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/17-18/C-031/NIT-648/2514 Dated 22/05/2017



NAME OF WORK: Annual Maintenance Contract for "Maintenance and Repair job of HT & LT Indoor Switchgear.

COST: Rs.1000/-

(Rupees One Thousand 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 Bhavan, Bokaro Steel City – 827001

NOTICE INVITING TENDER

CIN:U40300DL2001PTC112074

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

Date: 22/05/2017

NIT No.: BPSCL/CEO/P&C/17-18/C-031/NIT-648/2514

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 | Annual Maintenance Contract for "Maintenance and Repair job | |
|-----------------------------------|---|--|
| | of HT & LT Indoor Switchgear | |
| Earnest Money (in Indian Rs.) | Rs. 15,000/- (Rupees Fifteen Thousand) only | |
| Cost of tender documents | Rs.1000/- (Rupees One Thousand) Only | |
| (Non-refundable) (in Indian Rs.) | RS:1000/- (Rupees One Housand) Only | |
| Period of contract | 01 (One) year from the date of commencement of Work. [Extenda | |
| | for another one (01) year on satisfactory performance] | |
| Last date & time of submission of | 23/06/2017 at 12.00 Hrs. (IST) | |
| tender | 23/00/2017 at 12.00 1118. (131) | |
| Bid opening Date & Time. | 23/06/2017 at 12:15 Hrs. (Part A & B) | |

Qualifying Requirements / Eligibility Criteria:

1. The bidder should be an valid (up-to-date) ISO: 9001-2008 (or advance) certified company, while submission of tender.

2. Average annual turnover (AAT)

Bidder should have Minimum average annual turnover (MAT) of Rs.8.70 Lakhs.

- ⇒ 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 last three (03) consecutive years, ending 31st March of the previous financial year duly certified by CA.

3. Technical Capability:

Bidder 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 **Rs.8.68 lakhs** *

OR

➤ Two similar completed works each costing not less than **Rs.11.58 lakhs** *

OF

➤ One similar completed work costing not less than **Rs.20.27 lakhs** *

Similar Work means: "Maintenance and Repair job of electrical equipments belonging to HT (6.6 KV or more) switch gears".

⇒ 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

^{*} The value of work order(s) will be considered on pro rata yearly basis.

concerned authority etc.)

- 4. 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.
- 5. The bidder shall furnish authenticated copies of latest IT Return, Service Tax Registration, EPF certificate, ESI Certificate and Electrical license.

 The bidder is also required to submit Annexure VIII & IX as instructed there in.

General Terms & Conditions:

- i) Offer shall be accompanied with Cost of the tender documents of **Rs. 1000.00** (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.
- 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.com
- iii) However, Micro & small enterprises (MSEs) / PSU /Govt. Undertakings and Co-operative societies will be exempted from submission of cost of tender document & Earnest Money as per government policy. For MSEs the exemption from paying cost of tender document & Earnest Money will be 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.
- iv) 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 **Website: www.bpscl.com** only.
- 2. Bidders are requested to visit above 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) Tel: 8986874098

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 along with copy of System generated **acknowledgement-slip** for Online submission of sealed price bid etc. marked with (Part-B) Techno-Commercial Bid, NIT No. & Date (*In hard copy*)

Note: Part A & Part B shall be submitted in hard copy at following address:

DGM (P&C)

Bokaro Power Supply Co. (P) Ltd. Hall No.M-01, Old ADM Building

Ispat Bhawan, Bokaro Steel City – 827001

Ph: 06452 240380, Tel: 8986874098

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 incase 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 copy of System generated **acknowledgement-slip** for Online submission of sealed price bid to be submitted along with 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 without duly authenticated.
- 2.14 Tenders shall be accompanied by a copy of latest IT Return submitted, Service Tax Registration No. (if applicable) of the Indivdual / 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 <u>VDA Clause</u>: 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 OUOTING UNWORKABLE RATE:

if a tenderer quotes unworkable rates i.e. if the quoted price is less than the lower limit of the estimated price and is considered for placement of order, the party 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 Draft/Bank Guarantee. The amount of Performance Guarantee Bond will be equal to the difference between lower limit of estimated price and quoted price of the tenderer. Earnest Money of the tenderers who refuse to give Performance Guarantee Bond will be forfeited and they will not be considered for taking participation in any kind of Tender for next Six (06) months from the date of issue of letter to the Defaulter Firm, if order / contract is not finalised from the present tender.

