown upon the "said drawings" and described in the "said Specifications" and the "said Priced Bills of Quantities" (all together hereinafter referred to as "The Conditions"). AND WHEREAS the Contractor has submitted the Initial security deposit of Rs._____ (Rupees: _____ only) in the form of Cheque/DD/B.G.

NOW IT IS HEREBY AGREED AS FOLLOWS:

1 In consideration of the payment to be made to the contractor as hereinafter provided, he shall upon and subject to the said conditions execute and complete the works shown upon the said drawings and described by or referred to in the said Specifications, the Priced Bills of Quantities and such further detailed drawings and/or instructions as may be furnished to him by the GMDC/Consulting Engineer.

2 The GMDC shall pay the Contractor such sums as shall become payable to him in terms of the Conditions at the time and in the manner specified in the Conditions.

3 The terms Engineer in charge for the purpose of this Contract such other person as shall be nominated for the purpose by the GMDC not being a person to whom the Contractor shall object for reasons considered to be sufficient by the GMDC. Provided always that no person(s) subsequently appointed to be the Engineer in charge under this Contract shall be entitled to dis-regard or overrule any decision or approval or direction given or expressed in writing by the (previous) Architect/Consulting Engineer/Engineer for time being.

4 The Contract or the work is as referred to in Para of Instructions to Tenderers and all other subsidiary works connected herewith within the same site as may be ordered to be done

from time to time by the Engineer in charge for the time being although such works may not be shown on the said drawings or described in the said Specifications or the Priced Bills of Quantities.

5. All disputes arising out of or in any way connected with this contract shall be deemed to have arisen in Ahmedabad and only the Court at Ahmedabad shall have jurisdiction to determine the same.

6 The several parts of this Contract have been read and fully understood by me, the undersigned. IN WITNESS WHEREOF the parties hereto have hereunder set their hands this _____day of _____, 200__.

Signed by the said GMDC
In Presence of

Name: ----------
Address: ----------

Occupation: ----------

Signed by the said Contractor
In Presence of

Name: ----------
Address: ----------

Occupation: ----------

ISO 9001: 2008

Annexure—G

Indemnity declaration form
(On letter head of the bidder)

UNDERTAKING

Ref. No. DATE:

To,
The MANAGING DIRECTOR,
M/S. GUJARAT MINERAL DEVELOPMENT CORPORATION LTD,
"KHANIJ BHAVAN", 132, FT. RING ROAD,
NR. UNIVERSITY GROUND, VASTRAPUR,
AHMEDABAD–380 052.

Dear Sir,

We M/s_____ hereby undertake that, we shall at all times, indemnify and keep indemnified that GMDC Limited from any and all liability for damages resulting from or arising out of or in any way connected with the operations covered by the tender No GMDC: . We shall be responsible for all risk arising in connection with or on account of the operations covered by the contract covered by above tender and shall make good all losses and damages arising there from. In case, the GMDC Limited shall incur any cost or expense or suffer any loss on account of any claim demand or course of action brought against us and arising out of the operation covered by the Bidder/ Tenderer, the GMDC Limited shall have the power (Without being bound to do so) to define, contest or compromise any such claim demand or cause of action. Any amount that may become payable by GMDC Limited and any cost expense etc. that may be incurred by GMDC Limited in this behalf, shall also be recoverable from us, without prejudice to your other rights.

Yours Faithfully,
For_____

SEAL & SIGNATURE OF AUTHORITY

ISO 9001: 2008

Annexure—H

To be typed on Stamp Paper of Rs. 100.00 Same format for both the orders.

BANK GUARANTEE FOR SECURITY DEPOSIT

BG No. _____ For Rs._____

IRREVOCABLE BANK GUARANTEE

This deed of Guarantee is made this day _____ between Gujarat Mineral Development Corporation Limited having registered office at Khanij Bhavan, Near University Ground, Behind Gandhi Labour Institute, 132ft Ring Road, Vastrapur, Ahmedabad- 380 052 (India) hereinafter called Corporation and (Bankers) _____ for an amount of Rs. _____(Rupees _____) for and on behalf of M/s._____ having registered office at _____ hereinafter called Contractor/Vendor/Agency. (Which expression shall unless excluded by or repugnant to the context, included its successors and assigns of the concerned Parties.)

