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/MM/19-20/C-128/NIT-849/3844 Dated 25/11/2019



TENDER DOCUMENT

NAME OF WORK: Overhauling of Boiler # 8.

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/MM/19-20/C-128/NIT-849/3844

Date: 25/11/2019

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 Boiler # 8.	
Estimated Cost (in Indian Rs.)	Rs. 56,88,759.00	
	(Rupees Fifty Six Lakh Eighty Eight Thousand Seven Hundred Fifty Nine	
	Only) Excluding GST.	
Earnest Money (in Indian Rs.)	Rs. 1,00,000.00	
	(Rupees One Lakh) only	
Cost of Tender Document	Rs. 1,180.00	
(Non-refundable) (in Indian Rs.)	(Rupees One Thousand One Hundred Eighty) only including GST @ 18%	
Period of Contract	Work Order will be valid for One (01) Year from the date of issue.	
	However actual working period will be of 35 days including mobilization	
	as well as removal of scrap from the site.	
Last Date & Time of submission of	27/12/2010 at 12:00 Hrg. (IST)	
Tender	27/12/2019 at 12:00 Hrs. (IST)	
Bid opening Date & Time	27/12/2019 at 12:15 Hrs.	
Qualifying Requirements / Fligibili	ty Critaria ·	

Qualifying Requirements / Eligibility Criteria :

1. Bidder should have Minimum average annual turnover (MAT) of Rs. 17.06 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.
- 2. Bidder should have experience of having completed **similar work** in India 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 offers are invited. Value of such order shall be either of the following:

a. Three similar completed works each costing not less than to **Rs. 22.75 Lakhs**

- OR
- b. Two similar completed works each costing not less than to **Rs. 28.44 Lakhs**

OR

c. One similar completed work costing not less than to **Rs. 45.51 Lakhs**

<u>Similar Work means</u>: work order/orders, which include overhauling of High Pressure and High Temperature Boiler (capacity of boiler not less than 220 T/Hour). The scope of work should include high pressure parts, valves, burners, ducts etc.

- 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.)
- 3. 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 a self declaration as per format at **Annexure-VI**.

- 4. Bidding through consortium is not allowed.
- 5. The bidder shall submit self certified copies of following:
- IT Return (*Latest*), EPF, ESI Certificate, Partnership Deed/ Affidavit for Proprietorship/ Memorandum & Articles of Association, including changes in the Constitution of the Firm,(if any), Copy of GST registration certificate and Boiler repairer certificate issued by Chief Boiler Inspector. *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 in the form 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.
- Offer shall be accompanied with Earnest Money Deposit (EMD) in the form 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 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) Chief GM (MM) Tel: 8986874118 Email: <u>purchase.bpscl@gmail.com</u>

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:

Chief General Manager (MM) 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 (% above / % below) 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 you are not registered in buyjunction earlier. Click on Existing user in-case you have already registered in buyjunction earlier. Existing users can login with their user id and password.

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

New Users:

Steps to get your User ID 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 ID and Password.

5. Changing of password on first login is compulsory.

6. On receipt of the User ID 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 id 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: For any clarification on the bidding process please contact

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

Mr. Kaushik Roy _ 9836447044_ Roy.Kaushik@mjunction.in

Ms. Debalina Maity _ 8336991451_ Maity.Debalina@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) Bidder will quote price in any of the two options given below:

Percentage ABOVE with respect to Total Estimated Cost excluding GST

OR

Percentage BELOW with respect to Total Estimated Cost excluding GST

- a) If the bidder does not quote price in terms of percentage or quotes in more than one option, their offer will be rejected.
- b) In the tender schedule at the place where the bidder has to quote PERCENTAGE, 'above' will mean mathematically positive and 'below' will mean negative.

- c) The Lowest-1 (L-1) Bidder will be the one whose PERCENTAGE is mathematically lowest and all other Bidders will be ranked/termed as Lowest-2 (L-2), Lowest-3 (L-3) and so on, in the increasing order of PERCENTAGE quoted by them.
- ii) Tenderer's are requested to visit site for actual assessment of the job before submission of their offer.
- iii) Tenderer shall clearly indicate that their prices are firm in all respect till execution of the work order.
- iv) Any conditional offer or offer having deviations is liable to be rejected.
- v) You have to submit Tender document bearing your signature and seal on all the pages along with Techno-Commercial Offer / consent on NIT's Terms & Condition otherwise, it will be presumed that you do not accept our terms and conditions and this may lead to rejection of your offer forfeiting your 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.

- vi) 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.
- vii) Price or any indication of price shall <u>NOT</u> 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) 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.
- x) 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.
- xi) 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.
- xii) BPSCL reserves the right either to reject any/all the tenders without assigning any reason thereof.