2.23 **RATE FINALIZATION:**

BPSCL reserves the right to finalize the rate through either of the following modes:

1. a Either through Online Seal Bid Price Bid obtained just before Reverse Auction

OR

- b. Opening of Online Price (*submitted on www.buyjuntion.in*) / physical Price Bid, submitted at the time of techno-commercial bid.
- 2. Through Reverse Auction to be conducted by our service provider M/s. mjunction.
- 3. If RA is not concluded for any reason, RA may be re-launched or case may be determined on the basis of online/physical price received along with the techno-commercial bid.
- 4. Where it is decided not to conduct the RA, the techno-commercially accepted bidders shall be asked to submit online sealed or physical sealed decrement/s. In this case On line/physical price bid/s and online decrement or physical decrements, as decided by BPSCL, shall be opened together on same day and case be processed.

- 2.24 **FORCE MAJEURE**: 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.
- 2.25 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 by treated as firm price on that account and hence parties should state everything clearly.
- 2.27 **Special Instruction:** Tender will be opened on **23.06.2017 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. PREVENTIVE MAINTENANCE :

I. Oil Circuit Breakers (OCBs) / 6.6 KV & 11KV

- a. Cleaning of insulators, pole chamber and other parts of the breaker. Replacement of defective parts. Checking of oil. Topping-up tested oil up to required level. Replacement of oil in pole chambers. Arresting oil leakage.
- b. Checking of spring charging mechanism, auxiliary contact, indications, Signals, Mechanical / electrical interlocks etc and rectifying the defects.
- c. Checking ON/OFF operations both manually and electrically with breakers in 'TEST' Position. Rectifying the defects. Meggering.
- d. Measuring contact resistance of each pole of the breakers. Proceeding for medium repair if the contact resistance is higher than the permissible value, or, if there is any other major internal problem of the breaker.

II. Vacuum Circuit Breakers (VCBs) /6.6 KV & 11 KV

- a. Thorough cleaning of insulators, surge arrestors, vacuum chambers and other parts. Repair / replacement of defective parts.
- b. Checking of vacuum seals, spring charging mechanism, auxiliary contacts. Indications, signals, position locks, mechanical / electrical interlocks &rectifying thedefects.
- c. Checking ON/OFF operations both manually and electrically with breaker in 'Test Position' rectifying the defects. Meggering.
- d. Measuring contact resistance of each pole of the breaker. Proceeding for replacement of vacuum chamber (as decided by Engineer in-charge), or, if there is any other major internal problem of the breaker.

III. Air Circuit Breakers (ACBs)/ 11KV & 415 V

- a. Cleaning of insulators and other parts. Replacement of defective parts.
- b. Checking of resetting mechanism, auxiliary contact, indications, signals, door locks, position locks, limit switches mechanical / electrical interlocks etc & rectifying the defects.
- c. Checking ON/OFF mechanism & operations of breaker in Test position, if possible. Rectifying the defects. Meggering.
- d. Measuring contact resistance of each pole of the breaker. Proceeding for medium-repair, if the value is higher than permissible limit, or, if there is any other major problem of the breaker.

IV. HT and LT Isolators (6.6 KV, 11KV & 415 V)

Thorough cleaning of Isolators and other parts. Replacement of insulators. Jaw-contacts or other parts, if found defective. Checking of door locks, position locks and other interlocks & rectifying the defects. Meggering.

V. Potential transformers (PTs) / 6.6 KV & 11 KV

Thorough cleaning of PTs insulators and other parts. Repair or replacement of the defective parts. Tightening of connections and checking of Switches and fuses etc. Rectifying the defects. Meggering.

VI. Current Transformer (CTs) / 6.6 KV, 11 KV & 415 V

Thorough cleaning of CTs insulators and other parts. Repair or replacement of defective parts. Tightening of connections. Rectifying the defects. Meggering

VII. Reactors (11 KV)

Thorough cleaning of insulators and other parts. Repair or replacement of defective parts. Checking of air flow system. Rectifying the defects. Meggering.

VIII. Switch Gear Cubicles (6.6 KV & 11 KV & 415 V)

- a. Thorough cleaning of mini-buses, insulators, cables, cable glands and other parts including panel walls and panel doors.
- b. Tightening of HT and LT connections. Checking switches, indications and limit switches etc.
- c. Checking of sealing of doors, covers & cable entry etc. Checking of door locks, mechanical/ electrical interlocks, hinges, ventilation & cooling etc of the cubicles. Rectifying the defects coming to knowledge.
- **IX.** <u>DC System Cubicles</u>: Cleaning, inspection, repairing or replacing defective parts and accessories. Checking interlocking & operations. Rectifying defects.
- **X.** <u>Generator Excitation Panels</u>: Through cleaning of insulators and other accessories of the cubicles. Replacement of defective parts. Tightening of connections and rectifying defects.

