

BOKARO POWER SUPPLY CO. (P) LTD.

**HALL NO:- M-01, OLD ADMINISTRATIVE BUILDING,
ISPAT BHAVAN, BOKARO STEEL CITY – 827001**

CIN:U40300DL2001PTC112074

Reg. Office : Ispat Bhawan, Lodhi Road, New Delhi – 110 003

TENDER NOTICE NO.: BPSCL/CEO/P&C/16-17/C-042/NIT-583/2473

Dated 10/05/2016



TENDER DOCUMENT

NAME OF WORK: Assistance for Maintenance and Repair of Electrical Equipment
Belonging to Boiler No. 1 to 5, TPP Portion

COST : Rs.500/-
(Rupees Five Hundred only)

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Bokaro Power Supply Co. (P) Ltd.

(A Joint Venture of SAIL & DVC)

Hall No: - M-01, Old Administrative Building,

Ispat Bhawan, Bokaro Steel City – 827001

NOTICE INVITING TENDER

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Date: 10/05/2016

For and on behalf of BOKARO POWER SUPPLY COMPANY (P) LTD, sealed tenders in three parts, **Part - A** : Cost of Tender document & EMD, **Part- B** : Technical & Commercial Offer and **Part – C** : **Online Price** Bid are invited, from reputed, experienced and financially sound firms for the following work at our Power Plant.

Description of Work	Assistance for Maintenance and Repair of Electrical Equipment Belonging to Boiler No. 1 to 5, TPP Portion
Estimated Amount (in Indian Rs.)	Rs. 20,37,004/- (Rupees Twenty lakhs thirty seven thousand and four) only excluding Service Tax
Earnest Money (in Indian Rs.)	Rs. 15,000/- (Rupees Fifteen Thousand) only
Cost of tender documents (Non-refundable) (in Indian Rs.)	Rs.500/- (Rupees Five Hundred) Only
Period of contract	01 (One) year from the date of commencement of Work.
Last date & time of submission of tender	10/06/2016 at 12.00 Hrs. (IST)
Bid opening Date & Time.	10/06/2016 at 12:15 Hrs. (Part A & B)

Qualifying Requirements / Eligibility Criteria :

1. Average annual turnover (AAT)

Tenderer should have Minimum average annual turnover (MAT) of **Rs.30,55,506.00**

- ⇒ Average annual turnover shall be determined taking into consideration turnover of available preceding three consecutive financial years. Other income shall not be considered for arriving at annual turnover.
- ⇒ Audited annual accounts along with auditor's report of the bidder should be furnished in support of the same. Where audited annual account is not mandatory as per the law, the bidder has to submit annual financial turnover during the consecutive last three (03) years, ending 31st March of the previous financial year duly certified by CA.

2. Technical Capability :

Party should have experience of having completed **similar works** in any Public Sector Undertaking / Government / Semi Government organization or joint venture thereof/ Company registered under Companies Act during last 7 years ending last day of month previous to the one in which offer are invited shall be either of the following:

- Three similar completed works each costing not less than the amount equal to **30%** of the estimated cost. **OR**
- Two similar completed works each costing not less than the amount equal to **40%** of the estimated cost. **OR**
- One similar completed work costing not less than the amount equal to **70%** of the estimated cost.

Similar Work means:

- Maintenance / repair job of HT Motors;
- Maintenance / repair job of electrical drives like LT motors(A.C/D.C), electrically operated valve's control panels including limit switch box, LCS, etc

3. In support of their eligibility and experience, the Tenderer is required to submit self attested photo copies of work orders, completion certificates (by the concerned competent authority etc.) along with the techno-commercial bid. In addition, bidder shall submit an affidavit as per format at **Annexure-VI**, declaring that the documents submitted by them are genuine.

Completed Work means the executed/completed portion of Work Order/AMC/RC, even if the work has not been completed in totality (subject to furnishing proof of executed value of work in the form of certified copies of RA Bills) along with successful work execution certificate (by the concerned authority etc.)

4. The value of, work order(s) submitted by the bidder will be considered on pro rata yearly basis.
5. The bidder shall furnish authenticated copies of latest IT Return, Service Tax Registration, EPF certificate, ESI Certificate & valid (upto date) Electrical License for conducting contractual jobs of electrical nature, or proof of application for renewal of the same.
6. **The bidder must accept for finalization of rate through Reverse Action (RA) as per format given at Annexure-VIII.**

General Terms & Conditions:

- i) Offer shall be accompanied with Cost of the tender documents of **Rs. 500.00** (non-refundable) in the shape of Demand Draft / Banker's Cheque drawn from any Nationalized / Scheduled Bank except Co-Operative Bank, in favour of **Bokaro Power Supply Company (P) Ltd.**, Payable at Bokaro Steel City.

However Government organizations / Small scale industries registered with NSIC is not required to submit the cost of tender document subject to production of the documentary evidence like valid Registration certificate of the same item or group of item from appropriate Govt. Authority.

- ii) Offer shall be accompanied with Earnest Money Deposit (EMD) of **Rs.15,000.00 (Rupees Fifteen thousand) Only** in the shape of Demand Draft / Pay Orders / Bankers Cheque Payable at Bokaro Steel City // Bank Guarantee having validity for, one (01) year, from any Nationalized Bank / Scheduled Bank except Co-operative Bank drawn in favour of **Bokaro Power Supply Company (P) Ltd.** as per format available at our website: **www.bpscl.in**.

However EMD exemption wherever applicable may be availed of by Micro & Small Enterprises (MSEs) / PSUs / Govt. Undertakings and Co-operative Societies etc., as per Government policy. For MSEs, the exemption from EMD is to granted only on submission of valid notarized copy of certificate having a valid Entrepreneurs Memorandum (EM) number. SSI / NSIC certificate holders should also submit a copy of Entrepreneurs Memorandum.

- iii) The undersigned reserves the right to either reject any / all the tenders without assigning any reason thereof & also reserves the right to alter the qualifying requirements.

Note:

1. Tender documents are to be downloaded from our Website: **www.bpscl.in** only.
2. Bidders are requested to visit our website regularly for any addendum / corrigendum / Extension till opening of the NIT. **Any such changes shall not be published through Press advt.**

For and on behalf of
Bokaro Power Supply Company (P) Limited
Sd/-
(J.M Prasad)
DGM (P&C)
Email : **purchase.bpscl@gmail.com**

Conditions & Rules to be observed in submitting Tenders

1.01 Manner of Submission of the Tender

The tender shall be divided into 03 parts as follows:-

- a) **Part A:** This part Comprises of Cost of Tender document & EMD, NIT No. & date marked with Part A.
- b) **Part B:** This part Comprises of Technical and Commercial details, consent on terms & conditions of NIT etc. marked with (Part-B) Techno-Commercial Bid, NIT No. & Date (*In hard copy*)
- c) **Part C:** Online sealed Price Bid through URL : <http://www.buyjunction.in>

The process of submission of Online Price bid is as detailed hereunder-

Step 1: Type <http://www.buyjunction.in> in the internet explorer.

Step 2: Click on Login (present on Top right side of the Page)

Step 4: Click on **View Live Auctions and Tenders**.

Step 5: In the right side open/ global tenders link will be displayed.

Step 6: Click on the link for the above mentioned tender link present under Open tenders

Step 7: Click on new user if you are not registered in buyjunction earlier. Click on Existing user in-case you have already registered in buyjunction earlier. Existing users can login with their user id and password.

