Dear Sirs,

Sub: Notice Inviting Tender for supply of Static Exciters suitable for EKG 4.6/5 Shovel

1. Sealed tenders are invited in duplicate only from the proven manufacturers or their exclusively authorized sole selling agents authorized by their manufacturer to offer against this tender for supply of Static Exciter suitable for EKG 4.6/5 M³ Shovel to Areas of BCCL as per detailed specifications enclosed as Annexure – A.

FOR SPARE PARTS

PROVEN MEANS THOSE MANUFACTURERS OR EXCLUSIVELY AUTHORIZED SOLE SELLING AGENT WHO HAVE SUPPLIED TENDERED ITEMS IN PAST TO a) OEM OR b) TO THE MINING INDUSTRY AND / OR TO THE OTHER INDUSTRIES (PRIVATE OR GOVERNMENT / PUBLIC SECTOR UNDERTAKING – INDIGENOUS OR GLOBAL) AGAINST REGULAR (FIRM) ORDER (NOT TRIAL ORDER) PLACED BY COMPANY’S HQ. FOR THIS PURPOSE THE FIRM SHOULD SUBMIT AUTHENTICATED COPY OF SUCH PURCHASE ORDERS RECEIVED BY THEM. HOWEVER, TRIAL ORDERS PLACED BY BCCL CO.HQ MAY BE CONSIDERED IF THE FIRM OBTAINS PROVEN STATUS ON PERFORMANCE BASIS AGAINST SUCH TRIAL ORDERS.

2. The offers are to be submitted before the closing date and time as mentioned above. Late Tenders will not be considered.

3. Tenders may be deposited in person by the tenderer in the Tender Box kept at Tender cell, Purchase Department, Office of the CGM (MM), Bharat Coking Coal Limited, Commercial Block, Level –III, Koyla Bhawan, Koyla Nagar, Dhanbad or sent by post or courier to the above address. Bharat Coking Coal Limited however, does not take any responsibility for loss of tender in transit. Tender must be received on or before the due date and time of submission of tender. Tender received after due date of submission of the tender shall not be considered. No request for relaxation in this respect will be entertained.
4. Tenders sent through telegram, telex, Fax or E-Mail will not be considered.

5. Tender documents/forms purchased by one firm are not transferable to another firm.

6. The tender document is divided into the following parts:
   i) Annexure-A: Technical specification
   ii) Annexure-B: Commercial terms without price.
   iii) Annexure-C: Check List

7. (a) The offers are to be submitted in three parts. The first part “Part- I i.e. Techno-commercial offer” should contain the detailed Technical and commercial terms of the offer. In other words it contains the required details as per annexure A to C as stated at clause 6. However, this should not contain the price. The envelope should be sealed superscribed with the tender number and the date of opening and must mark Part I

(b) The second Part “Part-II i.e. Price Bid” should contain the details of price only. The envelope should be sealed superscribed with the tender number and the date of opening and must mark Part II.

(c) “Part– III” [Applicable for those tenderers who will down load tender documents from our web site]

In this case the intending tenderer must enclose the requisite tender fee as Bank Draft from any schedule Bank drawn in favour of “BHARAT COKING COAL LIMITED” payable at Dhanbad in the “Part – III ” envelope. The envelope shall be sealed, superscribed with tender number and due date of opening and must mark “Part-III”.

All the envelopes containing the tender shall be properly sealed. Envelopes stapled shall not be accepted. The name and address of the bidder must also be indicated on the envelopes. Please note that envelopes stapled shall not be accepted.

All these three sealed envelopes i.e. “Part – I ” [Techno-commercial bid], “Part- II ” [Price bid] and “Part – III ” [Requisite tender fee as indicated in the tender notice] should be kept in a bigger envelope giving details of the tender No. and due date and time of submission and opening along with the name and address of the bidder.

In absence of “Part-III” envelope offer shall be rejected out rightly without any reference for those tenderer who have down loaded the tender documents from our website.

08. Part–I (Techno-commercial Bid) and Part–II (Tender fee) will be opened on the due date of tender opening in presence of the authorised representative of the attending bidders.

NOTE:

a) Tenders not submitted in the above manner will not be accepted.

b) If tenderer disclose their price in the techno-commercial bid (Part-I) , the offer will be re-sealed and will be treated as invalid offer by the Tender opening Committee.

