

BOKARO POWER SUPPLY CO. (P) LTD.

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

**Reg. Office : Ispat Bhawan, Lodhi Road, New Delhi – 110 003
CIN:U40300DL2001PTC112074**

**TENDER NOTICE NO.: BPSCL/CEO/P&C/18-19/C-067/NIT-748/4327
Dated 04/09/2018**



TENDER DOCUMENT

NAME OF WORK: Overhauling of TPP Boiler (01 Unit).

**COST: Rs.1,180/-
(Rupees One Thousand One Hundred Eighty 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

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

CIN:U40300DL2001PTC112074

NOTICE INVITING TENDER

NIT No. : BPSCL/CEO/P&C/18-19/C-067/NIT-748/

Date: 04/09/2018

For and on behalf of BOKARO POWER SUPPLY COMPANY (P) LTD, sealed tenders in two parts, **Part - A** : Cost of Tender document & EMD, **Part- B** : Technical & Commercial Offer with copy of system generated acknowledgement-slip for online submission of sealed price are invited from the bidders meeting the eligibility and qualification criteria stipulated in the bidding documents for the following work at our Power Plant.

Description of Work	Overhauling of TPP Boiler (01 Unit).
Estimated Cost (in Indian Rs.)	Rs. 43,60,496.00 (Rupees Forty Three Lakhs Sixty Thousand Four Hundred Ninety Six Only) excluding GST.
Earnest Money (in Indian Rs.)	Rs. 15,000.00 (Rupees Fifteen Thousand) only
Cost of Tender Document (Non-refundable) (in Indian Rs.)	Rs. 1,180.00 (Rupees One Thousand One Hundred Eighty) Only including GST @ 18%
Period of Contract	Three (03) Months from the date of commencement of work.
Last Date & Time of submission of Tender	03/10/2018 at 12:00 Hrs. (IST)
Bid opening Date & Time	03/10/2018 at 12:15 Hrs.

Qualifying Requirements / Eligibility Criteria :

- Bidder shall have valid ISO 9001 Certification as on bid opening date.
- The bidder should have a valid Certificate of recognition as Boiler Repairer (Class-I or above) issued by directorate of Boilers, for carrying out Boiler repair. The bidder shall submit a self certified copy of the same as documentary evidence.
- Financial Capability :**
Bidder should have Minimum average annual turnover (MAT) of **Rs. 13.08 Lakhs.**
 - Average annual turnover shall be determined taking into consideration turnover of 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.

4. Technical Capability :

Bidder should have experience of having completed **similar work directly under the end user** 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.

Value of such order shall be either of the following:

- Three similar completed works each costing not less than to **Rs. 13.08 Lakhs**
- OR**
- Two similar completed works each costing not less than to **Rs. 17.44 Lakhs**
- OR**
- One similar completed work costing not less than to **Rs. 30.52 Lakhs**

Similar Work means: *Overhauling work in a High Pressure (100 Ata or above) Boiler having capacity not less than 220 T/hr. The scope of work should include high pressure parts, refractory, burner and ducts.*

- Work completion certificate (duly signed & stamped i.e. authenticated copy) to be submitted.
- 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.)

5. In support of their eligibility and experience, the bidder 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**.
6. Bidding through Consortium is not allowed.
7. The bidder shall submit self certified copies of following:
IT Return (*Latest*), Copy of PAN, EPF and ESI Certificate, Partnership Deed/ Affidavit for Proprietorship/ Memorandum & Articles of Association, including changes in the Constitution of the Firm,(if any) and Copy of GST registration certificate).

The bidder is also required to submit duly filled Annexure VIII.

General Terms & Conditions:

- i) Offer shall be accompanied with Cost of the tender documents of **Rs. 1,180.00** (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

In case of forfeiture of EMD by BPSCL the bidder is required to re-imburse the applicable GST to BPSCL.

- 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 copy of certificate having a valid Entrepreneurs Memorandum (EM) number / Udyog Adhaar Memorandum (whichever applicable). SSI/NSIC certificate holders should also submit Entrepreneurs Memorandum / Udyog Adhaar Memorandum (whichever applicable). However unit claiming exemption is required to submit copy of registration certificate indicating clearly the item category for which they are registered.
- iv) **Offers not accompanied with Cost of Tender Document (as per clause i) or Earnest Money Deposit (EMD) (as per clause ii) or copy of documents for exemption (as per clause iii) will be treated as INVALID.**
- v) **BPSCL reserves the right to :**
 - a) Re-tender / extend the due date of submission of offer.
 - b) Accept or reject any offer / all offers in full or part at any time at any stage without assigning any reasons-and without any compensation thereof to the bidders.
 - c) Modify the tender documents at any stage before the due date of tender.

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

(V Agrawal)
DGM (P&C)
Tel : 8986874118
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 02 parts as follows:-

- a) **Part A:** This part Comprises of Cost of Tender document & EMD.
- b) **Part B:** This part Comprises of Technical and Commercial details, consent on terms & conditions of NIT/ signed Tender Document along with copy of SYSTEM GENERATED **ACKNOWLEDGEMENT-SLIP FOR ONLINE SUBMISSION OF SEALED PRICE*** bid etc.

Sealed Tender *through Regd. Post/Speed Post/In-person/Courier Service* only, in an envelope containing 02 (Two) separate sealed envelopes (*as mentioned above*) with NIT No. & date of opening along with Sender's Name & Address printed on it, is to be sent to the below mentioned 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, Mob: 8986874118

*** PROCESS FOR ONLINE SUBMISSION OF SEALED PRICE :**

1. Online sealed Price Bid (**Landed Cost Excluding GST**) 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 3: Click on **View Live Auctions and Tenders**.

Step 4: In the right side open/ global tenders link will be displayed.

Step 5: Click on the link for the above mentioned tender link present under Open tenders

Step 6: Click on new user if contractor are not registered in buyjunction earlier. Click on Existing user in-case contractor 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 menu available before proceeding further (where ever applicable).

New Users:

Steps to get contractor **User ID** and **Password**

1. Click on the required tender link under **“Open Tenders”**
2. Choose contractor 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 contractor have mentioned in the registration form containing contractor User ID and Password.
5. Changing of password on first login is compulsory.
6. On receipt of the User ID and Password contractor 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 contractor existing user id and password for placing contractor bid.
4. Read through the **“Bidding Procedure”** to proceed further for bidding.

Bidding Procedure

After logging in with contractor user id and password contractor 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 contractor mentioning contractor 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 contractor 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 contractor need to fill up the price & click on evaluate at the bottom
3. If contractor want to quote the evaluated price then click on “**confirm**”.
4. After clicking on the confirm button of the template window, contractor price will appear in the “**New Bid**” box.