The Corporation entered in to contract with the contractor and issued tender No._____ to them, a Purchase/Work Order for the supply/work of _____ for the GMDC Site / Project/ Office_____ as per terms and conditions contained in Tender No. _____ L.O.I/Purchase/Work Order No. _____ dated _____ and whereas clause No. _____ of the said contract Provided that the Contractor/Vendor/Agency is required to produce a irrevocable Bank Guarantee in favor of the Corporation for sum of Rs. _____ (Rupees _____ Only) as Security Deposit for the due performance of the contract.

And whereas at the request of the Contractor/Vendor/Agency, the Bank has agreed to execute this guarantee.

IT IS HEREBY AGREED AND DECLARED BY THE BANKERS HERETO AS FOLLOW :

1). The Bank hereby guarantee to the Corporation the observance and performance by the Contractor/Vendor/Agency of the various terms and conditions obligations as provided in the said contract and further undertakes to pay to the Corporation a sum of Rs._____ (Rupees _____) on demand and without any demur in the event of the Contractor/Vendor/Agency failing or refusing to perform the various duties and obligations under the said contract or otherwise committed breach of any of the terms and conditions of the said contract and it is hereby declared that the decision of the Corporation that the Contractor/Vendor/Agency has to failed and neglected to perform any of the duties and obligations indicated in the said contract shall be final and binding on the Bank.

2). That the Guarantee herein shall not be affected by any change in the Constitution of the Bank.

3). That the Guarantee shall not be revoked without consent of the GMDC.

4). That the Bank further declares that on completion of the contract, the Corporation may retain such amount of the Guarantee as may be sufficient to cover any incorrect or excess payment made on the bill of the Contractor/Vendor/Agency till the Audit and defect liability period is completed.

5). NOTWITHSTANDING anything contained herein before our liability under this guarantee is restricted to Rs. _____ (Rupees _____ _____).

The Guarantee will remain in force for a period of _____ from the date of LOI/Purchase/Work Order i.e. up to _____ unless a demand or claim is made on us in writing on or before _____ all your rights under this guarantee shall be forfeited and we will be relieved and discharged from all our liabilities therein under.

SIGNATURE & SEAL OF BANKERS

ISO 9001: 2008

Annexure—I

Sr. no.	Details of Bidders to be filliped are as under.	
	Supplier Name (Vendor Name)	
1	URL(Website Name)	
2	Address Line1	
3	Address Line2	
4	Address Line3	
5	Address Line4	
6	City	
7	State	
8	Postal Code	
9	Address Name(Site)	
10	Phone Area Code	
11	Phone Number	
12	Fax Area Code	
13	Fax Number	
14	Email Address	
15	CONTACT PERSON NAME	
16	Mobile no. of Contact Person	
17	VAT NUMBER	
18	CST NUMBER for parties situated outside of gujarat	
19	PAN NUMBER	
20	TAN NUMBER (Optional)	
21	VENDOR TYPE (Material supplier OR service provider?)	
22	Product Code (Please select from the Sheet - Product Code)	
23	Product Code description (Please select from the Sheet - Product Code)	

ISO 9001: 2008

Annexure—J

PROFORMA FOR EARNEST MONEY DEPOSIT
On Tenderer's Letter Head

REF. NO. DATE:

TO,

MANAGING DIRECTOR,
M/S. GUJARAT MINERAL DEVELOPMENT CORPORATION LTD,
"KHANIJ BHAVAN", 132, FT. RING ROAD,
NR. UNIVERSITY GROUND, VASTRAPUR,
AHMEDABAD–380 052.

SUB. : E.M.D. for Tender No.

DEAR SIR,

WITH REFERENCE TO THE ABOVE AND AS PER TERMS & CONDITIONS OF TENDER, WE ARE SENDING HEREWITH D.D./PAY ORDER NO: _____ DATED _____ FOR RS. DRAWN ON _____ BANK _____ BRANCH IN FAVOUR OF M/S. GUJARAT MINERAL DEVELOPMENT CORPORATION LTD. PAYABLE AT AHMEDABAD, BEING THE AMOUNT OF E.M.D.