09. The price bids i.e. Part- II of only those tenders whose Part- I is found to be techno-commercially acceptable to BCCL will be opened later on. Date and time of opening will be suitably be intimated to such bidders whose offers are found techno-commercially acceptable.

10. Bharat Coking Coal Limited reserves the right to accept or reject any or all offers in part or in full without assigning any reason thereof. No dispute of any kind can be raised against this right of the buyer in any court of law or elsewhere.

11. Earnest Money:

a) An Earnest money of Rs. 25000.00 (Twenty Five Thousand only) in terms of Bank Draft of any schedule Bank drawn in favour of Bharat Coking Coal Limited payable at Dhanbad must accompany the Part-I(Techno-commercial offer) otherwise offer shall be considered unresponsive.

b) If it is accompany the Part-II(Price bid) , it will be presumed that tenderer did not deposit the requisite Earnest money and their offer shall be considered unresponsive. For unsuccessful tenderer, Earnest money shall be refunded immediately after finalisation of the tender.

12. Security money – Successful tenderers are required to deposit security money in the form of Bank Draft / Bank Guarantee of any schedule Bank for 10% value of the order (value means F.O.R destination price) within 15 days from the date of receipt of order. Bank Draft should be drawn in favour of “Bharat Coking Coal Limited” payable at Dhanbad. In case they fail to deposit the same, the order shall be cancelled and the case shall be processed to order elsewhere and the firm’s performance is to be kept recorded for future dealings with them. The security will be refunded to the firm within 30 days of satisfactory execution of the contract. (Execution of the contract means successfully completion of supply against the order) For unsatisfactory performance and/or contractual failure the security money shall be forfeited. Please note that security money may be converted in to Performance Bank Guarantee wherever required. Please note that validity of Performance Bank Guar
Guarantee shall be as per clause 11(a) of Commercial terms & conditions. Please confirm the acceptance of this clause clearly.

13. State/Central Govt. Organisation /PSU & Valid DGS&D/NSIC registered (for tendered items), firm shall be considered for exemption from submission of EMD/ Security money, if they can submit these documents after duly signed by Notary Public.

14. The bidders must give a declaration that they have not been banned or de-listed by any Government or quasi-Government agencies or PSUs. If any Government or quasi-Government agencies or PSUs have banned a bidder, this fact must be clearly stated and it may not necessarily be a cause for disqualifying them. If this declaration is not given, the bid will be rejected as non-responsive.

15. Bharat Coking Coal Limited reserves the right not to make any procurement against this tender without assigning any reasons.

16. Tenders of those tenderers who suo moto offer different prices or change the terms which affects the quoted price of the firm within the validity of the offer shall be treated as invalid offer ab initio and the action against such tenderer as per CIL rules / procure will be taken.

17. **ALL CONTRACTS WILL BE IN ACCORDANCE WITH THE PREVALENT INDIAN LAW AND ALL DISPUTES ARE SUBJECT TO THE JURISDICTION OF DHANBAD COURT AND JHARKHAND HIGH COURT ONLY.**

**IMPORTANT NOTE:**

(i) The tenderers are requested to go through all the Annexure and furnish specific replies to each question raised therein.

(ii) Printed terms and conditions of the vendor shall not be considered. Tenderers are requested to submit their offer complete in all respects maintaining serial number of items, terms and conditions as per tender documents along with all supporting documents failing which offer may not be considered.

(iii) Normally no deviation is acceptable to our tender documents. Terms and offers, which are in deviation, are liable for rejection without asking back reference to the tenderers. Offers as asked must be submitted complete in all respects.

(iv) Self attested copies of orders received from subsidiaries of CIL for the quoted items should be submitted along with the quotation in the Part-I (Techno-commercial offer). List of past supplies with the details of order reference and the performance report if any should be furnished along with the offer.

(v) The complete offer should be typed in the letterhead of the tender (Hand written quotation will be summarily rejected). If firm’s letter heads are not sufficient to accommodate technical and pricing details preferably bigger papers may be used, such sheets along with other pages of the offer should be signed and stamped by company’s authorised signatory.

(vi) All pages of tender documents should be signed including all enclosures submitted with the tenders except printed leaflets / catalogues and have company’s seal. This is must otherwise offer shall be rejected.

(vii) Erased and over written quotations will be summarily rejected unless corrections are authenticated with the tenderer’s signature.