XI. Generator Field Breakers

- a. Thorough cleaning of Insulators, fixed & moving contact, arc chutes and resistor etc.
- b. Checking of ON/OFF mechanism, contact pressure, auxiliary contacts, indications and signals. Repair / replacement of defective parts. Meggering.
- e. Measuring contact resistance. Proceeding for medium-repair, if the value is higher than the permissible limit, or, if there is any other major problem in the breaker.
- XII. <u>HT and LT Sections (11KV, 6.6 KV & 415 V)</u>: Thorough cleaning and blowing of section buses, droppers, support insulators and replacement of insulators, if required. Meggering and noting down the IR value of sections of each phase.
- **XIII.** <u>Instrumentation Transformer</u>: Thorough cleaning and blowing of insulators, core & winding, cable terminals. Meggering and noting down the IR values of both side of the transformer.

2. MEDIUM REPAIR:

I. Oil Circuit Breakers (OCBs) / 6.6 KV & 11 KV

- a. Dismantling of poles of breakers after draining of oil. Attending to defects of fixed and moving contacts, arc chambers, arms, Jaw-contact, spring charging mechanism, spring charging motor, oil seals, gaskets, 'O' rings, Split pins, insulating cranks and contact roller etc. Replacing the parts which are beyond repair.
- b. Re- assembling the poles and other mechanism of the breaker with associated fittings as per norms and standard procedures. Filling up fresh tested oil in poles up to required level. Checking manual operation. Adjusting contact-travels to values as per norms.
- c. Checking electrical operation and mechanical interlocks. Checking oil leakages. Rectifying the defects.
- d. Measuring contact-travels, contact resistances and also doing Meggering etc. Recording the results.

II. Vacuum Circuit Breakers (VCBs) / 6.6 KV & 11 KV (when installed)

- a. Dismantling the poles of breaker. Replacing vacuum chambers in case of loss of vacuum, defective surge-arrestors and insulators. Repairing or replacing the defective parts, auxiliary contact assembly, plug-sockets or any other parts not found working properly.
- b. Re-assembly the breaker with all fittings as per norms and standard procedure.

c. Checking manual/ electrical operations and mechanical interlocks. Meggering and recording the results.

III. Air Circuit Breakers (ACBs) / 11 KV & 415 V and Generator field breakers

- a. Dismantling the poles. Repairing or replacement of main contact (fixed and moving), auxiliary contacts, arc-chutes, springs, contact-arms, jumpers, jaw-contacts or any other part, if found defective.
- b. Re-assembling the poles with all fittings as per norms and standardprocedure. Adjusting contact pressures, checking manual/ electrical operations and all interlocks. Rectifying the defects.
- c. Measuring contact resistances, and also doing Meggering and logging the test-results.

3. TEMPERATURE MONITORING AND DEFECT RECTIFICATION: Temperature of HT

incomer-feeders and all the load-feeders will have to be regularly monitored using infra-red camera. If any hot point is detected. It is to be set right at the earliest taking the shut-down so that, it does not get converted into a measure breakdown. Thermography –survey results, location of the hot point, if any and the defect rectification measures are to be recorded properly.

4. TROUBLE SHOOTING IN ALL THREE SHIFTS.: If any trouble arises in the Indoor switchgear equipments, it is to be solved immediately. Readiness for taking up a job should always be there round the clock. Hence, working-personnel will have to be posted by you in all the three shifts covering 24 hours on all days including Sundays & Holidays, so that, the defects-rectification job could be started immediately as soon as the problem arises . A back-up group will always be ready even in odd hours to tackle the problem, if the front- line repair-man feels any difficulty in solving the problem.

5. ATTENDING TO BREAKDOWNS

- 1) If a breakdown occurs, the expert attending-group will have to be present at the occurrence-site and report to the control engineer (electrical section) within half an hour.
- 2) The affected portion is to be isolated under the guidance of control engineer (electrical section) and breakdown-repair works is to be started immediately after receiving work-permit.
- 3) After attending to the break down, the system is to be normalized back again under the guidance of control engineer (electrical section).
- 4) During breakdown, the repair-job is to be continued round the clock until the affected part is attended and normalized back.