Please note foreign bidders are required to select their bidding currency from the drop down available before proceeding further (where ever applicable).

New Users:

Steps to get your **User Code** and **Password**

1. Click on the required tender link under “**Open Tenders**”
2. Choose your Auction currency in-case any option is coming to select currency. Click on “**New User**”
3. Fill up the “**Registration Form**” and click on “**Submit**”. All fields marked with (*) are mandatory fields.
4. On submitting the filled-up registration form, an auto generated email will be sent to the email address you have mentioned in the registration form containing your User Code and Password.
5. Changing of password on first login is compulsory.
6. On receipt of the User Code and Password you become an **Existing User**. Now follow the steps of existing user to login to the auction site.

Existing Users

1. Click on the required tender link under “**Open Tender**”
2. Click on “**Existing User**”.
3. Log in with your existing user code and password for placing your bid.
4. Read through the “**Bidding Procedure**” to proceed further for bidding.

Bidding Procedure

After logging in with your user id and password you have to accept the “**Auction Terms**”.

Steps to accept the “Auction terms”:

1. Click on “**Auction Terms**”.
2. Then click on “**View term without DSC**”
3. Click on the relevant auction terms appearing under “**Term**” column.
4. Select the check box on the left-side of the relevant auction terms.
5. Click on the button besides “**Accept**”.
6. Then click on “**Submit**”.
7. A message will be displayed to you mentioning your acceptance to terms for auction.
8. It is mandatory to accept the terms of online bidding in order to proceed for submission of bid.

Steps to Submit Price Bid

1. Click on **“Bids.”**
2. Then click on **“Live Auction.”**
3. Put your login password as transaction password
4. Select the auction id and click on add to watch list.
5. Now the bidding screen is visible.

6a. For Template Bidding

1. Click on **Icon “T”** on left column of bidding screen (Which will appear separately **for each lot**).
2. A template form will open where you need to fill up the price & click on evaluate at the bottom
3. If you want to quote the evaluated price then click on **“confirm”**.
4. After clicking on the confirm button of the template window, your price will appear in the **“New Bid”** box.

6b. For Non-Template Bidding

1. Fill your Price in the **“New Bid Box”** visible on the bidding screen.
2. Select the check box at the extreme left of the bidding screen
3. Click on **“Submit”** button placed at the bottom left of the screen.
4. Bid once placed will have to be honoured.
5. You will see **“Bid Accepted”** in the **“Result”** column. This indicates that your bid is accepted and registered in the system.

Steps to take a print-out of the receipt

1. Once you have placed your bid, to download Bid Receipt, kindly click on **“Download”**.
2. Then click on **“Bid Receipt for Open Tender”**.
3. Select the auction to generate receipt.
4. Take print out of the same market-wise (Term List)/ item-wise (Auction list).

Note:

1. **Current price, Market status, Start Bid Price, Bid Decrement, Effective Price** will not be available.
2. Time remaining for the event to close will be shown under the Bid Summary screen.
3. For any clarification on the bidding process please contact
Mr. Manish Nandwana _ 9163348165_ manish.nandwana@mjunction.in
Ms. Monalisa Shaw _ 9163348297_ monalisa.shaw@mjunction.in
Mr. Sumit Kumar Das – 8873002750 - sumit.das@mjunction.in for Bokaro Office
A scanned copy of System generated **acknowledgement-slip for Online submission of sealed price bid to be submitted along with EMD Bid or Techno-commercial Bid.**

- 1.01.1 A & B part should be sealed in separate envelopes, clearly superscribing on the top of each envelope the relevant part number and description along with NIT reference and date of opening and submit all the parts simultaneously in another sealed envelope clearly superscribing NIT reference and date of opening.

1.02 Tender Validity Period

The tender shall be valid at least for 120 (One hundred twenty) days from the date of opening.

1.03 General

- i) Tenderer's are requested to visit site for actual assessment of the job before submission of their offer.
- ii) The tender rates shall be written in English, both words and figures. In the case of any discrepancy between the words & figures of the rates quoted, the rates expressed in words shall be taken as correct. In the case of discrepancy in the Unit Rate and Amount, Unit Rate will govern.

- iii) All pages of the tender documents, conditions, specifications & all enclosures must be signed with seal of the company at the lower left hand corner by the tenderer before submission of the tender.
- iv) If the intending tenderer is a Firm or Company, then they shall, in the forwarding letter, mention the number and names of all the partners & shall sign before submitting the same, unless the Power of Attorney holder has specifically been authorized in this respect.
- v) If any tenderer withdraws his tender before its acceptance or refuses within a reasonable time without giving any satisfactory and acceptable explanation thereof, the tenderer shall be disqualified for making any tender of the BPSCL for a minimum period of one year and the Earnest Money will be forfeited.
- vi) **Handling of Earnest Money:**
 - a) Earnest Money will be refunded to the un-successful tenderer after finalisation of tender and no interest will be paid for the same. Bidders are requested to provide Bank Details for refund of EMD.
 - b) The amount of Earnest money will be adjusted against Security Deposit only in case of successful Tenderer.
- vii) In case the date of tender opening happens to be holiday, the tender will be opened on the next working day at the same time.
- viii) **Any conditional offer or offer having deviations from our qualifying requirement, specification & instruction sheets is liable to be rejected.**
- ix) BPSCL reserves the right either to reject any/all the tenders without assigning any reason thereof.

General Terms and Conditions

- 2.01 Bidders are requested to visit the site before submission of the bid to get acquainted with actual site condition.
- 2.02 You will have to follow and observe the safety & statutory requirements.
- 2.03 You will have to fully responsible for any sort of unsafe activity of your workmen.
- 2.04 All working personnel should have proper safety certificates issued by BPSCL before start of work.
- 2.05 Supervision of the work has to be carried out by the agency.
- 2.06 Work is to be carried out as per instruction & satisfaction of the Engineer-In-Charge.
- 2.07 Rates are to be quoted on firm price basis. Any conditional offer is liable to be rejected.
- 2.08 In case of any documents/information submitted by the bidder(s) found to be false or containing any misrepresentation of having any fraudulent declaration in it then in such eventuality legal action (including cancellation of contract, banning of business dealing, forfeiture of EMD, criminal proceedings etc.) as deemed fit may be initiated by BPSCL against the bidder.
- 2.09 **Payment Terms :**
90% of contract value will be paid on pro-rata basis on progressive jobs duly certified by Engineer In-Charge and balance 10% will be retained as security deposit which will be released after three (03) months of satisfactory execution of work.

The expression satisfactory execution of the order shall mean fulfillment of all obligation arising out of and the guarantees stipulated in the contract. In default at satisfactory execution of the order the security deposit shall be forfeited to the BPSCL.

Any penalty for which the successful tenderer shall be found liable or any liquidated damages which shall be payable to the BPSCL in terms of the Contract, shall also be recoverable by the BPSCL from the Security deposit. If such security deposit will not be adequate for the purpose of liquidating the amount of penalty and/or damages as contemplated, the amount in excess thereof shall be deducted from any sum or sums which may be due or may become due to the successful tenderer from the BPSCL on any account whatsoever.