(viii) BCCL reserves the right to increase or decrease the tendered qty. against any/all the items of the tender.

(ix) The tenderer must submit separate sheet in Part ‘I’ (Techno-commercial offer) indicating any deviation in their offer from the Technical and Commercial terms specified/required.

(x) Offer of those tenderers will not be considered commercially acceptable who did not successfully execute previous order placed on them by BCCL despite giving commercial notice and against whom penal action have been initiated for breach of contract.

(xi) In case a firm is proven for a sub-assy of any particular Equipment, it will be considered proven for components of that particular sub-assy of the Equipment only.

(xii) As per Central Vigilance Commission (CVC) guidelines, no post tender negotiations may be held except in case of Proprietary Purchase or for items with limited source of supplies (negotiation in such case may be held only with L-1 / preferred L-1 vendor). The tenderer do not have adequate capacity to supply full quantity tendered, the uncovered quantity order may be distributed to L-2 tenderer at L-1 rate. Notwithstanding anything said above, BCCL reserves the right to follow any guideline or instruction received from the Government or any statutory bodies from time to time.

Encl: As above

Yours faithfully

For & on behalf of Bharat Coking Coal Limited.
COMMERCIAL TERMS:-

1. **Part-I i.e. TECHNO COMMERCIAL OFFER** should contain the following (but not the price of any item):
   i) Name and address of the original Manufacturer along with full details of the contacts persons, Telephone No, Fax No. , E. Mail address etc.
   ii) Details of order received giving the name of the buyer, their address and country, date of order and number/quantity item ordered and supplied. Specific details should be given regarding the item supplied with full address of the user, so that the same can be verified if felt necessary.
   iii) Details of collaborations, if any.
   iv) Details of After Sales Service to be provided, namely address of service depots, if any, strength of after sales service personnel and their qualifications and backgrounds.
   v) Details of Training offered, if any.
   vi) Details of quality control measures/stage inspections carried out . Accreditation of any approved std. quality control institute or organization may be indicated certifying the quality system of the bidder.
   vii) Details regarding location of the works. The purchaser reserves the right to inspect the works of the bidder. What are the facilities they will provide to carry out pre despatch inspection in stages of manufacturing process, if buyer wishes to do so.
   viii) A statement certifying that the bidder accepts all the commercial terms and conditions of Bharat Coking Coal Limited given in this bid documents without any reservation what so ever.

2. **(A) PART II i.e. PRICE BID** should contain the following:-
   i) Rate (Prices) must be quoted FIRM & FOR Destination basis with the following break up.
      a) Ex-Works Price
      b) Freight, Insurance, packing & Forwarding charges on lump-sum basis.
      c) Excise duty if applicable (It will be payable extra on Ex-works price basis)
      d) Sales Tax (It will be payable extra as applicable)

   **Note:** Commercial status of the bidders shall be determined after offsetting the amount if any, payable towards VAT

   **NOTE:** - 1. Please confirm in the technical bid Part-I that their rate is not inclusive of sales tax otherwise their offer may be ignored. However if their rate is inclusive of Ex-duty they must indicate the applicable rate of Excise duty in the technical bid i.e. Part-I

   2. The rate must be indicated both in figure and words. If there is difference between both, the amount appearing in words shall be taken for consideration.
      i) In case of direct import by us (BCCL) , price will be on F.O.R. delivery Port basis only . The Price must be on FIRM basis.
      ii) In case of Imported stores and prices are in Indian rupees on FOR destination basis, only applicable sales tax and statutory local levies (if any) will be payable extra. The price must be on FIRM basis.
      iii) Conditional discount including quantity discount will not be considered for comparative purpose. Cash discount or Prompt payment discount will also be treated in the same manner. However only unconditional discount will be taken into account for comparative evaluation to ascertain the competitiveness of the tender. In case of F.O.B price all discount attracts custom duty etc. except trade discount
      iv) In case of imported stores other than direct import by BCCL, the firm should quote FOR destination price in Indian rupees and firm shall give a certificate along with their offer of their Auditors certifying that they have paid Customs and other applicable Duties as per prevailing Customs Rates and refund if any shall be passed on to the buyer.