6b. For Non-Template Bidding

1. Fill contractor 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. Contractor will see “**Bid Accepted**” in the “**Result**” column. This indicates that contractor bid is accepted and registered in the system.

Steps to take a print-out of the receipt

1. Once contractor have placed contractor 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: For any clarification on the bidding process please contact

Mr. Anjan Buda- 9163348263- anjan.buda@mjunction.in

Mr. Manish Nandwana _ 9163348165_ manish.nandwana@mjunction.in

Ms. Monalisa Shaw _ 9163348297 _ monalisa.shaw@mjunction.in

Mr. Anshu Verma – 8873002772 - anshu.verma@mjunction.in

Mr. Mukesh Kumar Singh- 8873002741 – mukesh.singh@mjunction } for Bokaro Office

A copy of System generated **acknowledgement-slip** for Online submission of sealed price bid is to be submitted along with Techno-commercial Bid.

1.02 Tender Validity Period

Validity of the offer shall be **Four (04) months** from the bid opening date. In case of extension of "Bid submission Date", the validity will be counted from the extended bid opening date.

1.03 General Instructions:

- i) Tenderer's are requested to visit site for actual assessment of the job before submission of their offer.
- ii) Tenderer shall clearly indicate that their prices are firm in all respect till execution of the work order.
- iii) **Any conditional offer or offer having deviations is liable to be rejected.**
- iv) Contractor have to submit Tender document bearing contractor signature and seal on all the pages along with Techno-Commercial Offer / consent on NIT's Terms & Condition otherwise, it will be presumed that contractor do not accept our terms and conditions and this may lead to rejection of contractor offer forfeiting contractor claims if any.

Bidders are advised to mention page no. on each page of documents submitted by them. BPSCL shall not bear any responsibility in case of any reported loss of documents submitted by the bidder during tender opening or thereafter.

- v) 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.
- vi) The tender rates shall be written in English, both in words and figures. In case of any discrepancy between the words & figures of the rates quoted, the rates expressed in words shall be taken as correct. In case of discrepancy in the Unit Rate and Amount, Unit Rate will govern.
- vii) Price or any indication of price shall **NOT** be mentioned in the Techno-Commercial Bid.
- viii) The sealed tenders received will be opened on scheduled opening date and time in the office of Purchase & Contract, in presence of such bidders who might choose to witness the same
- ix) If name of the bidder is not mentioned on the envelope, it may be considered as unsolicited and processed as per P&WP in vogue.
- x) 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.
- xi) Communication regarding date of Opening of Price-Bid shall be displayed on the Notice board of Purchase & Contract and individual communication to the techno-commercially eligible bidders will be sent only to their e-mail address given in tender documents.
- xii) Offers from two or more bidders shall summarily be rejected if they have any of the following parameters common:
 - a) Same PAN
 - b) Same GST Number
 - c) Same Postal address
 - d) Same E-mail ID
 - e) Same Mobile number
 - f) Same person signing in more than one offer/representing more than one bidder.
- xiii) BPSCL reserves the right either to reject any/all the tenders without assigning any reason thereof.

GENERAL TERMS AND CONDITIONS

- 1.01 Contractor will have to follow and observe the safety & statutory requirements.
- 1.02 Contractor will be fully responsible for any sort of unsafe activity of their workmen. All working personnel should have proper safety certificates issued by BPSCL before start of work.
- 1.03 Contractor will produce medical fitness certificate for his workers. Height passes to be obtained from safety department, if required.
- 1.04 Supervision of the work has to be carried out by the agency.
- 1.05 In case of any documents/information submitted by the bidder(s) found to be false or containing any misrepresentation or having any fraudulent declaration in it then in such eventuality EMD will be forfeited and legal action (including cancellation of contract, banning of business dealing, criminal proceedings etc.) as deemed fit may be initiated by BPSCL against the bidder.
- 1.06 If any tenderer withdraws his bid after opening of bids 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 six months and the Earnest Money will be forfeited.

1.07 Payment Terms :

90% of contract value will be paid on pro-rata basis duly certified by Engineer In-Charge and balance 10% will be retained as security deposit which will be released after 06 months after successful completion of work.

The expression satisfactory execution of the order shall mean fulfillment of all obligation arising out of and in connection with the contract. In case of default in satisfactory execution of the order the security deposit shall be forfeited.

Amount of penalty and/or Liquidated Damages imposed (if any) will be recovered from Security Deposit. If the amount of Security Deposit is not sufficient, the bidder will be required to pay the balance amount to BPSCL. If the bidder doesn't pay the balance amount, the same 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.

- 1.08 Contractor will have to strictly adhere to the provision of various labour laws including payment of bonus Act 1965.
- 1.09 Contractor will have to pay Rs.4/- extra/day to the working persons as per BPSCL rules in addition to minimum wages.
- 1.10 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.
- 1.11 Paying authority –In - charge (F&A), BPSCL.
- 1.12 By accepting the order contractor is understood to have accepted to all responsibilities for completing the work in all respect.

1.13 GST Related Clauses :

- a. All bidders should strictly quote GST as extra.
- b. Bidders have to submit their GSTIN registration details to BPSCL along with supporting documents.

1.	GSTIN	
2.	Service Accounting Code No.	
3.	Applicable GST Rate	
	CGST (in %)	
	SGST (in %)	
	IGST (in %)	

- c. Bidder would pass on the tax benefit/savings, if any, on account of output taxes to BPSCL.
- d. Bidder shall agree to do all things not limited to providing GST invoices or other documentation as per GST Law relating to the above Services, payment of taxes, timely filing of valid statutory returns for the tax period on the Goods and Service Tax Portal etc. that may be necessary to match the invoice on GSTN

common portal and enable BPSCL to claim input tax credit in relation to any GST payable under this agreement or in respect of any part under this agreement.

- e. In case the Input Tax Credit of GST is denied or demand is recovered from BPSCL on account of any non-compliance by the Supplier/ Contractor, including non-payment of GST charged and recovered, the Supplier/ Contractor shall indemnify BPSCL in respect of all claims of tax, penalty and/or interest, loss, damage, costs, expenses and liability that may arise due to such non-compliance. Further, in case of any differential tax liability on account of any wrong classification/valuation etc. by the vendor, BPSCL will not be liable to reimburse any part of such differential tax, interest, penalty etc. It will be the sole responsibility of the vendor to discharge appropriate taxes, as applicable.
- f. Supplier/ Contractor shall maintain high GST compliance rating track record at any given point of time.