Notwithstanding what has been stated above if the successful tenderer shall have duly performed all his obligation under and the guarantees stipulated in the contract and observe all the terms and conditions thereof and no penalty shall have been recoverable from him and / or the BPSCL shall not have suffered any damages whatsoever, then security deposit shall be refunded, on receipt of a certificate from the Engineer in - charge that there is no claim against the Successful tenderer under the Contract.
- 2.10 Contractor will produce medical fitness certificate for his workers prior to CLC clearance for working at height. Height passes to be obtained from safety department.
- 2.11 You will have to strictly adhere to the provision of various labour laws including payment of bonus Act 1965.
- 2.12 You will have to pay Rs.4/- extra to the working persons as per BPSCL rules above minimum wage of one day.
- 2.13 Offer is to either type written or by handwritten and in no case partly type written and partly hand written. No corrections, overtyping shall be permitted. If so, the same shall be summarily rejected.
- 2.14 Tenders shall be accompanied by a copy of latest IT Return submitted, Service Tax Registration No. (if applicable) of the Individual/Party/Firm submitting the Tender.
- 2.15 Paying authority –In - charge (F&A), BPSCL.
- 2.16 Tenderers shall quote their firm rates and no negotiations will be held except with the lowest tenderer, if required.
- 2.17 In accepting the order you are understood to accept to all responsibilities for completing the work in all respect.

- 2.18 Where a claim of Service Tax is preferred and admitted, the tenderer must satisfy that he is a registered contractor under Service Tax Act and possesses a Certificate of Registration in the firm's name in which the service is made and shall in proof thereof, while submitting bills for payment, furnish the number, date and other particulars of such Certificate.
- 2.19 The manpower (labour and Supervisor) deployed for completion of the job and for compliance of work & safety of the workmen should be adequate. However the compliance and completion of the job cannot be restricted to labour supply but on the actual execution of the job to be certified by the Engineer – In – charge.
- 2.20 **VDA Clause** : During operation of the contract, if there is an upward revision of minimum wages, VDA by the appropriate Government, the Contractor shall be entitled to reimbursement of such additional amount on actual basis subject to production of documentary evidence. The base date shall be the Bid opening date OR Revised offer date (in case of negotiated prices)
- 2.21 **Work accident** :
a. You will be totally responsible for the safety of the workers employed by them. In the event of any work-accident, major or minor, your representative you must take care of the injured person immediately and provide him the required treatment as suggested by the doctor. The injured person may be admitted to BGH for the treatment by paying the charges as demanded by the hospital authority.
b. You shall be fully responsible for making payment of compensation to your own workmen or to those of your sub-contractor in respect of any accident or injury occurring to them. BPSCL will in no way be responsible for it and will remain indemnified against all such claims of compensation in such cases
- 2.22 **SUBMISSION OF BANK GUARANTEE FOR QUOTING UNWORKABLE RATE**
If the tenderer quotes unworkable rate i.e. quoted rate of tenderer is lesser than 90.00% of estimated value and is considered for placement of work order, they/he will be asked to justify the rate quoted and will have to give Performance guarantee bond (in addition to the Security Deposit) in the form of Bank Guarantee (In prescribed format as available at our website: www.bpscl.in) issued by any Nationalized/Scheduled Bank in favour of Bokaro Power Supply Company (P) Limited. The amount of PBG will be equivalent to difference of 90% of estimated value and quoted value.
- 2.23 **FORCE MAJEURE** : Vendors / Contractor shall not be considered in default if delay occurs due to cause beyond their control such as acts of God, natural calamities, civil wars fire, strike, frost, floods, riot and acts of unsurpassed power. Only those causes which have duration of more than seven days shall be considered in force majeure clause. In the event of delay due to such clause the delivery / completion period will be extended for a length of time equal to the period of force majeure of at the option of owner order may be cancelled without any liability what so ever on the part of the owner.
- 2.24 **RATE FINALIZATION:**
Rates will be finalized through Reverse auction among the techno commercially acceptable tenderers through our authorized service providers i.e. **M/s. Mjunction Service Ltd.** The tenderers have to submit their acceptance as per enclosed format at **Annexure – VIII & IX** along with their techno-commercial bid. The schedule and details of Reverse Auction event shall be communicated by our Service provider (**M/s. Mjunction Service Limited**) to the techno-commercially accepted bidders.
- 2.25 **The Parties should clearly indicate their prices firm in all respects till execution of the work order.**
- 2.26 In case of asking any variation on any account whether sales tax or Service tax (wherever applicable) will not be treated as firm price on that account and hence parties should state everything clearly.
- 2.27 **Special Instruction:** Tender will be opened on **10.06.2016 at 12.15 PM**. If it is declared a holiday by BPSCL then in the next working day at the same time in the presence of Tenderer's Authorized Representatives, who wish to be present.

Scope of works :**1. HT MOTORS:****A.Preventive Maintenance of motors:**

- i. Thorough cleaning of the complete motor externally and internally up to the extent possible using Vacuum cleaner, Air blower, Markin cloth and cleaning agents of recommended grade and quality.
- ii. Cleaning of insulators, tightening of power cable connections and setting right of all other defects as detected inside the motor terminal box.
- iii. Greasing or topping up of oil in the bearings.
- iv. Cleaning of cooling ducts by compressed air and soft brush.
- v. Checking of coolers against leakages.
- vi. Checking of intactness of temperature-sensors.
- vii. Checking and tightening of end-shields, fan, fan-cover, cooler box, cooler pipes & terminal box etc.
- viii. Checking of firmness of power cable on the support structure.
- ix. Checking of 'earthing- strip' connection to motor body.
- x. Measuring IR values of the motor winding by a 2.5KV megger and recording the obtained values.
- xi. Protecting the motor by providing suitable coverings over it, if it is found threatened from external hazards like dust and water etc.
- xii. Carrying out regular inspection and maintenance and measuring earth-resistance value of Earthing pits, electrodes and strips in the adjacent areas.

B.Repair and Replacement of defective parts of motors:

- i. Replacement of couplings, end-shields, fan and fan cover etc., if found defective.
- ii. Ensuring perfect fitting of motor parts for long time trouble –free operation
- iii. Replacement of the leaking cooler with a spare one if more than permissible number of tubes are found leaking in it.
- iv. Connection and disconnection of cable-leads repair of the cable-leads by re-lugging and re-taping & replacement of insulators etc. both at motor and supply panel ends. Replacement of complete motor terminal box, if needed.
- v. Heating and drying-out of motor-winding for improving its IR value to the required level.
- vi. Attending to the hot-spot defects both at motor and supply-panel ends.

C. Replacement of a defective motor with a spare tested one:

- i. Making the defective motor free mechanically and electrically after noting down the relevant data and details and shifting it to the place of repair.
- ii. Shifting and placing a spare tested motor at the place of foundation.
- iii. Checking motor terminal insulators for any cracks and its studs for its proper threads along with proper star point termination if any.
- iv. Doing connection of cable leads, earthing strips and cooler-pipes etc. after checking and meggering the cable & motor separately.
- v. Running the motor in decoupled condition for checking DOR, vibration, axial-shift, noise, no-load current and indications etc.
- vi. Noting down all the relevant parameters of the motor pertaining to current, vibration, noise and temperature-rise etc. in loaded condition for future references.

D. Reconditioning of overused motors:

- i. Shifting the motor to the place of repair and dismantling it carefully one by one in proper sequence after putting proper markings over the dismantled parts.
- ii. Storing and preserving all the dismantled parts safely.
- iii. Carrying out cleaning of all the dismantled parts and checking them carefully for their healthiness.
- iv. Carrying out repair of the detected defects or replacing the irreparable defective parts with new spare pieces.