6. CLEANING OF FLOORS AND PANELS

- 1) The floors of S/G rooms must be cleaned regularly using brooms, dusters, brushes & vacuum cleaners first and later on by wet mopping using detergents.
- 2) The S/G panels should be cleaned from outside using the vacuum cleaners and marking cloth regularly.
- 3) The inside of LT S/G panels should be cleaned using vacuum cleaners after taking permission from control engineer (electrical section) and adopting safety measures against possible hazards as and when possible. The inside of HT S/G panels should be cleaned only during shutdown period.
- 4) All dust entry points inside the panels/ cubicles and finally inside the S/G rooms should be located and plugged.
- 5) Cleaning of S/G rooms will include cleaning of floors, doors, windows, window glasses and removal of cobwebs etc.
- 6) Dust and garbage accumulated due to cleaning activities should be disposed off in a dust bin made of HDPE material and kept at different places for such purposes only.
- 7) All the dust bins will have to be taken to a central garbage disposal yard and will be emptied there regularly

- 8) If floors are found damaged here and there on a smaller scale and posing problems in sweeping and mopping, it should be repaired using suitable material.
- 9) The level of cleanliness maintained must be of high order.

7. HOUSEKEEPING

- 1. Scrupulous materials found littered and garbage generated during the repair- work must be mopped and disposed-off immediately in the dust-bin or at remote barren place.
- 2. Spares, consumables, tools, tackles, kits and instruments etc all must be kept nicely arranged on racks and in almirahs.
- 3. The final outcome of all the activities pertaining to Housekeeping should be:
 - a) The panels are to be maintained neat and clean.
 - b) The S/G rooms look tidy and arranged and also well illuminated
 - c) Sufficient numbers of fire fighting equipments are available inside S/G rooms.
 - d) No seepage of water and ingress of dust into the S/G rooms
 - e) The S/G rooms are manned by duty-post man round the clock and entry of unauthorized persons completely stopped.

8. <u>MAINTAINING AIR PRESSURISING, VENTILATION AND COOLING SYSTEM IN PROPER</u> WORKING ORDER:

The contractor will have to maintain the air pressurizing, ventilation and cooling systems in proper working condition to maintain the desired level of temperature and cleaning in the S/G rooms all the time. If any defect or shortcoming is detected in this system, that is to be repaired / replaced / modified and made alright. Under this head we have got 03 nos. of Air intake fans (for 1 KV reactor cooling), 30 nos. of exhaust fans and 04 nos. of motors of tube axial fans (for pressuring 6.6 KV S/G rooms and some other places).

9. FLOAT CHARGERS AND BOOST CHARGERS OF CPP: We have 220V dual float chargers

(90A) and dual boost chargers (90A) suitable for charging 220V/600 AH lead acid battery of CPP. The input supply to the float charger is AC 3Ø 415 volts. Its DC output floats the battery at 2.15V to 2.20V per cell with a voltage stabilization of \pm 1% and is capable of feeding a DC continuous load of 90 Amps. Similarly, the input supply to the boost charger is AC 3 Ø 415 volts. Its DC out put is capable of boost charging the battery at any constant current as per the setting from 25% to 100% of 90 Amps. The current will remain stabilized within \pm 2% of the set current for AC input supply voltage variation of \pm 10%. The DC out put voltage range of 1.85V to 2.65V per cell required for boost charging shall be automatically selected by the charger in this constant current mode. The contractor shall be responsible to maintain the above set of charger perfectly in healthy and operating condition by doing its periodical preventive maintenance and carrying out the required repair of the faulty part whenever any trouble arises in them.

- **10. PAINTING OF PANELS AND LABELLING:** All the S/G Panels should be spray painted and labeling done correctly, whose shining surface have become dull or got damaged so that, they always look new and bright. The required paints and thinner will be supplied by BPSCL.
- **11.PROVIDING ASSISTANCE IN DOING RETROFITTING OF VCBs:** You will provide assistance to job executing agency in doing retrofitting of new CBs in place of old OCBs/ VCBs/ACBs (6.6 KV&11.5 KV) and LT ACBs.
- **12. <u>SETTING RIGHT CABLE-CONNECTION PROBLEMS</u>**: Setting right power cable connection problems in switchgear panels. Carrying out connection / disconnection and replacement, pertaining to indoor switchgear equipments.
- 13. PROVIDING ASSITANCE TO 'OPERATION-GROUP' IN CARRYING OUT 'SHUTDOWN'AND'NORMALIZATION' ACTIVITIES.