1.14 **Work accident :**

- a. Contractor will be responsible for the safety of the workers employed by contractor. In the event of any work-accident, major or minor, contractor/contractor's representative must take care of the injured person immediately and provide him the required treatment as suggested by the doctor. If contractor or his representative are not available for medical care, the injured worker will be treated in Bokaro General Hospital and the cost of treatment will be recovered from contractor.
- b. Contractor shall be fully responsible for making payment of compensation to their workmen or to those of their 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

1.15 **SUBMISSION OF PERFORMANCE GUARANTEE BOND FOR QUOTING UNWORKABLE RATE:**

If a tenderer quotes unworkable rates i.e. if the quoted price is less than the approved lower limit of the estimated price and is considered for placement of order, the contractor will be asked to justify the rate quoted. On non acceptance of justification / refusal of the same, the tenderer will be asked to furnish 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 approved 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.

In case of forfeiture of Performance Guarantee Bond the contractor is required to re-imburse the applicable GST to BPSCL.

1.16 **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

- 1.b. Opening of Online Price (*submitted on www.buyjunction.in*) 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 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 physical decrement. In this case – On line price bid and physical decrements, shall be opened together on same day and case be processed.

1.17 **FORCE MAJEURE :** Bidder 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 without imposition of Liquidated Damages at the option of owner.

1.18 **Banning of Business Dealings:** On arising any situation or occurrence of any event as mentioned in Clause 6 of the Guidelines on Banning of Business Dealings, the tenderer/bidder or supplier under the tendering process or contract with BPSCL, as the case may be, shall be liable for action under and in accordance with the

aforementioned Guidelines. The “Guidelines on Banning of Business Dealings” shall form part of the Tender/Contract.

1.19 **Handling of Earnest Money:**

- 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.
- The amount of Earnest money may be adjusted against Security Deposit only in case of successful Tenderer.

1.20 **LIQUIDATED DAMAGES:** Time stipulated in the Contract for completion of the work is essence of the Contract. If the Contractor fails in the due performance of his Contract to fulfill his obligations in time under the Agreement, he shall be liable to pay liquidated damage for the period of delay and not by way of penalty a sum at the rate of 0.5% of the Contract value of the delayed work for each week of delay and part thereof subject to maximum of 5.0% of the contract value.

1.21 **RISK AND COST:** Failure on Contractor’s part to start the work within reasonable time/ the progress of the job is poor/ for any breach of contract will entail termination of the Contract. In such an event, the job will be executed at the risk and cost of the Contractor by alternative arrangements.

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

- i. Upto Rs. 5000/-by DGM (safety)/Head of safety Engg. Department /Head of the Department where work is being done for 1st violation of safety norm, non use of PPEs(Personal Protective Equipments) like safety shoes, hand gloves, safety helmets, goggles etc as per work requirements by contractor or contractor workers. This condition is applicable in case of violations of Road Safety norms also.
- ii. Fine upto Rs. 20,000/- on 2nd Violation as mentioned in clause (i) above.
- iii. 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 clause no (i) above.
- iv. Fine upto Rs. 10,000/- for violation in use of Full Body Harness by contractor or contractor worker for working at height (above 1.8 meter from immediate floor).
- v. Fine Rs. 25,000/- (minimum) to Rs. 50,000/- (Maximum) for serious injuries and disabilities caused by violations as mentioned in Clause No. (i) and (iv) above.
- vi. Independent of the above, contractor shall be fined Rs. 1,00,000/- (1 Lakh) or more and debarred / deregistered from taking up further contractual work in BPSCL from the date of issue of debarring / deregistering the order in case any Fatal accident occurs due to violations as mentioned in Clause (i) and (iv) above.

Note: In case penalty is imposed then the successful bidder has to re-imburse the applicable GST to BPSCL

SCOPE OF WORK:**1. Cleaning****1.1. External Cleaning**

- i) Washing of boiler roof with water spray.
- ii) Cleaning of furnace 1st and 2nd pass from outside.
- iii) Cleaning of all stair case and platform of the Boiler.
- iv) Cleaning of feed line area at 8M and CD feeder area at 13M.
- v) Cleaning of all gas line platforms.
- vi) Cleaning of shot hopper area

1.2 Internal Cleaning: Cleaning of shoots & ash deposition from boiler super heater tubes, economizer tubes, water wall tubes etc. by high pressure water jet.

2. Boiler Tube Thickness Checking / De-metering

- i) Proper cleaning at different position of high pressure line & gas line (BF & CO).
- ii) Point making (for thickness measurement / de-metering) at the above locations by filing.
- iii) Locations wise thickness measurement / de-metering by the appropriate instrument (as per directive of the site in-charge).
- iv) Compiling the thickness measurement / de-metering reports & submitting it to the site in-charge.

3. Burners**3.1 Burners, CO Gas Line & Dampers**

- i) Dismantling / revisioning of CO gas line dampers (*each set comprising of two dampers of dia. 200mm*).
- ii) Lowering CO pipe including 90^o bend upto orifice plates, cleaning and again fixing with orifice plate.
- iii) Dismantling and lowering burners at 0 meter. Each burner's weight is approx 1 ton.
- iv) Dismantling and lowering of dust pipe bends above burners with reducers and assembly after burner jobs are over.
- v) Repair of air casing (dia. 3000 mm, length 1 meter)
- vi) Repair of BF chamber by gas / arc cutting ,if found defective during inspection.
- vii) Rectification / changing of SS tips, if required (*Dia. 400mm, 600mm & 1100mm, thickness 16 to 20mm, length 1 meter*).
- viii) Fixing of burner assembly by putting asbestos cloth in flanges, leveling & centering.
- ix) Fixing the revisioned/ new coke-oven dampers.

3.2 Oil & Steam Line

- i) Revisioning / replacement of oil and steam line valves dia. 20 and 25mm.
- ii) Changing/repairing of oil and steam pipes of dia. upto 42 x 4mm.

3.3 Secondary Air Dampers

- i) Revisioning of secondary air dampers, each set containing two dampers which are to be made free individually then to be connected by link with gear box.