- v. Doing necessary arrangements for sending of the rotor to PFRS or other relevant sections for balancing of rotor
- vi. Heating and drying of stator and rotor windings and plotting the drying curve.
- vii. Applying varnish and again drying it for allowing the varnish to get set.
- viii. Carrying out reassembly of the motor.
- ix. Measuring and noting down the final IR values of the motor windings.
- x. Painting the motor externally.
- xi. Storing and preserving the reconditioned motor as spare for future use following the recommended methods of storage and preservation.

E. Dispatching a burnt motor for repair:

- i. Checking and confirming that the motor under reference has got really burnt.
- ii. Making the burnt motor completely free from both mechanical and electrical sides.
- iii. Loading the burnt motor in a truck, tying it down firmly and dispatching the same to the repair-agency for repair.
- iv. Unloading the motor at the place of storage when it is received back after repair.
- v. Measuring and noting down the IR values and winding resistances etc. of the repaired motor and matching them with test-report results as sent by the repair agency.
- vi. Painting the motor externally.
- vii. Storing and preserving the repaired motor as spare for future use adopting the recommended methods of storage and preservation.

2. LT MOTORS:

- i. Thorough cleaning of the complete motor externally and internally up to the extent possible using Vacuum cleaner, Air-blower, Markin cloth and cleaning agents of recommended grade and quality.
- ii. Cleaning and tightening of connections inside the motor terminal box.
- iii. Adjusting, repairing or replacing the defective parts of the motor as per the defect list pertaining to, vibration, abnormal sound, high current and high temperature etc.
- iv. Greasing of bearings.
- v. Checking and tightening of fixing bolts of foundation, end-shields, bearing-housings, fan, fan-cover, terminal-box and earthing-strips etc.
- vi. Measuring and recording IR values of the motor winding for future references.
- vii. Heating and drying of motors if their IR values are found to be low.
- viii. Protecting the motors by providing suitable coverings over them if they are found threatened from external hazards like dust, water and heat etc.
- ix. Replacing a defective motor, if found unfit for service, with a spare healthy and tested piece after matching all the relevant technical specification details.
- x. Giving the newly fitted motor into service after checking DOR and taking decoupled trial run.
- xi. Noting down all the relevant parameters pertaining to current, vibration, noise, indications and temperature rise etc. in loaded condition of the motor for future references.
- xii. Shifting the taken out motor to the place of repair and making it serviceable again after carrying out the required repair and replacement of the defective parts with spare ones.
- xiii. Heating, drying and varnishing of the motor windings if condition of the motor so demands.
- xiv. Sending a burnt motor to the repair-agency after noting down its name plate details.
- xv. Measuring and noting down the IR and winding resistance values when the motor is received back after repair. Taking its decoupled trial run at the test-bench.
- xvi. Painting of the motor externally.
- xvii. Storing and preserving the repaired and tested motors as spare for future use adopting the recommended methods of storage and preservation.
- xviii. Carrying out regular inspection and maintenance and measuring earth-resistance values of Earthing pits, electrodes and strips in the adjacent areas.

3. DC MOTORS AND GENERATORS:

- i. Carrying out all the activities from point no. (i) to (xviii) as described under the head of 'LT Motors'.

- ii. In addition to above, carrying out maintenance and repair activities as described under the head 'Current Collecting gear'.
- iii. In case of Dust feeder motors:-
 - a) Measuring and adjusting the speeds of all the six nos. of Dust feeder motors of a Boiler at regular intervals.
 - b) Cleaning and polishing the flat controller stud surfaces to make them smooth and even.
 - c) Repeating the above exercises for all the five nos. of Boilers one by one.
 - d) Carrying out maintenance and repair of the Inverter fed variable frequency motors as per the instruction of the Engineer in-charge, if they are installed in place of DC motors.

4. LT FEEDERS TO MOTORS (AC & DC) OF DRIVES AND GATE VALVES:

- i. Blowing, cleaning and tightening of connections at the row of terminals, switches, relays and contactors.
- ii. Cleaning of switch contacts, auxiliary and power contacts of relays and contactors using cleaning agents of recommended grade and quality.
- iii. Replacement of fused indication lamps on regular basis.
- iv. Replacement of lamp-holders, switches, relays and contactors, if found defective.
- v. Cleaning and tightening of connections in the local junction and limit-switch boxes.
- vi. Protecting the local junction and limit-switch boxes and cables connected to them by providing suitable coverings over them if they are found threatened from external hazards like dust, water and heat etc.
- vii. Replacing defective limit-switches with spare ones.
- viii. Checking, locating and rectifying all other control and power circuit defects.
- ix. Doing setting of limit-switches of valves and checking valve-operation with the consent and in coordination with mechanical counterparts of BPSCL.
- x. Taking trial-run of the drives with the consent and in coordination with mechanical counterparts of BPSCL.

5. CONTROL DESKS AND SUPPLY PANELS SUCH AS GVDC^S, PDB^S, MCC^S, DUST FEEDER PANELS ETC.:

- i. Thorough cleaning by sucking out dust and tightening of connections at the row of terminals, indication lamps, switches and relays as installed inside the control desks.
- ii. Thorough cleaning of the power supply buses, Insulators, Droppers, Automats, Knife-switches, MCCB^S, Control-switches, Relays, Contactors and row of terminals, installed inside the supply panels using Vacuum cleaner, Markin cloth and cleaning agents of recommended quality.
- iii. Tightening of all the control and power circuit connections inside the supply panels.
- iv. Maintaining, repairing or replacing the defective components of control and power circuits.
- v. Checking of closing, locking and sealing of doors and rectifying the defects, if found.
- vi. Sealing of cable-entry points.
- vii. Meggering and noting down the IR values of the power supply buses of each phase.
- viii. Checking earthing-strip connections to the control desks and supply panels.
- ix. Painting and labelling of all the control desks and supply panels.
- x. Maintaining, repairing and replacing the exhaust fans provided in the supply-panel rooms.
- xi. Providing additional fans, if needed, to enhance ventilation and cooling so as to maintain the desired level of temperature and cleanliness in the above rooms.

6. CONTROL AND POWER CABLES:

- i. Setting right LT & HT power cable connections, lugging and insulation-damage problems both at sending and receiving ends.
- ii. Carrying out connection, disconnection, repair or replacement of defective LT power & control cables by laying and terminating new cables.

7. DC SUPPLY FEEDERS:

- i. Blowing, cleaning and tightening of connection both at sending and receiving ends using cleaning agents of recommended grade and quality.

- ii. Carrying out maintenance and repair activities of Fuses, Knife switches and Isolators etc as described under the respective heads.
- iii. Providing assistance in locating and removing 'earth-fault' in DC supply feeders.

8. COMMON ACCESSORIES USED IN ELECTRICAL CIRCUITS AND EQUIPMENTS:

A. FUSES:

- i. Removing deposits and metal dust from the contact surfaces and contact blades.
- ii. Checking against cracks and reduced thickness of fibre wall of the cartridge fuse and replacing the same if any such defect is found.
- iii. While replacing the fusible elements of quartz-filled fuses, sand must be fully renewed.
- iv. Ensuring that the contact blades of cartridge fuses fit tightly in the jaws.
- v. While replacing fuses, it is to be ensured that the rating of the 'Fusible element' matches with the rating of the fuse-body and that of the circuit being protected.