KINDLY ACKNOWLEDGE THE RECEIPT AND SEND YOUR STAMPED RECEIPT FOR THE SAME.

THANKING YOU,

YOUR'S FAITHFULLY,

Signature & Stamp of the Tenderer

Name: _____

Address: _____

ISO 9001: 2008

Annexure—K

SOLVENCY CERTIFICATE -PROFORMA (If Applicable)

(ON BANK LETTER HEAD)

Date:

This is to state that to the best of our knowledge and information, M/s._____,

a Customer of our Bank is respectable and can be treated as solvent up to a sum of Rs……. (Rupees……).

It is certified that this information is furnished without any risk and responsibility on Bank or its Officers in any respect whatsoever more particularly either as Guarantor or otherwise. This certificate is issued at specific request of the Customer.

Signature & Stamp of the Tenderer

Name: _____

Address: _____

ISO 9001: 2008

Annexure—L

B.G. for an Advance Payment against Supply **On Rs. 100/- Stamp Paper**

Gujarat Mineral Development Corporation Limited,
" Khanij Bhavan ", Near University Ground,
Behind Gandhi Labour Institute, 132ft Ring Road,
Vastrapur, AHMEDABAD – 380 052

Dear Sir,

Guarantee No. :
Amount of Guarantee :
Guarantee cover from : to
Last date for lodgment of claim :

This deed of Guarantee executed by _____ (Bank Name and Address) (hereinafter referred to as the "BANK ") in favour of M/s Gujarat Mineral Development Corporation Limited (hereinafter referred to as the "OWNER") for an amount not exceeding Rs._____ (Rupees_____) at the request of M/s. _____(Name & Address of Contractor)(hereinafter referred to as the "CONTRACTOR").

This guarantee is issued subject to the condition that the liability of the bank under this Guarantee is limited to a maximum of Rs. _____ (Rupees _____) and the guarantee shall remain in full force up to _____(Date of expiry) and cannot be invoked other than by a written demand or claim under this guarantee served on the bank on or before_____(Last date of Claim).

In consideration of the "OWNER" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assign having awarded to the "CONTRACTOR" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assign the LOI/Purchase/ Work Order No. _____ dated _____ Valued at Rs._____ (Rupees_____). The scope of Purchase/Work Order covers _____ etc. at GMDC Site/ Office_____ (hereinafter referred to as "CONTRACT") and the "OWNER" having agreed to make an advance payment against supply to the "CONTRACTOR" for performance of above "CONTRACT" amounting to 10% (Ten Percent) of contract value as an advance against a Bank Guarantee to be furnished by the "CONTRACTOR".

We, _____(Name of the Bank) having its Central/Head Office at _____ the "BANK" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns do hereby irrevocably guarantee and unconditionally undertake to pay to the "OWNER" immediately on first demand any or all money payable by the "CONTRACTOR" to the extent of Rs. _____ (Rupees _____) as aforesaid at any time without any demur, reservations, recourse, contest or protest and/or without any reference to the Contractor. Any such demand made by the "OWNER" on the "BANK" shall be conclusive and binding notwithstanding

any difference between the "OWNER" and the "CONTRACTOR" or any dispute pending before any Court, Tribunal, Arbitrator or any other authority.

"The Bank further agrees that the "OWNER" at its option shall be entitled to enforce this guarantee against the "BANK" as principal debtor in first instance without proceeding against the "CONTRACTOR" and notwithstanding any security or other guarantee the "OWNER" may have in relation to the contractor's liabilities.

Notwithstanding anything contained hereinabove, our liability under this advance payment guarantee is restricted to Rs. _____ (Rupees_____) and comes into force only upon receipt by the "CONTRACTOR" of the advance payment.

This guarantee will automatically be reduced proportionately against progressive invoices relevant to the value of work done and certified by the "OWNER" for the reduced amount and shall remain in force up to _____ unless a claim in writing is received by us before and up to _____, we shall be discharged from the liability under the guarantee.

Notwithstanding anything contained herein:

a) Our liability under this Bank Guarantee shall not exceed Rs._____. (Rupees _____)

b) This Bank Guarantee shall be valid up to _____ and

c) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____.

WITNESS: **BANK STAMP & SIGNATUR**

Signature & Stamp of the Tenderer

Name: _____

Address: _____