4. Cyclone & Separator of Mill System

- i) Gas cut worn out portion of separator cones, shifting and welding with new one.
- ii) Repair of worn out portion of dust cyclone
- iii) Repair/Replacement of connecting pipe of separator to cyclone.
- iv) Replacement of bottom pipes & separators cones dia. 290 mm.
- v) Removal of mill fan suction dampers & fitting new one.
- vi) Removal / revisioning of atmospheric suction damper of mill system.
- vii) Revisioning of on-off valves including modification of inspection holes & repair of pipes.
- viii) Overhauling & making free of separators link, vanes & its sector assembly, broken links are to be replaced.
- ix) Changing of damaged explosion vents of cyclones and separators.
- x) Repair / replacement of worn out portion of mill fan suction & delivery pipe ducts (1100mm dia.).

5. Gas line valves

- i) Dismantling of dia. 600 mm. hermetically sealed dampers & gear box from position of CO & BF gas line at 16 M and 27 M level. (*weight of each damper is about 200 kg*)

- ii) Revisioning/replacement of dampers (Dia. 600 mm)
 - Revisioning of dampers involves making shaft free / changing replacing the rubber flap/seal, changing of stopper bolts, brackets & spring.
 - Replacement of damper involves shifting of new dampers from store to site and shifting of old dampers to scrap yard as per direction of site In- charge.
- iii) Assembly of dampers and gear boxes after revisioning.
- iv) Revisioning of bleeder valves of size dia. 80mm.
- v) Revisioning / replacement of hermetically sealed dampers of BF gas line (size dia. 1200mm).
 - a) Revisioning of dampers involves making shaft free / changing replacing the rubber flap/seal, changing of stopper bolts, brackets, spring & revisioning of its gear box
 - b) Replacement of damper involves shifting of new dampers from store to site and shifting of old dampers to scrap yard as per direction of site In- charge
- vi) Revisioning / replacement of regulating dampers size dia.1200 mm. The job involves making dampers free.
 - a) Revisioning of dampers involves making shaft free / changing replacing the rubber flap/seal, changing of stopper bolts, brackets & spring
 - b) Replacement of damper involves shifting of new dampers from store to site and shifting of old dampers to scrap yard as per direction of site In-charge.
- vii) Cleaning of duct pipe at 16 M level of BF gasoline. pipe size dia. 1200mm

6. Overhauling of Drum

- i) Opening of drum manholes. Cleaning & assembly after repair of drum. The manholes holding should be leak proof in Hydraulic Test
- ii) Plugging of drum inside about 52 Nos. and removal after repair (*plugs will be supplied by BPSCL*).
- iii) Changing of gasket of drum cyclone, gas cutting and removing the keys of flanges and again fixing after gasket positioning and tack welding of key.
- iv) Repair / positioning of filter trays & filter plates by cutting & welding.
- v) Inspection and choking removal of all sampling lines, CBD lines and phosphate dosing line

7. Overhauling of HP Valves

- i) Dismantling of Valves.
- ii) Repair / replacement of spindle, valve's seat & discs, lapping of sheet as per requirement.
- iii) Revisioning of stuffing boxes including new inner & outer gland packing.
- iv) Changing of bushes & bearings.
- v) Revisioning of gear boxes including changing of internal & bearings as per requirement.
- vi) Final assembly & oil topping in gear boxes.
- vii) Checking operation of valves.
- viii) Total numbers of valves for SN 1-09, SN 2-20 and AN 3-100 Approx. in one boiler.

Lists of valves to be serviced:

S.N	Description of Valves	Valve Size	Valve No.
1.	Main Steam Valve Super Heater Blow Down Valve Feed Line Valve Feed Line Valve Feeds Check Valve Feed Line NRV (Non Return Valve)	273 x 18 100 x 12 100 x 12 175 x 16 175 x 16 175 x 16	252 255 / 256 324 / 372 323 / 371 FC Valve NRV
2.	Feed Line, Injection Line Valve including Control Valve / Armature Valve / Eco. Drain Valve / DM Line Valve, EBD Valve EBD Valve	76 x 8	--
3.	Drum Mountings, Vents, Drain Valves, Sample Line Valves etc.	25 x 4 / 10 x 2	--

8. Overhauling of LP Valves (As per need)

- i) Changing of spiral gasket / serretted rings.
- ii) Changing of all flange & gland bolts.
- iii) Repair/replacement of spindles, bushes & new gland packing.
- iv) Repair /replacement of operating wheels
- v) Final checking of the operation of valves.

Lists of LP valves to be serviced

S.N	Description of Valves	Valve Size
1.	Valve for Oil Firing system, purging and drains Cooling water Line Valves	25 x 4 / 40 x 6

Job involves:

- a) Cutting of valve and shifting it to boiler spare store.
- b) Shifting of new valve from store to site.
- c) Fitting of valve and joint welding.
- d) Stress relieving is to be done for valve class – 2500.
- e) Total numbers of valves: 70 (approx.) in one boiler.

9. Changing of HP & LP Valves (As per need)

- i) Cutting of valve and shifting it to boiler spare store.
- ii) Shifting of new valve from store to site.
- iii) Fitting of valve and joint welding.
- iv) Stress relieving is to be done for valve class – 2500.
- v) Radiographic / Ultrasonic Test of all valve joints

HP Valves
Φ 10 mm Φ 20 mm Φ 65 mm
Φ 100 mm (class – 2500) Φ 100 mm (class – 1500)
Φ 175 mm (class – 1500) Φ 225 mm (class – 2500)
LP Valves
Φ 10 mm Φ 20 mm Φ 40 mm

10. TIG Welding Joints for Repairing/Replacement of Boiler Tubes

- i) Cutting of clamps.
- ii) Cutting & removal of damaged tubes.
- iii) Shifting of new tubes at site.
- iv) Fitting & welding of joints.
- v) Proper clamping of high pressure tubes (SH tubes, Economizer tubes and water wall tubes).
- vi) Stress Relieving where ever required.

S.N	Description
1.	Economizer Ø32 x 3.5 Screen S. H. Tubes Ø32 x 4 Convective – I Ø38 x 4 Convective – II Ø42 x 4.5 Water Wall Ø60 x 5 H. P. Drain Line Ø 38 x 4 & Ø32 x 3.5
2.	a) Feed/Injection Line Ø76 x 7.6 b) Economizer Drain c) Soot Blower Line d) D. M. Water Line
3.	Feed Line (Steel-20) Ø133 x10
4.	Steam Line (12X1MØ) Ø133 x14
5.	Stub Joints

11. Radiographic Test/Ultrasonic Test of Welding Joints

S.N	Description
1.	Economizer - Ø32 x 4 Screen S. H. Tubes - Ø32 x 4 Convective – I - Ø38 x 4 Convective – II - Ø42 x 4.5 Water Wall - Ø60 x 5 Feed/Injection Line - Ø76 x 7.6 And stub of above sizes.
2	Feed Line (Steel-20) - Ø175 x 16), Ø133x10 Steam Line - Ø 133 x 14

12. **Alignment of Water Wall:** Positioning of water wall panels and headers to their original position as per drawing. All clamps, supports, scallop bars etc. are to be repaired / replaced. Extra clamps or scallop bars are to be introduced as per instruction of engineer in charge.