You will provide assistance to 'Shift-operation' group under the leadership of shift in charge of MCB / ECR-II in isolating and normalizing the equipments which are taken for repair.

14. MAINTENANCE AND REPAIR OF EARTHING GRID

- 1) Carrying out regular inspection and maintenance of Earth-pits, Electrodes and Earth-Strips and doing repair as per the requirement.
- 2) Measuring earth-resistance values and noting them down in tabular form.
- 3) Ensuring earth-resistance values within norms by doing treatment with water and salt.

15. MAINTENANCE AND REPAIR OF 11.5 KV BUS-DUCTS: You will carry out maintenance and repair of 11.5 KV bus-ducts of GTs and auxiliary power transformers which lie inside indoor switchgear rooms.

16. LOGGING AND RECORD- KEEPING

- 1. You will maintain job-progress record on daily, monthly and annual basis.
- 2. Check-list will have to be filled-up pertaining to each equipments as and when that equipment is taken for maintenance and repair
- 3. Maintenance and repair records of all the equipments of indoor switchgear system along with technical specifications will have to be maintained.
- 4. An updated record of spares requirements and their available stock will have to be maintained and also maintain their consumption-pattern.
- 5. All the records must be systematic and computerized so that, it may be retrieved and presented any time on demand.

17. BPSCL WILL PROVIDE THE FOLLOWINGS, FREE OF COST, as per requirement for job Execution:-

- a) EOT Crane, Mobile Crane, Truck and Fork Lift.
- b) Compressed air, electricity and water.
- c) All types of spares needed to be replaced during the repair work of Indoor Switchgear equipments
- d) Gases for carrying out gas-cutting and welding.
- e) Gaskets, insulating varnish, grease, sealants, lubricants, Transformer-oil, 'O' ring, rubber chord, oil seals, nuts and bolts, paints, thinner, kerosene, diesel & contact cleaner etc.
- f) Welding electrodes and brazing rods.
- g) Steel plates, pipes, angles and channels etc.
- h) GI Pipes.
- i) Power and control cables, lugs, glands. HT tape and lug-crimping tools etc.
- j) Machining facilities as available in area Repair Shop of BPSCL.

18. <u>TOOLS, TACKLES, SAFETY EQUIPMENTS, INSTRUMENTS AND CONSUMABLES</u> <u>TO BESUPPLIED BY THE CONTRACTOR</u>.

Following materials shall be supplied / arranged by you at your own cost:

- 1) Fitter hand-tools set.
- 2) Electrician hand tools set (electrically insulated and tested).
- 3) Gas cutting set.
- 4) Welding machine, welding cable and accessories.
- 5) General type consumables such as cotton waste, markin cloth, LT tapes and emery paper etc.
- 6) Testing kits and measuring instruments to carry out the maintenance, repair and parameters measurements of the Breakers and other equipments successfully as described in details under the head 'Scope of work'.
- 7) Meggers of different voltage levels (1 KV, 2.5 KV and 5 KV) for measuring the insulation values.
- 8) Earth–resistance measuring tester.

- 9) Temperature measuring gun to monitor the temperature of the feeder and equipments of indoor switchgears.
- 10) Cleaning and dust removing equipments like brooms, duster, brushes, vacuum cleaner, buckets, mopping kits, dustbins and other supporting accessories along with detergents to carry out perfect cleaning of the switchgear rooms and panels.
- 11) Industrial vacuum cleaner.
- 12) General air blowers.
- 13) Hot air blower.
- 14) General as well as electrical safety wears appliances and equipments to be used by your employees.
- 15) Special purpose tackles working tables and approach platform including insulated aluminumplatform ladder etc.
- 16) Grinding machine.
- 17) Drilling machine with full set of bits.
- 18) Thread making taps.
- 19) Hand trolleys.
- 20) Soldering and brazing kits.
- 21) Stationary items for systematic and presentable record-keeping and carrying out routine work on daily basis.
- 22) Computer with printer
- 23) Spray painting machine.

19.FREQUENCY OF CARRYING OUT THE MAINTENANCE AND REPAIR WORK.