2 (B) (a) In spite of mentioning that offers should be submitted by the tenderer on FOR destination basis as per clause 2(A)(i) above , in case a tenderer does not specify the basis of price or quoted on ex-works or FOR dispatching station basis, the price will be loaded to arrive at the F.O.R. destination price on the following manner.
Approx. distance of dispatching station from Consignee’s end. | %age FOR dispatching station price reg. Freight. | PKg. & Frwdg. Charges | Transit Ins. Charge
--- | --- | --- | ---
Above 2001 Km | 5% | 2% | ½%
1501 Km - 2000 Km | 4% | 2% | ½%
1001 Km - 1500 Km | 3% | 2% | ½%
501 Km – 1000 Km | 2% | 2% | ½%
Below 500 Km | 1% | 2% | ½%

2. (B) (b) In case of Imports, the tenderers are required to quote on FOB delivery port basis. The total price will be estimated in the following manner to arrive at the CIF price & landed price of the import offers.

<table>
<thead>
<tr>
<th>Sl.no</th>
<th>Description</th>
<th>Imported from USA, Canada and Japan</th>
<th>Imported from European and other countries.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Freight &amp; Insurance</td>
<td>12% of FOB value</td>
<td>10% of FOB value</td>
</tr>
<tr>
<td>2</td>
<td>Insurances Charges</td>
<td>1/2% of FOB value</td>
<td>1/2% of FOB value</td>
</tr>
<tr>
<td>3</td>
<td>Custom Duty</td>
<td>As applicable</td>
<td>As applicable</td>
</tr>
<tr>
<td>4</td>
<td>Port handling and clearance Charges, Inland transportation and other miscellaneous charges</td>
<td>5% of FOB value</td>
<td>5% of FOB value</td>
</tr>
</tbody>
</table>

To arrive the FOR destination Price in Indian Rupees, the exchange rate published in National Newspaper applicable on the date of opening of Price Bids will be taken. The applicable rate will be “Selling BC Rate”.

3. VALIDITY:- The offer must be valid for acceptance for a period of 6(Six) months from the date of opening tender. Offers will not be permitted to be withdrawn during this period.

4. ULTIMATE CONSIGNEE: The materials may be consigned to any of the depot of BCCL.

5. PRICE VARIATION: Only FIRM price shall be quoted .No price variation will be allowed during the pendency of the contract excepting for price fall clause.

6. PAYMENT TERM:
   a) For indigenous supplies.
   100% payment within 30 days of receipt and acceptance of the materials or from the date of receipt of Bill by the Consignee whichever is later.
   b) For imported supplies if Price is on FOB basis.
   In case of imported items where the price is on F.O.B. value 100% will be paid against letter of credit. Agency commission will be paid in Indian Rupee. Clearly indicate the quantum of Agency Commission included in the F.O.B Price.

7. Either the Indian Agent on behalf of the foreign principal or the foreign principal may directly bid in a tender but not both.

If an agent participates in a tender on behalf of one manufacturer, he should not quote on behalf of another manufacturer along with the first manufacturer for the same item.

8. In case of indigenous supplies, Tenderers are required to furnish the following details/information in the techno-commercial bid Part-I for transferring the Money to the supplier’s account through e banking while making payment.
   a. Name of the Bank.
   b. Name of the Branch with complete address.
   c. Party’s Account Style.
   d. Party’s nature of Account.
   e. Party’s Account Number.

9. DELIVERY:
   i) Required delivery schedule-

<table>
<thead>
<tr>
<th>Sl.no</th>
<th>Item</th>
<th>Delivery Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As per Annexure -A</td>
<td></td>
</tr>
</tbody>
</table>

ii) The bidder should be in a position to supply in specific delivery period at least 25% of the total tendered quantity otherwise offer shall be considered unresponsive.

iii) The delivery schedule quoted in the offer shall be firm and final. Delivery will be counted from the date of receipt of the order. Failure to supply the material in time may attract penalty as per clause No.

10. PENALTY FOR FAILURE TO SUPPLY IN TIME:- As per Appendix -I

11. GUARANTEE/WARRANTY: - As per Annexure – A (Technical specification) PERFORMANCE BANK GUARANTEE: Not applicable
12. PACKING FOR TRANSIT.
The bidder should confirm provision of proper packing of the goods to be shipped by them if order is placed on them as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods final destination and absence of heavy handling facilities at all the points in transit. The packing, marking and documentation within and outside the package shall comply strictly with such special requirement as shall be expressly provided for in the order.

13. QUALITY CONTROL MEASURE
The bidder shall furnish details of quality control measures being adopted by him, including any International / Indian standard actually being followed.