B. PUSH BUTTON SWITCHES:

- i. Cleaning the contact surfaces and tightening the connections.
- ii. Replacing the weakened springs.
- iii. Ensuring free movement of the push button in the shell without sticking.
- iv. Replacing the push button if found to have become defective.

C. CONTROL SWITCHES:

Control switches are built up of stacked moulded-insulation components provided with a system of moving and fixed contacts. It has got a set of terminals for connecting them to the external circuits. It incorporates control, signalling and alarm circuit contacts.

- i. Cleaning and tightening of the connections.
- ii. Replacing the switch if found to have become defective.
- iii. As the moving and fixed contacts are arranged inside the switch as per a particular programme, it should not normally be opened and disturbed unless it is unavoidable to do so for carrying out a repair.

D. ROTARY SWITCHES:

- i. Cleaning and tightening of the connections.
- ii. After a long period of service, its arc-quenching discs should be replaced.
- iii. The complete switch should be replaced if found to have become defective.

E. KNIFE SWITCHES:

- i. Thorough cleaning of contact surfaces of the blades and jaws.
- ii. Tightening of nuts and bolts which join the switch components.
- iii. Replacing faulty springs and damaged blades and jaws with new ones.
- iv. Ensuring that the blade and jaw surfaces make a fully penetrated and tight contact.
- v. Ensuring that the blades enter the jaws without jerk and misalignment.
- vi. Replacing the complete knife switches if found defective.

F. RHEOSTATS:

Rheostats are generally used for starting, regulating and field-control purposes.

- i. Cleaning the brushes and the contacts by removing dust and oxide film.
- ii. Tightening the connections.
- iii. Replacing the burnt out contacts and resistor elements.
- iv. Burnt ends of wire or ribbon-wound nichrome elements may be welded also.

- v. Checking and adjusting for free movement of brushes over contact-studs and a correct brush-contact pressure.
- vi. Replacing the complete Rheostat if found irreparable

G. CONTROLLERS

Generally there are three types of controllers:-

a) Flat type b) Drum type & c) Cam type

- i. Cleaning, smoothing and aligning of the contact surfaces of the bar-copper segment, cams and drums.
- ii. Checking and replacing the contact and return springs to ensure a right pressure of the electrical contacts in a closed condition and a right clearance in an open condition.
- iii. While changing the contacts, proper care is to be taken for their positioning as shown in the contact-operation sequence diagram.

H. JUNCTION BOXES AND LIMIT SWITCH BOXES:

- i. Cleaning and tightening of connections.
- ii. Checking of closing, locking and sealing of covers and rectifying the defects, if found.
- iii. Sealing of cable-entry points.
- iv. Protecting them by providing suitable covering, if they are found threatened from external hazards like dust, water and heat.
- v. Changing the complete boxes if found damaged or defective.

I. AUTOMATS AND OVERLOADS:

- i. Cleaning & tightening of connections.
- ii. Removing all traces of all three phases of the automates.
- iii. Checking of contacts of all three phases of the automates.
- iv. In case of misalignment of automats and overloads, it should be identified and rectified.
- v. Replacement of automats and overloads if they are found defective.

J. INDICATION LAMPS:

- i. Replacing the fused indication lamps on regular basis.
- ii. Defective lamp-holders should be replaced with spare pieces.
- iii. Reasons of Indication-lamps not glowing are to be located and set right.

K. INDICATING METERS:

- i. Checking for the operativeness of the Indicating meters installed on control desks and panels etc. on regular basis.
- ii. Locating and rectifying the defects, if any indicating meter is found not working.
- iii. Replacing the defective meters with spare pieces.

L. CONTACTORS (AC AND DC):

A contactor consists of mainly four parts:-

- a) An electromagnetic system for closing and opening of the contactor.
 - b) Main power contacts
 - c) Arc chutes
 - d) Auxiliary contacts
- i. Removing all traces of deposits and dirt from the contacts and arc-chute grid plates.
 - ii. Lightly burnt contacts should be cleaned with very fine sand paper.
 - iii. Heavily burnt contacts with traces of fused metal should be smoothened with a fine-cut file.

- iv. The grid plates should be cleaned with a brush so as not to damage the thin copper layer on the steel grid plates.
- v. In case arc chutes are cracked, pitted or chipped, they may be repaired with suitable grade putty or, replaced if found irreparable.
- vi. Ensuring that the moving system turns easily and the armature is pulled tightly against the core.
- vii. Loud noise or chattering in the magnetic system takes place due to the following reasons:-
 - a). Loosening of the yoke and armature fixing screws.
 - b). Fracture of the shading coil embedded in the core slots.
 - c). Misalignment and insufficient area of the mating faces. Problem should be identified and rectified
- viii. Problem of sticking of the armature to the core should be rectified by setting right the non-magnetic spacer fitted on the core.
- ix. Initial and final pressure of the main contacts should be checked and adjusted.
- x. Damaged parts of the contactor or the complete contactor should be replaced as per the decision of the Engineer in-charge.

M. CURRENT COLLECTING GEAR:

The current-collecting gear of Electrical machines includes:-

- a) Commutators
- b) Sliprings
- c) Brush holders
- d) Brush rockers
- e) Brushes

Following types of problems are generally encountered in the current collecting gear:-

- a). Sparking at brushes

It may be due to:-

- i. Excessive brush pressure
- ii. Poor brush fit on commutator
- iii. Misaligned brush holders
- iv. Uneven distribution of current in commutating coils.
- b) Brushes have shifted from neutral
- c) Projecting inter bar mica.
- d) Bridging of commutator bars by copper dust and burrs.
- e) Uneven wear and grooving in commutators and sliprings

It may be due to:-

- i. Excessive vibration, which takes place due to
 - a. Improper balancing of rotor
 - b. Misalignment of shafts
 - c. Eccentricity of half couplings
- ii. Incorrect brush adjustment
- iii. Incorrect bedding of brushes

Problem is to be identified and set right as per the decision of the Engineer in-charge.

N. BEARINGS:

Bearings used for electrical machines is Rolling contact bearings

Following types of problems arise in Rolling contact bearings:-

- i. Wear of the raceways- It is due to abrasions caused by penetration of sand and other small hard matter into the bearing.
 - It may also result from penetration of the wear-products of brushes.

- ii. Fatigue pitting of the metal on the raceways and ball or roller surfaces - It occurs due to operation under increased load or for longer period of time. Defective bearings should be replaced with spare pieces. Prior to fitting, if bearings are heated up to a temperature of 80 to 90⁰C by induction heating, it is easier to seat them on the shaft.

O. MAINTENANCE OF ROTOR:

- i. Thorough cleaning of the complete Rotor up to the extent possible using Vacuum cleaner, Heavy duty air blower, Markin cloth and cleaning agents of recommended grade and quality.
- ii. Cleaning of rotor by thinner to remove the dust accumulated on the surface of the rotor.
- iii. Heating and drying of rotor windings.
- iv. Applying varnish and again drying it for allowing the varnish to get set.
- v. Checking of rotor bar cracks.
- vi. Polishing of rotor journal for bearing matching.
- vii. Doing core flux test of the rotor winding for checking of the heating of rotor.
- viii. If necessary, sending the defective rotor to the repair agency & making it serviceable again after carrying out the required repair and replacement of the defective parts with spare one.
- ix. Measuring and noting down the IR and winding resistance values when the rotor is received back after repair.