- 1. Major overhaul or medium repair of the breakers is to be done once a year. But routine inspection, cleaning and condition-monitoring will be done regularly whenever an opportunity is available for doing it.
- 2. Thorough inspection-cleaning, maintenance and repair work of other equipments of Indoor switchgear will be carried out once in a year depending upon the availability of the shutdown.
- 3. If a problem arises in any equipments of the indoor switchgear, it will be attended immediately irrespective of the maintenance and repair work done earlier and it will be counted under the head 'trouble shooting in all the three shifts.
- 4. If a breakdown occurs in any equipments of the Indoor switchgear, it will be attended immediately irrespective of the maintenance and repair work done earlier and it will be counted under the head 'Attending to breakdowns'.
- 5. Cleaning, housekeeping, temperature-monitoring, logging and Record keeping etc are to be done regularly as per the detailed instructions given under the head 'Scope of Work'.

20. Quality Assurance Plan

- 1. The maintenance and repair work of indoor switchgear equipments will be done as per the details describe in the 'Scope of work'.
- 2. In addition to the details described in the 'scope of work', check-list forms' will be supplied which are to be strictly followed for carrying out the repair work. Different data and details will have to be recorded in the 'Check-list form' and got it counter signed by the site engineer to ensure the required quality of the job performed.
- 3. After the maintenance and repair work is over, the operation of the breaker will be checked up manually and electricity and also the operation of auxiliary contact and glowing of indication lamps to ensure the required quality of the job performed.
- 4. Values of contact resistance, condition of insulating oil and insulation resistance of different parts etc will be checked and results so obtained will be recorded in the 'Check list'.
- 5. Temperature of different parts of switchgear equipments, noted down during temperature-monitoring exercise, should be recorded properly and produced before the site engineer.
- 6. There will be a six months guarantee to ensure the right quality of workmanship in carrying out the repair job. If a repair fails within the next six months of doing it, you will be held responsible for it in addition to carrying out its repeat-repair free of cost.
- 7. Different test norms and test results must confirm to the values as prescribed by the manufacture or as enumerated in the related IS specifications.
- 8. All items of work shall be executed in accordance with laid down standard practices or the IS codes, as the case may be.

9. Electrical safety guidelines and provisions of electricity rules must be given due regard while executing the job.

ANNEXURE - IV

SPECIAL TERMS & CONDITIONS:

1. Guidelines regarding performance of work

- i. The contractor will perform the subject work in accordance with the guidelines contained in the work order, technical specifications of equipments/ devices, IS codes of practice, and the instructions of the Engineer-In-Charge.
- ii. 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.
- iii. In case of any doubt or contradiction regarding jobs, the decision of the Engineer- in-charge will be final.

2. 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.

3. Supply and use of safety equipments

All the safety appliances and equipments for protection of personnel deployed for the job are to be provided by the contractors at their own cost. Proper use of safety equipments / appliances and adherence to safety rules/ norms must be ensured by the contractors.

4. Test certificates of safety equipments

- i. The electrical safety appliances like electrician's shoes, HV insulated gloves and insulated mats, etc, should be used only after getting the same tested at a reliable testing laboratory on a regular basis.
- ii. All other safety appliances like helmets and safety belts, etc, must be purchased from standard companies and used only after getting them tested.
- iii. Tools used by electricians must be of electrical grade, properly insulated and tested.

5. Observance of safety rules

- i. It is the responsibility of the contractors 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.
- ii. The employees of the contractors 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.

6. Medical fitness of employees

The contractors 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.

7. Gate-passes for contractor's employees

For the employees, the contractors 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.

8. 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

9. Compliance with various Labour laws and Electricity rules

The contractors will have to strictly comply with the provisions of various labour laws, electricity rules, Workmen Compensation Act, EPF and ESI rules, etc, as applicable for working at site of Power Plant, BPSCL. The contractors 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.

10. Supervision of job

Supervision of the work on site on daily basis shall have to be carried out by the contractors. The contractors and the supervisors will be fully responsible for any unsafe, indecent, illegal incidents caused by the employees.

11. Coverage Area

11.5 KV, 6.6 KV, 415 V & 220 V AC switchgear equipments buses and sections of following area of Power Plant will be covered under this contract:-

- i. 6.6 KV Switch Gear of CPP
- ii. LT Switch Gear of CPP
- iii. LT Switch Gear of RCPH
- iv. LT Switch Gear of WCTP (TPP & CPP)
- v. LT Switch Gear of ESPs (TPP & CPP)
- vi. 11.5 KV system (section 1 to section 4 of TPP & CPP)

12. 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 equipments as used in power generation and distribution network in a Thermal Power Plant.
- ii. Working personnel of the contractor must have a thorough knowledge of carrying out maintenance and repair jobs of Transformers,LT ACBs, 6.6 KV and 11.5 KV Breakers, Isolators and other equipments of HV indoor switchgear system of different makes and types as installed in our Plant so as to cover up their responsibility-area confidently and perform the jobs successfully. Their workmanship should be of unskilled/skilled grade.
- iii. Supervisors and technicians, deployed for doing the jobs, should have enough job experiences and competence in all the relevant areas.