13. Overhauling of Safety Valves of TPP

- i) Revisioning/replacement of safety valves:
 - a. Dismantling of safety valves by opening flange bolts & cutting of pipe connection.
 - b. Revisioning of safety valve at '32' Mtr. or '0' Mtr.
 - c. Assembly of safety valve in position & connection of impulse & drain pipe **OR** Replacement of safety valve with new one if required with S.R and R.T/U.T as applicable.
- ii) Revisioning / replacement of Impulse safety valve.
- iii) Revisioning / replacement of atomizing steam line safety valve at burner floor.

14. Furnace Shell Plate Changing

- i) Shifting of (Size – 1 M x 1 M) of shell plates from store to '0' M area of the boiler.
- ii) Cutting & removal of damaged shell plates at different positions of the furnace wall as per the directives of the site in-charge.
- iii) Shifting of shell plates to these locations from '0' M area of the boiler.
- iv) Fitting & welding of shell plates at the above locations of the furnace.
- v) Shifting of damaged shell plates from the above locations to scrap yard.

15. Rectification of all Super Heater Headers Hangers Supports

- i) Rectification of Screen Super Heater & water wall Headers Hangers Supports.

16. Repair of Structure

- i) Repair of deformed beam and channels forming the furnace & supporting the water walls. This includes strengthening of main columns of furnace.

17. Overhauling of Ducts & Compensators

- i) Repair of compensator and duct from furnace hopper to ESP inlet.
- ii) Repair of compensator and duct from ESP outlet to ID fan inlet.
- iii) Repair of furnace explosion vent & its duct. Replacement of plate from FD fan via bottom and top APH ring header up to burner inlet.
- iv) Shot hopper cover plate replacement.

18. Overhauling of Hopper & Hydraulic seal

A. Hopper:

- i) Gas cutting shell plate below and above 8 meter upto 10 meter & weld after inspection.
- ii) Make scaffolding from 0 meter to 8 meter level of hopper for inspection & removal after work completion.
- iii) Cutting hopper connection, clean thoroughly & brings the hopper in normal position.
- iv) Weld hopper connection (bracket) after checking level.

B. Hopper at 2nd pass

- i) Repair of manhole, angle, channel. Cleaning of all four hoppers.

C. Hydraulic seal

- i) Repair / replacement / positioning of hydraulic seal, weld them after leveling.
- ii) Fix & weld knives & angles in position. if required, hydraulic seal trays, knives & drain valves are to be replaced.
- iii) Fix & weld corner hydraulic seal knives & angles.
- iv) Fix & weld bracket / pin (main support).
- v) Cleaning / changing hydraulic seal inlet & outlet water pipes and over flow pipes.
- vi) Armature rod welding wherever required.
- vii) Water charging and rectification of defects.

19. Repair of Air Preheater

- i) Replacement of damaged compensators of all three stages.
- ii) Repair / replacement of roof compensators.
- iii) Plugging of leaking APH tubes of all the three stages.
- iv) Cleaning of duct from FD fan via bottom and top APH ring header up to burner inlet.

20. Erection of scaffolding

- a) Scaffolding is to be erected from 0'M to 27'M inside the furnace with platforms at 4'M, 10'M, 16'M, 21'M & 27'M at all sides of the furnace. However 10'M platform should cover the total furnace area.
- b) Scaffolding is to be made to reach all the SH panels.
- c) Scaffolding should be made with steel pipe which must be safe, stable consisting of railing at the free end.
- d) After successful completion of Hydraulic test the scaffolding is to be removed within 48 hrs. (max^m).

21. a) Coal Dust Pipes of Mill System

- i) To gas cut worn-out bends and pipes after providing proper supports. Erect and weld new pipes (16 nos. bends).
- ii) To change straight pipes , including ceramic wherever needed (*this includes changing of compensators also*).
(pipe size dia. 406 x 10 mm)
- iii) Patching / jacketing of newly replaced pipes with 10 mm. thick plates in area covering 1M length.

b) Primary Air Dampers

- i) Opening of inspection holes.
- ii) Dismantling of dampers, revisioning / replacement of dampers.
- iii) Positioning of link and connection.
- iv) Assembly of dampers & welding with 1 M pipe both side and Positioning.
- v) Closing of man holes with proper sealing arrangement.
- vi) Revisioning of all (12 nos.) dampers (Hot air, Cold air and warm air) and repair of their pipe lines (including compensator).

22. Overhauling of Seal Pot and platforms

A. Seal Pot

- i) Revisioning of Seal pots (03 Nos.)
- ii) Changing of drain pipe of size 60 x 5 mm. and bends.
- iii) Replacement / revisioning of valves:
 - dia 80 mm.
 - dia 50 mm.
 - dia 20 mm

B. Platform

- i) Repair/replacement of platform and stair case along with railing all around the Boiler from 0'M to 32'M.
- ii) Repair/replacement of platform of BF & CO gas line at 16'M, 21'M & 27'M along with their railing.
- iii) Repairing /replacement of PBD platforms along with stair cases

23. OVERHAULING OF R. C. FEEDERS, C. D. FEEDERS & BUNKERS

A. R. C. FEEDERS & C. D. FEEDERS

- i) Decoupling of motor, gearbox and motor removal.
- ii) Removal of front and rear cover.
- iii) Removal of scrapper chain.
- iv) Repair of feeder body, dismantling of front and rear sprocket assembly with guide mechanism.
- v) Replacement of guide plates of bottom and top.
- vi) Changing of old base plates and shifting to scrap yard.
- vii) Changing of old measuring plate and shifting to scrap yard.
- viii) Cutting of new base plate, edge preparation and shifting to site to 8M.
- ix) Cutting of new measuring plate edge preparation and shifting to site at 8M.