9. CLEANING, HOUSEKEPPING & PAINTING:

- i. Electrical equipments, control desks, supply panels and adjacent areas should be regularly cleaned using Brushes, Vacuum cleaners, Blowers and Markin cloth etc. following the safety norms and the instructions of the Engineer in-charge.
- ii. Whenever any risk is involved, cleaning of such equipments and panels has to be done during the shutdown period only.
- iii. Dust and garbage, accumulated due to cleaning activities and also due to maintenance and repair work, should be disposed of to a far-off central garbage disposal place.
- iv. All dust entry points inside the panels and cubicles should be located and plugged.
- v. Spares, consumables, tools, tackles, kits and instruments etc., all must be kept nicely arranged on racks and in almirahs.
- vi. Sufficient numbers of firefighting equipments must be available at key-points near the electrical equipments and supply-panels.
- vii. All the electrical equipments and supply-panels should be painted and labelling done correctly, whose shining surfaces have become dull or got damaged so that, they always look new and bright. The required paints and thinner will be supplied by BPSCL.

10. TROUBLE SHOOTING IN ALL THE THREE SHIFTS:

Readiness for taking up a job should always be there round the clock, including Sundays and holydays.

11. ATTENDING TO BREAKDOWNS:

If a breakdown occurs the affected portion has to be identified and breakdown repair work is to be started after receiving work permit

12. RECORD-KEEPING & REPORT-MAKING

- i. The contractor will maintain job-progress record on daily basis.
- ii. Check-list will have to be filled- up pertaining to each equipment as and when that equipment is taken for maintenance and repair.
- iii. Maintenance and repair record of all the equipment will have to be maintained.

SPECIAL TERMS & CONDITIONS :

1. Party have to arrange necessary gate passes of their workers alongwith night permission from the concerning authority.
2. Party have to process the gate passes formalities of their workers after getting information from the EIC of the job.
3. All working personnel should have proper safety certificates issued by BPSCL before start of work.
4. Job may be carried out round the clock till completion.
5. Material shifting from store to site will be contractor's responsibility.
6. Jobs are to be started after getting proper shut down/work permits from the concerning authority.
7. Work is to be done in coordination with mechanical counterpart agency.
8. Proper trial run to be taken in consultation with mechanical counterpart agency.
9. You will have to be fully responsible for any sort of unsafe activity of your workmen.
10. All the working probable tools & tackles and safety appliances of reputed make such as hand tools, test lamps, torch, multimeter, tongue testers, drill machines, grinding machines, welding machines, gas cutting sets, sling d-shackle up-to 10 tons capacity etc. are to be provided prior to start of the job by you.
11. Defects found due to poor workmanship have to be liquidated free of cost by you within the limited time frame as instructed by EIC.
12. All safety procedures, standards for the workmen, equipment have to be adhered by you.
13. You will have to follow and observe the safety & statutory requirements.
14. You will have to be fully responsible for any sort of unsafe activity of your workmen.
15. Supervision of the work is to be carried out by the agency.
16. During contract period there will be no consideration of idle & escalation charges.
17. Any work not mentioned in the scope of work but found necessary and indispensable as per discretion of EIC will have be agreed and executed by the agency inarguably.
18. Party should ensure his manpower working in the specified area; strict action is to be taken if his employees found in other place engaging in any un-lawful activities.
19. Supervisor will act as an overall site in charge for this particular job on behalf of contractor with sufficient experience. Supervisor will have to be normally available at the working site, coordinating with the EIC for proper, satisfactory & safe working.
20. Party will authorize one of his working personnel to issue materials from technical cell store to site.
21. Party will maintain a register for noting down the details of jobs done against each planning schedule, and that should be shown to EIC whenever required.
22. BPSCL have the right to check the credential of the working personnel deployed by the party, if found not suitable, changing / substitution is to be done.
23. **Guidelines regarding performance of work**
 1. The contractor will perform the subject work in accordance with the guidelines contained in the work order, technical specifications of equipment/ devices, IS codes of practice.
 2. All incidental items of work not shown or specified but reasonably implied and found to be necessary for successful completion of the work shall be deemed to be included in the scope of work at no extra cost to BPSCL.

3. In case of any doubt or contradiction regarding jobs, the decision of the Engineer- in-charge will be final and abiding.
24. **Safety training and safety clearance** : All unskilled and skilled workers, supervisors and engineers of the contractor must undergo safety- training conducted by Safety Engineering Department of BPSCL and obtain certificates from there without which they will not be allowed to work.
25. **Supply and use of safety equipment**
- a. All the safety appliances and equipment for protection of personnel deployed for the job are to be provided by the contractor at their own cost. Proper use of safety equipment / appliances and adherence to safety rules/ norms must be ensured by the contractor.
 - b. All the safety equipment& appliances (of general & electrical type) provided as per Clause No. 3 above should be as per the instruction of safety department of BPSCL.
26. **Observance of safety rules**
1. It is the responsibility of the contractor to comply with all the safety rules and regulations as applicable in the plant area. Ignorance of safety rules and statutes will not be a valid excuse.
 2. The employees of the contractor will have to strictly observe safety rules and comply with statutory requirements concerning safety. Any violation thereof by any employee will expose the contractor to penalty.
27. **Medical fitness of employees** : The contractor will have to ensure proper medical fitness of the employees employed by him and will produce medical fitness certificates for them from a registered medical practitioner prior to clearance for working at height.
28. **Supervision of Work** : Supervision of the work on site on daily basis shall have to be carried out by the contractor. The contractor and the supervisor will be fully responsible for any unsafe, indecent, illegal incidents caused by his employees.
29. **Gate-passes for contractor's employees** : For the employees, the contractor will have to arrange for necessary gate-passes, vehicle-passes and permission for working in Sundays/ holidays and during night-hours, after fulfilling the formalities as laid down by the BSL/ BPSCL/ CISF authorities.
30. **Work permit** : As the area of work is highly sensitive with respect to safety hazards, the responsible supervisor / engineer of the contractor must take proper work-permit, shutdown clearance and other instructions from the Engineer in-charge daily, before start of the work
31. **Compliance with various labor laws and Electricity rules** : The contractor will have to strictly comply with the provisions of various labor laws, electricity rules, Workmen Compensation Act, EPF and ESI rules etc, as applicable for working at site of Power Plant, BPSCL. The contractor shall be directly responsible for all the consequences arising from their non-compliances and BPSCL will remain indemnified against all such implications pertaining to them.
32. **Load - lifting equipment** : All the load lifting equipment like slings, ropes, D-shackles and safety belts, etc, must be tested by an authorized agency at regular intervals and their test- certificates obtained.
33. **Inputs by BPSCL (Free of cost)**