14. PRICE FALL CLAUSE: - As per Appendix -II

15. FORCE MAJEURE CLAUSE
If the execution of the contract/supply order is delayed beyond the period stipulated in the contract/supply order as a result of out-break of hostilities, declaration of an embargo/curfew or blockade or fire, flood, acts of nature or any other contingency beyond the supplier’s control due to act of God then BCCL may allow such additional time by extending the delivery period, as it considers to be justified by the circumstances of the case and its decision shall be final. If and when additional time is granted by BCCL the contract/supply order shall be read and understood as if it had contained from its inception the delivery date as extended. Further this clause state that:

a) The successful bidder will, in the event of his having to resort to this clause by a registered letter duly certified by the local Chamber of Commerce or statutory authority, the beginning and end of the causes of the delay, within fifteen days of the occurrence and cessation of such Force Majeure Conditions. In the event of delay lasting out of Force Majeure, BCCL will reserve the right to cancel the contract and provisions governing termination of contract, as stated in the bid documents will apply.

b) For delays arising out of Force Majeure, the bidder will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither BCCL nor the bidder shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions did actually exists.

c) If any of the force majeure conditions exists in the place of operation of the bidder 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.

16. INSPECTION & TESTS.
i) The purchaser of its authorized representative shall have the right to inspect and/or to test the goods to confirm their conformity to the contract. The purchaser shall notify the supplier in writing of the identity of any representative retained for these purposes.

ii) If the inspections and tests is conducted on the premises of the supplier or its subcontractor(s) at point of delivery and/or at the goods final destination when conducted on the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the purchaser.

iii) Should any inspected or tested Goods fail to conform to the specifications, the purchaser may reject them and the supplier shall replace the rejected goods and make all alternatives necessary to meet specification requirements free of cost to the Purchaser.

iv) The materials will be inspected on arrival at site by the consignee, which will be considered as final. This shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative’s i.e. third party prior to the dispatch of the Goods.

v) Nothing in these documents shall in any way release the supplier from any warranty or other obligations under this contract.

For Chief General Manager(MM)
APPENDIX-I

PENALTY FOR FAILURE TO SUPPLY IN TIME

The time and date of delivery of stores stipulated in Purchase order shall be deemed to be of the essence of the contract and delivery of the stores must be completed by the date specified. No materials should be supplied beyond the specified delivery period, unless specific approval has been obtained from the purchaser.

In the event of failure to delivery or dispatch the stores within the stipulated date/ period in accordance with the samples and/or specification mentioned is the supply order, and in the event of breach of any terms and conditions mentioned in the supply order, Bharat Coking Coal Limited reserves the right:

a) To recover from successful tenderer, as agreed liquidated damages, a sum not less than 0.5% (half percentage) of the price of the stores which successful tenderer has not been able to supply (for this purpose part of a unit supplied will not be considered) as aforesaid for each week or part of a week during which the delivery of such stores may be in arrears limited to 10%. Where felt necessary the limit of 10% can be increased to 15% at the discretion of Head of the Materials Management Division.
b) To purchase elsewhere, after due notice to the successful tenderer on the account and at the risk of the defaulting supplier the stores not supplied or others of a similar description without canceling the supply order in respect of consignment not yet due for supply or

c) To cancel the supply order or a portion thereof, and if so desired to purchase the store at the risk and cost of the defaulting supplier and also

d) To extend the period of delivery with or without penalty as may be considered fit and proper. The penalty, if imposed shall not be more than the agreed liquidated damages referred to in clause (a) above.
e) To encash any Bank guarantee which is available for recovery of the penalty or
f) To forfeit the security deposit full or in part.
g) Whenever under the contract a sum of money is recoverable from and payable by the supplier, BCCL shall be entitled to recover such sum by appropriating, in part or whole by deducting any sum or which at any time thereafter may be due to the successful tenderer in this or any other contract with Bharat Coking Coal Ltd. or any subsidiary of Coal India Ltd. Should this sum be not sufficient to cover the full amount recoverable, the successful tenderer shall pay BCCL on demand the remaining amount. The supplier shall not be entitled to any gain under this clause.

The bidder must confirm the acceptance of this Penalty clause, which will not be altered.