- x) Installation of new base plate in position and welding.
- xi) Installation of new measuring plate in position and welding.
- xii) Replacement / patch welding of coal inlet chute of raw coal feeder above (10M).
- xiii) Repair of manhole of feeder.
- xiv) Rectification of feed control mechanism.
- xv) Revisioning of old sprocket mech. / changing of bearings.
- xvi) Installation of front and rear sprocket assembly in position.
- xvii) Fixing of big sprocket assembly with driving shaft.
- xviii) Revisioning of gear box and changing of gearbox internals.
- xix) Revisioning of tension mechanism of driving sprocket.
- xx) Shifting of scrapper chain from TPP store to site.
- xxi) Fixing of new scrapper chain in position.
- xxii) Alignment of gearbox with driving sprocket and fixing of driving roller chain. Alignment of motor with gearbox.
- xxiii) Painting of feeder body.
- xxiv) Trial run of feeder, adjustment of scrapper chain tension, fixing of chain guard and coupling guard.
- xxv) Revisioning / repair of raw coal bunker gate.
- xxvi) Decoupling and removal of CD feeder.
- xxvii) Dismantling of feeder, revisioning of feeder, charging of bush and bearing.
- xxviii) Revisioning of feeder gate / changing of gate bush if required.
- xxix) Revisioning of gearbox, charging of worm wheel, worm shift along with bearing.
- xxx) Fitting of gearbox in position with feeder and coupling of CD feeders.
- xxxi) Changing of dust pipe line, patching and attending leakage of dust pipe lines of the feeder.

B. Bunkers

- i) Preparation of scaffolding for raw coal bunkers, coal dust bunkers from 13M and above all around the bunkers.
- ii) Cutting of 16mm thick MS plates of proper size and transporting them to raw coal bunkers and coal dust bunkers area at 13 M level.
- iii) Lifting, fitting and welding of MS plates of required size around the damaged portion of raw coal bunker & coal dust bunkers.
- iv) Patch repair of damaged portion of top cover of raw coal bunker and coal dust bunker.
- v) Changing of measuring rope, pulley counter weight for dust bunker. Repair of coal dust line from dust screw conveyor to coal dust bunker.

24. Thermal Insulation and Aluminum Sheeting

- i) Shifting of bamboos for scaffolding at site.
- ii) Transporting of insulation materials i.e. slag wool, cement, asbestos powder etc. from store to site.
- iii) Transporting of Al / GI sheets from store to site.
- iv) Breaking & removal of old insulation as per directive of site in-charge. at different position of the boiler duct, HP pipe line & LP pipe line etc.
- v) Complete insulation of the portions where repair has been done as per the directive of the site in-charge.
- vi) Complete insulation of the damaged portions of duct, pipelines, hoppers etc. as per the directive of the site in-charge.
- vii) Removal of thermal insulation of all the headers at the drum floor.
- viii) Removal of thermal insulation of all the piping outside the boiler.
- ix) Removal of thermal insulation of all the burners for Capital Repair.
- x) Fixing of thermal insulation of the entire header at the drum floor.
- xi) Fixing of thermal insulation at all the piping outside the boiler.
- xii) Fixing of thermal insulation of all the burners after Capital Repair of the burner.

25. Refractory Job

- i) Refractory job at furnace roof area below drum.
- ii) Refractory job at all four side walls of 1st pass area including hopper.
- iii) Refractory job at goose neck, economizer, APH etc.

26. Supervision : Contractor have to deploy sufficient numbers of supervisor for the following areas/jobs. Ex-BHEL experts are preferable.

- a) Equipments
- b) Duct at 0'M and above.
- c) Pressure parts & valve
- d) Refractory job

SPECIAL TERMS & CONDITIONS:

1. COMMENCEMENT AND EXECUTION OF WORK :

- a) The date of commencement of work depends upon situation of Plant, but contractor shall mobilize the resource within seven (07) days after receiving information from BPSCL.
- b) Work shall be carried out round the clock including holidays & Sunday.

2. MINIMUM RESOURCES TO BE DEPLOYED BY THE CONTRACTOR:

- a) The contractor has to depute all supervisors, skilled & semi-skilled and un-skilled work force for execution of the subject job.
- b) Sufficient no. of HP welders and LP welders, Supervisors, gas cutters, riggers, fitters etc. must be engaged for execution of the subject job.

3. The contractor shall transport the required material from the store / other sites of BSL to the site of work and dispose of the dismantled / damaged parts to the designated scrap yard.

4. BPSCL reserves the right to do the incomplete job / job not taken up by the contractor, by engaging other agency and such work will be done at the risk and cost of the contractor.

5. Following consumable will be provided by BPSCL on free of cost basis :

- a) Spare parts
- b) Steel (Plate, beam, channel, angle, sheet, nut bolts etc.) as per job requirement
- c) Refractory materials
- d) Glands, gaskets, rope, asbestos cloth etc.
- e) Insulating materials with Al/GI Sheet.
- f) Electricity, water

6. Following consumable shall be provided by contractor

- a) Industrial gases
- b) Electrodes
- c) Filler rods
- d) Cutting & grinding wheels
- e) Grease, jute, kerosene, diesel
- f) Graphite powder, Rust remover, Steel putti etc.

7. Following T&P shall be provided by contractor

- Welding Machine
- Cutting set
- Grinding Machine
- Cutting & grinding wheel
- Scaffolding Material
- D-Metering machine
- S.R Equipments
- DPT Kit
- Electrode Heater
- R.T Source
- X ray Film
- UT Machine
- High Pressure Jet machine
- Hydra, Truck,
- Winch machine
- Chain block
- Water hose pipe
- Welding cable
- Hand lamp
- Gas monitor and all other tools and tackles .

Above items are indicative only. The successful Bidder has to arrange tools & tackles beyond above, if required. All tools & tackles should be adequate to meet the requirement at every point simultaneously .

8. HOUSE KEEPING OF AREA

- a) The contractor shall keep the site clean and dispose off all waste material, rubbish etc. during the work itself in specified manner. The contractor shall also remove all temporary arrangements made during working

(scaffolding etc.) and shift them to storage area. The contractor shall carry out any measures required to comply with health and hygiene regulations. The site shall be left clean and tidy on daily basis.

- b) The contractor should not keep / leave any scrap / items hindering the walk ways and working areas.
- c) All un-used, removed spares and un-used consumables shall be returned to the departmental stores.

9. **SUBLETTING:** The contractor may engage one or more subcontractors who must have adequate experience of similar types of jobs for engaging SW, USW, SSW for part or whole of the scope of work. Deployment of subcontractors should be got approved by BPSCL after submitting their credentials and other relevant documents. . However the job will be done under the technical & administrative control of principal contractor. Labour license, CLC clearance etc. are to be obtained by the subcontractors under the responsibility of the Contractor.