Following materials shall be supplied by BPSCL free of cost:-

1. Mobile crane, Truck and Fork lift.
2. Compressed air, electricity and water.

3. Industrial gases for carrying out gas-cutting and welding.
 4. Gaskets, insulating varnish, grease, sealants, lubricants, 'O' rings, rubber chords, oil seals, nuts and bolts, paints, thinner, etc.
 5. General and special purpose welding electrodes and brazing rods.
 6. Steel plates, MS Pipes, angles, channels & G.I. Pipes etc.
 7. Power and control cables, lugs, glands, HT tape and crimping tools etc
 8. Machining facilities as available in Area Repair Shop of BPSCL
34. **Analysis of Faults** : If any breakdown occurs, it is to be analyzed to find out its root cause. Once the cause is identified, its remedial measure is also to be thought out and incorporated in consent with the Engineer in-charge so that, a similar breakdown does not occur again.
35. **Job competence of working personnel**
- i. Supervisors of the job executing agency must have keen familiarity with the power system practices and the types of equipment as used in power generation and distribution network in a Thermal Power Plant.
 - ii. Contractor has to deploy necessary workforce for the execution of job. Working personnel of the contractor must have a thorough knowledge of carrying out maintenance and repair jobs Electricalequipment and devices installed in boiler electrics of Power Plant, BPSCL, LT & HT Motors, others covered by the scope of the work, so as to cover up their responsibility-area confidently and perform the jobs successfully. Their workmanship should be of high skilled/ expert grade.
 - iii. Supervisors and technicians, deployed for doing the jobs, should have enough job experiences and high level of competence in all the relevant areas.
 - iv. The contractor should employ supervisors having good experience of working at systems of appropriate voltage level in AC & DC
36. **Job planning and scheduling**
1. After assessing the total quantum of work, job planning & scheduling will have to be done so that, job fulfillment target is achieved in all areas.
 2. Planned shutdown of any particular equipment, line, etc, may not be available on some particular day due to unfavorable plant condition. Planning is to be re-scheduled accordingly.
37. **Preservation of Spare Parts** : Spares as well as the dismantled parts of equipment will have to be kept safely and preserved properly, maintaining a systematic record of them. Spare conservation is to be done regularly.
38. **Workmanship guarantee** :If a repair fails within the next six months, the contractor will be held responsible for it and the contractor shall have to re-do the repair, free of cost.
39. **Subletting of contract** : The contractor will not engage sub-contractor for the job.
40. **Regular Inspection and monitoring of Equipment in the system**
- All the equipment and devices installed in the Boiler electrics of Power Plant, BPSCL, LT & HT Motors and others covered by the scope of the work, are to be inspected regularly by the Engineers / Technicians engaged by the contractor, and various technical parameters are to be noted. Monitoring of conditions and technical parameters are to be taken-up for planning of shut-down / maintenance schedules for healthy up-keep of equipment.
41. **Conditions for Manpower deployed**
- a) All workmen deployed for the work will have to follow and observe the safety & statutory requirements.
 - b) Proper use of safety appliances, personnel protection equipment (including safety helmet, hand gloves, safety goggles, safety shoes, full body harness, etc), should be ensured.

- c) The bidder has to comply with Labor laws, ESI Act, EPF rules and AWA rules applicable in the plant area.
- d) The bidder has to fulfill various labor laws and regulations including Payment of Bonus Act, 1965, or latest amendment of the same.
- 42. **Quality of job.** : In case of any dispute regarding the quality of the job, the decision of officer in charge of BPSCL will be final and abiding. The job completion certificate will be issued by him.
- 43. No job should suffer due to shortage of manpower. Any lapse on the part of the bidding agency to provide adequate manpower will be viewed seriously & may result in deduction of payment.
- 44. You have to remove all the scraps & wastes generated by your work to a dumping ground as directed by the engineer-in-charge.
- 45. The job is to be executed as per the satisfaction of the engineer-in-charge, who will be issue the work completion certificate.
- 46. **Penalty clause:**
 - a) A case of non-removal of scrap generated after completion of job will be penalized @Rs. 250/- each time of such an occurrence.
 - b) Any case of dumping of scrap/ waste generated by the job to any are other than the marked dumping ground, will be penalized @Rs 500/- each time of such.
 - c) If shortage of tools, tackles, consumables, measuring and testing instruments and safety equipment is detected with the first warning, Rs. 500/- to Rs. 1000/- will be charged as penalty, with the second warning Rs. 1000/- to Rs. 5000/- will be charged as penalty, with the third warning Rs. 5000/- to Rs. 20,000/- will be charged as penalty and if further lapses observed Work Order may be cancelled.
 - d) If the allotted job delayed or hampered due to negligence by the contractor, penalty may be imposed up-to Rs. 10, 000/- each time.
- 47. **Guarantee Clause:** : The workmanship is to be guaranteed for a period of 06 (Six) Months. In case of any defects arising out of bad workmanship within the guarantee period, the defects will have to be redone free of cost by the contractor.

48. **Safety Clause:**

Without prejudice to the right conferred by the clause for stoppage of work for violation of safety requirements, contractor shall be liable for penalties mentioned below:-

- 1. Up to Rs. 5000/- by DGM (Safety)/ Head of Safety Engg. Department / Head of the Department where work is being done for 1st violation of safety norms, nonuse of PPEs (Personal Protective Equipment) like safety shoes, hand gloves, safety helmets, goggles, etc as per works requirements by the contractor or his workers. This condition is applicable in case of violations of Road Safety norms also.
- 2. Fine up to Rs. 20,000/- on 2nd violation as mentioned in Safety Clause No. 1 above.
- 3. The contractor shall be debarred for one year / deregistered from taking up further contractual work in BPSCL from the date of issue of debarring / deregistering order on 3rd violation as mentioned in Safety Clause no. 1 above.
- 4. Fine up to Rs. 10,000/- for violation in use of Full Body Harness by the contractor or his workers for working at height (above 1.8 meters from immediate floor).
- 5. Fine Rs. 25,000/- (Minimum) to Rs. 50,000/- (Maximum) for serious injuries and disabilities caused by violations as mentioned in Safety Clause no. 1 & 4 above.
- 6. Independent of the above, contractor shall be fined Rs. 1, 00,000/- (Rs. 1 Lakh) or more and debarred / deregistered from taking up further contractual work in BPSCL from the date of issue of debarring / deregistering order in case any fatal accident occurs due to violations as mentioned in Safety Clause No. 1 & 4 above.

PRICE BID/ FORMAT**Special Instruction –**

1. *In the event of a L1 Bidder backing out prior to placement of order, in addition to forfeiture of EMD the bidder should be suspended for a period of six months from the date of issue of suspension order*
2. *Breakup of quoted unit LC (Landed Cost) excluding service tax rate shall be submitted by the bidder. In case of refusal of bidder to submit price break up, the bidder shall be suspended for a period of six months from the date of issue of suspension order.*
3. **Price Basis L1 bidder will be decided on lowest Landed Cost excluding service tax Basis.**

Sl. No .	Description of Jobs	Rate/Month (Rs.)	Amount for one year (Rs.)
1	Assistance for Maintenance and Repair jobs of 44 HT Motor.		
2	Assistance for Maintenance and Repair jobs of LT AC Motors for drives (48 Nos.) and Valves (120 Nos.) including their supply feeders.		
3	Assistance for Maintenance and Repair jobs of LT DC Motors (22 Nos.) and DC Generators (02 Nos.) including their supply feeders.		
4	Assistance for Maintenance and Repair jobs of Control desks and supply panels such as GVDCS, PDBS, MCCS and Dust feeder panels etc.		
5	Assistance for Maintenance and Repair jobs of Control and Power cable as per the requirement.		
6	Assistance for Maintenance and Repair jobs of DC board & supply feeders from DC board to all other areas.		
7	Assistance for Maintenance and Repair jobs of common accessories as used in Electrical circuits and equipment.		
8	Assistance for Cleaning, Housekeeping & Painting jobs as part of routine activities pertaining to the equipment and panels as mentioned above.		
9	Assistance for Trouble-shooting in all the three shifts as per the requirement.		
10	Assistance for Attending to breakdowns as and when they occur.		
11	Assistance for Record-keeping and Report-making.		
Total Amount (Rs)			

Note : Service Tax extra as applicable

Signature with seal of tenderer

Notarized Affidavit

I.....son/daughter of Shri
Aged..... years resident of
.....PS.....District.....State.....do
hereby solemnly affirm that:

- (i) I am (designation/authority) in M/s
(name of the firm/company).
(ii) I confirm that all documents submitted against Enquiry No. dtd.
..... in support of eligibility criteria are genuine.
(iii) I undertake to produce all documents in original for verification as and when asked for
the same by BPSCL.