APPENDIX-II

PRICE FALL CLAUSE

i) The prices charged for the stores supplied under the contract by the supplier shall in no event exceed the lowest price at which the supplier offer to sell the stores of identical description to any other organization from date of offer till completion of supply under the contract.

ii) If at any time during the said period the supplier offers lower sale price of such stores to any other organization at a price lower than the price chargeable under this contract, the supplier shall forthwith notify such reduction or sale to the consignee concerned under intimation to CGM(MM), Bharat Coking Coal Limited, Commercial Block, Level –III, Koyla Bhawan, Koyla Nagar, Dhanbad and the price payable under the contract for the stores supplied after the date of coming into force of such reduction or sale, shall stand correspondingly reduced. The above stipulated will not, however apply to exports by the supplier.

The bidder should confirm their acceptance of the above clauses.

M.M.(P)
CHECK- LIST

( To be filled by the Tenderer duly signed and stamped )

1. Whether the tenderer is a Manufacturer  
   Yes/No

2. Whether the tenderer is a exclusively authorized marketing outlet of a manufacturer  
   Yes/No

3. If the reply against(2) above is yes, then indicate name & full address of the Principal.

4. In case of (2) above whether the Principals Authorisation as Exclusive Authorised Marketing Outlet is enclosed with the offer  
   Yes/No

5. Acceptance of 180 days offer’s validity period as per NIT  
   Yes/No

6. Whether quoted prices are FIRM as per NIT.  
   Yes/No

7. Whether Price quoted is on FOR destination basis as per NIT  
   Yes/No

8. Acceptance of Payment terms as per NIT  
   Yes/No

9. Acceptance of Liquidated damages & Risk purchase clause as per NIT.  
   Yes/No

10. Acceptance of Price fall clause as per NIT.  
    Yes/No

11. Whether banned or delisted by any Government or quasi-Government agencies or PSUs.  
    Yes/No

**NOTE:** NON -ACCEPTANCE OF ANY OF THE TERMS AND CONDITIONS MAY LEAD TO REJECTION OF OFFER.

SIGNATURE OF THE TENDERER
WITH SEAL & STAMP
TECHNICAL SPECIFICATIONS FOR STATIC EXCITER SUITABLE EKG 4.6/5 M³ Shovel

1. Description & Quantity:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>STATIC EXCITER FOR EKG SHOVEL</td>
<td>05 Nos.</td>
</tr>
</tbody>
</table>

**Specification:**
Static DC regulated power source for replacement of dynamic exciter (conventional rotating Exciter) suitable to be fitted in EKG/EQC 4.6/5 M³ shovel in present electrical configuration.

1. Input Voltage – 440/220V (± 10%), 3 Phase AC
2. Output (Splited)
   a) 107-117V at DC terminal (unregulated for trip motor supply) – 50% duty cycle
   b) 107-117V at DC terminal (regulated for excitation and control supply) – Continuous duty cycle. (Regulation can be done through auto transformer or through other effective control scheme). Rectified output to be ripple free at least 98% through filters.
3. Total load taking capacity 15 KW
4. Transformer and choke are required to be minimum with class B dry type, natural/forced air cooled.
5. Input with three phase (suitable rated) MCCB with HRC fuse protection.
6. Output should have over voltage and over current protection.
7. System should have voltage indicators and panel LED indicators at input and output.
8. System insulation is to be as per requirement of IER 56.
9. Entire system should enclose with easy mountable IP 45 enclosure.
10. Enclosure is to be easily adjustable, (as small as possible, approximately 40X40X20 inches in size) rugged, stable, sustainable to shovel working conditions.

The firm should submit details the following technical specification/query in chronological order:

1. Offered items should be suitable in respect of fitment to the subject equipment/machine without further modification
2. Firm should indicate item description; part number if any, drawing with dimensions and quantity in technical bid of offer
3. Firm should declare the commissioning of subject equipment by them, providing skilled manpower and all needful accessories inclusive to the equipment.
4. Firm should declare the fitment guaranty without any external modification
5. Warranty – 18 months from the date of delivery or 15 months after commissioning in appropriate load and power conditions which ever is earlier.
6. Firm should declare their obligation of immediate after sales service on call.
7. Item supplied will be embossed with logo of the firm/identity mark and serial no. if any in a place where normal wear is not possible.
8. Delivery – 2-3 months from the date of order

No engineering drawing as well as sample of the items shall be provided to the firms.

M.M.(P)