10. QUALITY OF WORK

- a) The engineer-in-charge or his representatives will carry out checks and inspections, maintaining the quality of work are primarily responsibility of the contractor.
- b) The clearances, settings and other measurement affecting quality are to be taken in presence of BPSCL representative and logged in checklist.
- c) The assembly of equipments after servicing / overhauling, restoring to its original shape and all other assemblies of important / critical nature shall to be done in the presence of BPSCL representatives.
- d) All work being done on the equipment to be notified to the engineer - in - charge/his representative so that necessary inspection can be done during the progress of work.
- e) The contractor shall ensure that the equipment to be attended is dismantled carefully without damage to any parts. All dismantled parts to be kept in a clean place, well covered, and responsibility of theft / pilferage / damage to dismantled parts lies on the contractor. However, if there is any such damage before dismantling of the equipment, the same is to be shown to the BPSCL representative, who is supervising the job.
- f) The recovery in respect of any spare which is damaged due to negligence on the part of contractor will be done at the rates as per mentioned in the price catalog of equipment supplier / latest purchase order values .
- g) The contractor should be responsible for the workmanship of the job executed by him. For this purpose, he should stand guarantee of six months. In case of failure, the contractor should get the same attended immediately by deploying additional manpower from his own expenses and the defect liability will get further extended accordingly. if he fails to do the same, BPSCL reserves the right to get it attended by some outside agencies at the contractor's risk and cost.

11. STATUTORY COMPLIANCE

- a) Statutory compliances regarding labour license, insurance & statutory requirements of boiler inspectorates and factory inspectorates shall be binding on the contractor as per labour laws and factory acts, and same has to be shown before start of work.
- b) In addition, if there is any change in labour laws after the contract has been awarded, then the new law shall automatically be binding on the contractor.
- c) T&P like lifting and pulling tools etc. being used by the contractor must be tested and inspected as per statutory requirement of state govt. factory act / safety norms and a copy of test certificate is to be submitted to engineer in-charge/his representative.
- d) The contractor shall compulsorily provide personal protective equipments to his employees and in the event of his not providing the same by the start of work it may be provided by BPSCL at contractor's cost and the cost will be recovered from their bills.
- e) Labour license for engaging labour for the work should be submitted before start of work.
- f) Before the trial of the equipment written declaration regarding clearance of men & materials removed to be given.
- g) Prior to demobilization of men & materials, permission is required from engineer in-charge/his representative.

12. GENERAL SAFETY PRECAUTIONS:

- a) All persons deployed by contractor should be medically fit.
- b) Work should be started only after ensuring that valid permit to work is available for working in the relevant area.
- c) All persons must wear safety helmet, safety shoes and use other personal protective equipments like dust mask, safety belt, hand gloves, grinding goggles and fire restrained clothing as deemed necessary.
- d) Proper illumination should be provided in working area.

- e) Hand railings / toe guards etc. Wherever removed shall be restored as soon as possible after completion of work.
- f) Wherever opening has been made in the floor, suitable warning boards will be displayed and the contractor will have to close the opening after completion of job.
- g) For working in isolated areas viz: pent house, dead chambers etc. At least two persons must be deputed, one being outside to ensure safety of the person working inside.
- h) Violation of any safety norms shall draw the penalty as per the safety clauses of BPSCL.

13. SAFETY PRECAUTIONS RELATED TO WELDING AND GAS CUTTING.

- a) DA. Hoses should be kept away from the welding cables, the hoses should be healthy with proper clamping to prevent chances of gas leak.
- b) Gas cylinders should not be rolled on the ground or carried in bi-cycles etc. Trolleys should be used for their transportation.
- c) For lifting and lowering cylinders proper cage should be used. Anchoring at valve portion should be avoided as the valve is delicate portion of the cylinder and is liable to break causing serious accident.
- d) All welders, grinder men, and cutters shall use protective goggles.
- e) Welding cables should have proper insulation. No naked cable should be used.
- f) While welding or gas cutting, the area where the sparks/hot metal is likely to fall should be identified and all inflammable materials should be removed from or effectively covered in the affected area to prevent any chance of fire.

14. SAFETY PRECAUTIONS RELATED TO ELECTRICAL EQUIPMENTS:

- a) All portable hand lamps used inside enclosed space shall be of 24-volt ratings.
- b) All portable hand lamps shall have insulated handle, cage guard/cover over the bulbs.
- c) All electrical cables shall be of double insulated type and joints in electric power supply cables should be avoided to the extent possible. In case joints are unavoidable these should be minimum and the joint should be properly insulated.
- d) Inserting bare terminals in plug sockets is prohibited.
- e) Proper plug tops should be used for connection with switchboards.
- f) All welding machines, grinding machines, drilling machines etc. should have their bodies properly earthed.
- g) All grinder men should use hand gloves and safety goggle while working with grinder.
- h) All electrical hand tools should preferably be of fiber body to reduce risk of electric shock.
- i) All welding machine connections shall be made with welding receptacles only,

Note: violation of any of the safety measures would invite penalty as specified against condition for unsafe working as per BPSCL'S RULES.

15. SAFETY PRECAUTIONS RELATED TO WORKING AT HEIGHTS:

- a) No loose material shall be left at heights as material falling may cause serious injuries.
- b) Working platforms at height should have adequate space and proper railings. Where permanent railings are not feasible, temporary railings using manila rope or any other means should be provided.
- c) Toe guards should be provided in the platforms deployed for the work. All scaffolding should be inspected for its soundness and strength; only tubular scaffolding materials should be used.
- d) Any scaffolding shall be constructed with a minimum of three supports as per safety norms for a standard length plank.
- e) Proper approaches should be made up to the working area.
- f) Each scaffolding plank should be properly supported at least at four places. Gaps should not be left between planks.
- g) All workers working at a height of more than two meters of any other location fall from where is likely to cause injuries should use safety belts.

16. SAFETY TRAINING

- a) Contractor shall ensure that all of his workmen deployed for the work have understood safety requirement for the assigned work.
- b) Before the start of work, safety requirements are to be briefed by concerned supervisor.

17. ENVIRONMENTAL COMPLIANCE

- a) Contractor shall ensure that environmental related awareness program has been given to his employee at the time of start of work.
- b) Putting the activities of maintenance / overhauling / cleaning waste generated is to be disposed as follows.
 1. Before start of work contractor should be, ensure availability of following in the place of work.
 - i. Drum/jerry cane/trays for waste liquid cleaning agent.
 - ii. Identified container for waste jute.
 - iii. Identified container for waste gasket / asbestos/rubber.
 - iv. Identified container / sack for keeping waste insulations wool.
 - v. Sufficient no of trays for keeping equipment parts for maintenance.
 - vi. Funnels hose and strainers in sufficient quantity for transfer of cleaning agent
 2. During the maintenance activity, waste generated shall be kept in identified storage area.