13. Job planning and scheduling

- i. 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.
- ii. 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.
- 14. <u>Preservation of Spare Parts</u>: Spares as well as the dismantled parts of equipments will have to be kept safely and preserved properly, maintaining a systematic record of them. Spare conservation is to be done regularly.

- 15. **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.
- 16. <u>Subletting of contract</u> The contractor may engage sub-contractors only after applying for the same with complete credentials of the proposed sub-contractors (including proofs of experience of similar type job, valid Electrical Contractual License, ESI, EPF, ITR, Service Tax Registration, etc, whichever applicable), duly forwarded by the engineer in-charge and obtaining approval of competent authority of BPSCL.

17. Regular Inspection and monitoring of Equipments in the system

All the equipments and devices installed in the HV & LV Switch Gear of Power Plant, BPSCL, are to be inspected regularly by the Supervisors / Technicians engaged by the contractor, and general conditions with 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 equipments.

18. Conditions for Manpower deployed

- a.) You have to provide minimum indicative manpower required for the job is as follows: Supervisor (*Diploma*) 01 No.; Supervisor (*Non Diploma*) 02 No.; SW 04 Nos.; SSW 03 Nos.; USW 06 Nos. on regularly excluding weekly OFF.
- b.) All workmen deployed for the work will have to follow and observed the safety & statutory requirements. They should attend safety training of BPSCL successfully.
- c.) Proper use of safety appliances, personnel protection equipments (including safety helmet, hand gloves, safety goggles, safety shoes, full body harness, etc, whatever required), by the manpower deployed, should be ensured.
- d.) The bidder has to comply with Labour laws, ESI Act, EPF, AWA rules, etc, applicable in the plant area.

19. Penalty Charges:

You will be exposed to following types of penalty charges:-

- 1. If the manpower deployed is less than that given in the minimum manpower, penalty @ of Rs. 100.00 per man-days along with existing labour wage will be deducted from the payment.
- 2. If there is any loss of production of power plant due to shortage of manpower or any other cause attributable to you or employees deployed by you, an amount of Rs. 5000/- will be charged as penalty.
- 3. If you are found violating the guidelines and polluting the environments, you may be charged anything between Rs 500/- to 1000/- as penalty.
- 4. While executing the routine job, if delayed beyond the stipulated time, a penalty of Rs. 500/- to Rs 1000/- may be charged.
- 5. If shortage of tools, tackles, consumables, measuring and testing instruments and safety equipments is detected, Rs. 100/- to Rs. 500/- will be charged as penalty.
- 6. If a breakdown occurs due to either poor workmanship or some sort of negligence in doing a job properly, a penalty of Rs. 1000/- to Rs. 5000/- will be charged.
- 7. If the cleaning of the switchgear rooms and panels are not found up to the mark. A penalty of Rs. 500/- to Rs. 1000/- will be charged.
- 8. Your employee must be competent enough to execute the work without damaging anything. If such damage takes place, cost of spares and its replacement-cost will be recovered from you.
- 9. In additional to above, if any other act of omission, negligence and lack of expertise is detected in the responsibility areas, it will expose you to penalty charges of Rs. 5000/- for each case.

- 20. **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, non use of PPEs (Personal Protective Equipments) 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 L1 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.

Summary of Schedule of Qty: Summary of Schedule of Qty:

| Description | Duration | Total Amount (Rs.) |
|---|----------|--------------------|
| Annual Maintenance Contract for "Maintenance and Repair job of HT & LT Indoor Switchgear" | One year | |