Solemnly affirmed & declared before me by Deponent(s) who is/are identified by	The declaration made herein above are true to the best of our knowledge, information and belief signed atOn..... Deponent(s)
---	---

ANNEXURE - VII

CHECKLIST TO BE FILLED BY CONTRACTOR EXCEPT REMARKS:- All documents which is require for fulfill the qualifying requirement/ Eligibility criteria are to be submitted along with tender in serial order (clearly mention page no.) and the tenderer must fill the checklist of Annexure-V

CHECKLIST 1- OF DOCUMENT SUBMITTED BY TENDERER

Sl.No.	Document	Submit/ Not Submitted	Page No.	Remarks by BPSCL
1.	Valid work order			
2.	Completion Certificate			
3.	Partnership/ Proprietor			
4.	EPF			
5.	ESI			
6.	Latest ITR			
7.	* Service Tax Regn. No.			
8.	Turnover/ PL Sheet			
*If the agency is not under the preview of service tax then please write Not applicable (N.A.).				
Total numbers of pages in Techno-commercial Bid				

CHECKLIST-2 [PLEASE TICK (✓) THE ONE WHICH IS APPLICABLE AND CUT (X) ANOTHER]

1.	All document as per NIT and Checklist 1	Submitted () Not submitted ()
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DECLARATION OF TENDERER:-

I M/s hereby declare that to best of my knowledge, the information given in the checklist is correct and complete, if any mistake/ incorrect statement will be found then you have right to reject and cancel (my) tender/application without any notice. I also hereby declare that I have read the all terms and conditions of tender document carefully.

Signature of tenderer with seal

(To be submitted on Supplier's Letter Head)

Format for Acceptance of General Terms & Conditions, Commercial Terms and all other Terms of the Reverse Auction

We _____ (Contractor Name)
having registered office at _____ (Address)
agree to all the Commercial, General & other Terms & Conditions listed in the
NIT No. _____
dated _____
for the work of _____ (subject work) through Reverse Auction.

We confirm that we are in a position to do the job as per the scope of work given in NIT/RFQ. We agree to participate in the Reverse Auction and abide by the rules.

We nominate an executive, whose details are given below, to put the bids on our behalf.

The details of the person authorized to bid on our behalf is as follows.

Name & Designation :
E-mail ID :
Contact phone nos. :
Address :

(Signature & Seal)

Place :
Date :

Format for submitting last quoted prices*(To be submitted on Company Letter Head of the Bidder)***(To be sent within 30 mins of conclusion of the Reverse Auction)**

To,

mjunction services limited
 1st Floor, Tata Centre
 43, Jawaharlal Nehru Road
 Kolkata – 700 071

Fax: 033 – 2288 3279**Ref: Reverse Auction forfor Bokaro Power Supply Co. (P) Ltd. held on**

Reference above, we hereby confirm our Market wise last quoted prices in the Reverse Auction held on forfor Bokaro Power Supply Co. (P) Ltd., Bokaro Steel City.

Market No.	Last Quoted Price

We also confirm that we will submit item wise price break-up, within two working days from the date of Reverse Auction.

Signature :

Name :

Designation :

Date :

ENVIRONMENT, HEALTH AND SAFETY**EHS (Environment, Health and Safety) Clause for contracts where overall site is under BPSCL control****Contractor's Responsibilities**

The contractor shall during the entire term of contract undertake to perform the following obligations relating to environment, health and safety:-

1. Ensure that your workforce is not exposed to asbestos or asbestos containing atmosphere.
2. Take suitable control measures to ensure that the workers are protected from dust emission.
3. Monitor and ensure that the working area is free from any toxic gas, vapour and fume. Take adequate measures to reduce level of concentration below permissible limit. Exposure to any particular toxic gas, vapour or fume shall not exceed the maximum permissible limit prescribed in local regulation for any particular period of time. Ensure adequate ventilation and no immediate danger to life and health of personnel working at site.
4. Ensure that there is no flammable atmosphere and uncontrolled fire hazard in and around the work place. In case it is required to work in flammable atmosphere, implement safe working procedure and suitable control measures in order to work safely.
5. Ensure that the workers are protected from excessive noise and heat. Take adequate measures to reduce noise/heat level below the permissible limit.
6. Ensure safe access and egress in and around work place. Ensure proper maintenance of Platforms, staircases, ramps etc. Special care and all safety measures should be taken while working at height. Roof work and access to roofs must not be undertaken without prior permit.
7. All Personal Protection Equipments supplied by the contractor should be of internationally recognized standards. All tools and tackles bought by the contractor for use during the contract period should have proper and valid certification by competent authority.
8. All lifting equipments, tools and accessories provided by BPSCL should be maintained and returned back in sound condition after the completion of contract period.
9. Ensure that the illumination in and around workplace and access areas are maintained properly. Make sure to switch off the light, fan and air conditioners after use.
10. The contractor must ensure that all machinery and equipments are provided with earth fault circuit breakers at all times when using electrical leads. Use of electrical tape for temporary repair is prohibited.
11. Guards and covers for equipments/machineries are to be provided where ever necessary.
12. Gas cylinders shall be securely stored, transported, identified and used in line with legislation and EHS requirements.
13. Fire extinguishers and other fire fighting equipments provided in different locations should never be misused.
14. Contractor must ensure optimum use of water with minimum wastage.
15. Contractor shall also ensure that the work area is kept clean, tidy, & free from debris. The contractor is also fully responsible for protection of ground and underground from pollution.
16. Identify and highlight potential hazards / risks existing.
17. Ensure suitable corrective actions are implemented for identified issues.
18. Provide adequate emergency and first-aid facilities and it should be available in all shifts.
19. All workers should be trained and communicated about the onsite emergency and evacuation plan.
20. All equipments and plant should be maintained in safe condition.
21. The Contractor and their Personnel admitted to site must conduct themselves in an orderly and safe manner and conform at all times to the EHS Requirements. Fighting, engaging in horseplay, being under the influence of or possessing alcohol or drugs, gambling, soliciting, stealing, immoral or otherwise undesirable conduct is not permitted and shall not be tolerated. Upon knowledge of such conduct, BPSCL shall exclude the concerned person from the site and take all other appropriate measures as deemed necessary. BPSCL reserves the right to perform random drug and alcohol tests.
22. The Contractor shall immediately notify BPSCL of any environmental incident, injury, illness, near-miss, unsafe condition or practice and any loss or damage to property, including incidents related to the Contractor Personnel. An investigation report assessing the root cause, corrective action, and preventative action shall be submitted by the Contractor to BPSCL within 24-hours of the incident's occurrence.