18. PENALTY CLAUSES:

- a) For any incomplete scaffolding erection work, a penalty of Rs. 5,000 per missing floor will be imposed in addition to erection of the same.
- b) In case the thickness readings taken are found to be incorrect or readings taken are not at appropriate location or contact media is contaminated , a penalty will be imposed @ Rs 200 per reading and contractor has to take the reading again at no extra cost.
- c) Any vertical tube cut should be necessarily capped immediately with proper cap otherwise penalty @ Rs. 500 per tube will be imposed.
- d) if any leakage is detected in newly made joints during hydraulic test ,a penalty@250/ such joint will be imposed and the defect should be rectified by contractor at no extra cost.
- e) If any leakage is detected in newly made joints within 72 hour of commissioning of boiler, a penalty will be imposed @ Rs 500 per joint and contractor has to rectify the defect at no extra cost.
- f) In case of passing/gland leakages in valves within 72 hr of commissioning of boiler due to poor workmanship, a penalty @ Rs 1000.00 per valve will be imposed and defect shall be rectified by the contractor at no extra cost.
- g) For any leakage (air, water and flue gas) found due to poor workmanship, a penalty @ Rs 10000.00 per Leakage area will be imposed in addition to rectification of defect at no extra cost.
- h) All generated scraps should be shifted to designated scrap yard within the scheduled time days otherwise penalty @ Rs. 2000 per day will be imposed.

PRICE BID/ RA 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 GST shall be submitted by the bidder. In case of refusal of L1 bidder to submit price break up, EMD will be forfeited and 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 GST Basis.**

Sl. No.	Description of work	Total Amount
1.	Overhauling of TPP Boiler (One Unit) as per Scope of work.	
LANDED COST*		

Note: GST extra as applicable

PRICE BREAK UP OF LANDED COST:

Sl. No.	Description	Quantity	Rate/ Unit (Rs.)	Amount (Rs.)
1.	Internal & External washing of Boiler as per Sl.No. 1 of Scope of work.			
	1.1. External Cleaning	1 Boiler		
	1.2. Internal Cleaning	1 Boiler		
2.	Boiler Tube Thickness Checking / De-metering as per Sl.No. 2 of Scope of work.	1 Boiler		
3.	Burners as per Sl.No. 3 of Scope of work.	1 Boiler		
4.	Cyclone & Separator of Mill System as per Sl.No. 4 of Scope of work.	02 Sets		
5.	Gas line valves as per Sl.No. 5 of Scope of work.	1 Boiler		
6.	Overhauling of drum as per Sl.No. 6 of Scope of work.	1 Boiler		
7.	Overhauling of HP Valves as per Sl.No. 7 of Scope of work.	1 Boiler		
8.	Overhauling of LP Valves as per Sl.No. 8 of Scope of work.	1 Boiler		
9.	Changing of HP & LP Valves (As per need) as per Sl.No. 9 of Scope of work.			
	9.1. HP Valves	1 Boiler		
	9.2. LP Valves	1 Boiler		
10.	TIG Welding Joints For Repairing/Replacement of Boiler Tubes as per Sl.No. 10 of Scope of work.	1 Boiler		
11.	Radiographic Test/Ultrasonic Test of Welding Joints as per Sl.No. 11 of Scope of work.	1 Boiler		
12.	Alignment of Water Wall as per Sl.No. 12 of Scope of work.	1 Boiler		
13.	Overhauling of Safety Valves of TPP as per Sl.No. 13 of Scope of work.			
	13.1.Revisioning/replacement of safety valves	02 Nos.		
	13.2. Revisioning / replacement of Impulse safety valve	02 Nos.		
	13.3. Revisioning / replacement of atomizing steam line safety valve at burner floor	01 No,		
14.	Furnace Shell Plate Changing as per Sl.No. 14 of Scope of work.	1 Boiler		
15.	Rectification of all Super Heater Headers Hangers Supports as per Sl.No. 15 of Scope of work.	1 Boiler		
16.	Repair of Structure as per Sl. No. 16 of Scope of work.	1 Boiler		
17.	Overhauling of Ducts & Compensators as per Sl. No. 17 of Scope of work.	1 Boiler		
18.	Overhauling of Hopper & Hydraulic Seal as per Sl. No. 18 of Scope of work.	1 Boiler		
19.	Repair of Air Pre-heater as per Sl. No. 19 of Scope of work.	1 Boiler		

20.	Erection of scaffolding as per Sl. No. 20 of Scope of work.	1 Boiler		
21.	Coal dust pipes of Mill System & primary air dampers as per Sl. No. 21 of Scope of work.	1 Boiler		
22.	Overhauling of Seal Pot and platforms as per Sl. No. 22 of Scope of work.	1 Boiler		
23.	Overhauling of R. C. Feeders, C. D. Feeders & Bunkers as per Sl. No. 23 of Scope of work.	1 Boiler		
24.	Thermal insulation and aluminum sheeting as per Sl. No. 24 of Scope of work.	1 Boiler		
25.	Refractory Job as per Sl. No. 25 of Scope of work.	1 Boiler		
26.	Supervision as per Sl. No. 26 of Scope of work.	1 Boiler		

Note: GST Extra

Signature with seal of tenderer

ANNEXURE - VII

CHECKLIST TO BE FILLED BY BIDDER EXCEPT REMARKS:- All documents which are required for fulfillment of 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.

CHECKLIST OF DOCUMENT SUBMITTED BY TENDERER

Sl. No.	Document	Page No.	Remarks by BPSCL
1.	Work Order		
2.	Completion Certificate		
3.	Partnership/ Proprietor		
4.	EPF		
5.	ESIC		
6.	Latest ITR		
7.	* GSTIN		
8.	Turnover/ PL Sheet		
*If the agency is not under the preview of GST then please write Not applicable (N.A.).			
Total numbers of pages in Techno-commercial Bid			

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) having

PAN _____ & registered office at _____ (Address)

agree to all the Commercial, General & other Terms & Conditions listed in the

NIT No. _____ dated _____

for the work of _____

(Name of 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 for
for Bokaro Power Supply Co. (P) Ltd., Bokaro Steel City.

Market No.	Last Quoted Price
	<i>To be submitted by the L-1 Bidder only after finalization of RA</i>

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****Bidder'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 contractor 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 bidder 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 bidder 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. Bidder 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 Bidder 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 Bidder 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 Bidder 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 Bidder 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.