⇒ Price Break-up:

| Sl. | Description of Jobs | Rate/ Month | Total Amount for 12 Months (Rs.) |
|-----|---|----------------|----------------------------------|
| 1. | Maintenance and Repair of HT (6.6 KV & 11 KV) Breakers (190 Nos.) consisting of OCBs, ACBs & VCBs. | | |
| 2. | Maintenance and Repair of HT (6.6 KV & 11 KV) Cubicles (227 Nos.) including 11 KV Reactors. | | |
| 3. | Maintenance and Repair of HT (6.6 KV & 11 KV) Isolators (40 Nos.). | | |
| 4. | Maintenance and Repair of LT (AC & DC) ACBs (165 Nos.) including Generator Field Breakers. | | |
| 5. | Maintenance and Repair of LT Isolators & MCCBs wherever provided (Lots). | | |
| 6. | Maintenance and Repair of LT (AC & DC) Cubicles including Generator Excitation Panels, DC distribution Board and battery charger cubicles (Lots). | | |
| 7. | Maintenance and Repair of LT & HT (6.6 KV & 11 KV) Potential Transformers (86 Nos.). | | |
| 8. | Maintenance and Repair of LT & HT (6.6 KV & 11 KV) Current Transformers (Lots). | | |
| 9. | Maintenance and Repair of HT (6.6 KV & 11 KV) Section buses (12 Nos.). | | |
| 10. | Maintenance and Repair of LT Section buses (22 Nos.) including the portion of buses starting right from the LT transformer. | | |
| 11. | Temperature monitoring and defect rectification of all the HT & LT feeders (Lot). | | |
| 12. | Trouble shooting in all the three shifts as per the requirement (Lot). | | |
| 13. | Attending to breakdowns as and when they occur. | | |
| 14. | Cleaning of floors and panels of all the switchgear rooms and their vicinity areas. | | |
| 15. | Housekeeping in all the switchgear rooms and their vicinity areas. | | |
| 16. | Maintenance and Repair of Air-intake, Exhaust Fan and Axial fans (37Nos.) | | |
| 17. | Painting and labeling of HT & LT switchgear panels as per the requirement. | | |
| 18. | Providing assistance in doing retrofitting of VCBs in place of OCBs as and when it is done. | | |
| 19. | Setting right cable-connection problems as per the requirement. | | |
| 20. | Providing assistance to 'Operation Group' in carrying out shut down and normalization activities pertaining to indoor switchgear system. | | |

| Rupees only | | | |
|-------------|--|--|--|
| 23. | Logging and Record keeping (Regular). | | |
| 22. | Maintenance and Repair of 11 KV bus – ducts lying inside Indoor switchgear rooms (22 Nos.) | | |
| 21. | Maintenance and Repair of 'Earthing Grid' pertaining to Indoor switchgear system. | | |

Note: Service Tax extra as applicable

Signature with seal of tenderer

Notarized Affidavit

| Iso AgedyoPS | ears | resident | of |
|--|----------------------------------|---|-----------|
| hereby solemnly affirm that: | | | |
| (i) I am (name of the firm/company). | (designation/author | ity) in M/s | |
| (ii) I confirm that all documents submi | | | dtd. |
| (iii) I undertake to produce all docume the same by BPSCL. | _ , | _ | asked for |
| Solemnly affirmed & declared before me by Deponent(s) who is/are identified by | true to the besinformation and b | made herein above are st of our knowledge, belief at | |
| |] | Deponent(s) | |

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/ | Page No. | Remarks by |
|---------|---------------------------------|-------------------------|----------------------|------------------|
| | | Not Submitted | | 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 | v of service tax then p | please write Not app | plicable (N.A.). |
| Total | numbers of pages in Techno- | commercial Bid | | |
| | | | | |

| CHE | CKLIST-2 [PLEASE TICK ($$) THE ONE W | HICH IS APPLICABLE AND CUT (X) ANOTHER] |
|-----|---|---|
| 1. | All document as per NIT and Checklist 1 | Submitted () |
| | | Not submitted () |

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 bidder's Letter Head)

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

| We | (Contractor Name) ha | | |
|-----------------------------|--|------------------------------|--|
| PAN | & registered office at(| | |
| agree to all the Commerc | al, General & other Terms & Conditions listed | in the | |
| NIT No | dated | | |
| for the work of | (subject work) through | Reverse Auction. | |
| | a position to do the job as per the scope of work g Auction and abide by the rules. | iven in NIT/RFQ. We agree to | |
| We nominate an executive | , whose details are given below, to put the bids on | our behalf. | |
| The details of the person a | athorized 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 1 st Floor, Tata Centre 43, Jawaharlal Nehr Kolkata – 700 071 | re |
|---|---|
| Fax: 033 – 2288 32 | 779 |
| Ref: Reverse Auct | ion forfor Bokaro Power Supply Co. (P) Ltd. held on |
| | we hereby confirm our Market wise last quoted prices in the Reverse Auction held or |
| | Last Quoted Price at 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.