GENERAL TERMS AND CONDITIONS

- 1.01 You will have to follow and observe the safety & statutory requirements.
- 1.02 You will have to fully responsible for any sort of unsafe activity of your workmen. All working personnel should have proper safety certificates issued by BPSCL before start of work.
- 1.03 Bidder 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 Work is to be carried out as per work order.
- 1.06 In case any of the documents/information submitted by the bidder(s) is/are 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.
- 1.07 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 BPSCL for a minimum period of six months and the Earnest Money will be forfeited.

1.08 **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 Guarantee period.

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 Bill / Security Deposit. If the amount of Bill / 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.

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

1.14 **GST Related Clauses :**

- a. All bidders should quote GST as extra. If not mentioned, same will be taken 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 will 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 noncompliance 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.

1.15 Work accident :

- **a.** You will be responsible for the safety of the workers employed by you. In the event of any workaccident, major or minor, you/your representative must take care of the injured person immediately and provide him the required treatment as suggested by the doctor. If you/your 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 you.
- **b.** You shall be fully responsible for making payment of compensation to your 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

1.16 <u>SUBMISSION OF PERFORMANCE GUARANTEE BOND FOR QUOTING UNWORKABLE</u> <u>RATE:</u>

If a bidder quotes unworkable rates i.e. if the quoted price is less than **75%** of the estimated price and is considered for placement of order, the party will be asked to justify the rate quoted. On non acceptance of justification / refusal of the same, the bidder 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 **75%** of estimated price and quoted price of the bidder. Earnest Money of the bidders 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.

- 1.17 **AWA CLAUSE:** The contractor shall have to pay an amount of Rs 96.15 per day on actual attendance per month (not exceeding Rs 2500/month) to the worker engaged by you in this job as additional welfare amenity (AWA) as per relevant circular/notification of BPSCL and you are requested to include the amount against AWA in your quoted rate, submit the offer accordingly.
- 1.18 **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.
- 1.19 **Banning of Business Dealings:** On arising of 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.

1.20 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.

- 1.21 **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, you 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 you or your 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. You 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 3^{rd} violation as mentioned in clause no (i) above.
 - iv. Fine upto Rs. 10,000/- for violation in use of Full Body Harness by you or your 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, you 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

- 1.23 **<u>RATE FINALIZATION</u>**: BPSCL reserves the right to finalize the rate through either of the following modes:
 - 1. Opening of Online Price (*submitted on <u>www.buyjuntion.in</u>*) submitted at the time of techno-commercial bid.
 - 2. Through Reverse Auction to be conducted by our service provider M/s. mjunction.
 - 3. Where it is decided not to conduct the RA, the techno-commercially accepted bidders may be asked to submit decrement in percentage (%) on their price submitted at the time of techno-commercial bid. In this case On line price bid and % decrement shall be considered together to finalize the rate.

Scope of Work:

1. Overhauling of High Pressure Parts including valves and repairing of pent house.

- a) External washing of Boiler 1st pass, and 2nd pass, 3rd pass, pent house and APH at 0 meter to top of the Boiler and hot air & cold air duct.
- b) Erection of scaffolding from zero meter to ceiling including PSH, end super heater etc inside the furnace. Inspection platform inside the boiler will be made at an interval of 1.5 to 2 meters around the scaffolding along with hand railing upto ceiling of Boiler & flight of stairs or ladders of scaffolding will not be more than 500 mm. (Bamboos are strictly not allowed).
- c) High pressure water jet cleaning from inside of water wall, Eco, PSH. ESH, 1st and 2nd convective, Hanger tubes, APH etc.
- d) D Metering : thickness measurement of water wall, platen 1 & 2, economizer, convective, hanger tubes, gooseneck area, all bends, alloy steel pipe, T Joints, super heater blow down, down comers at various elevations.5000 thousand nos. of thickness samples will be required to be taken for thickness measurement. All scaffolding required for thickness measurement will be arranged by party.
- e) Replacement of defective tubes as per history, thickness measurement, visual inspection etc. of water wall, convective, PSH, ESH, ceiling, economizer and hangers etc. All tubes will be cut by cutting wheel only. All vertical tube holes (after cutting) would essentially be covered by any type of caps. Root welding will be done by TIG & subsequent run may be done by ARC welding.
- f) Shielding of erosion prone area of pressure parts.
- g) Repairing of Pent house :
 - i. Removal of insulation & Cutting of man holes as per requirements for cleaning and inspection.
 - ii. Extensive cleaning from inside of pent house.
 - iii. Replacement of all defected plates, angles & channels of pent house.
 - iv. Fitting and welding of sealing plates to pent house, fins welding and sealing of roof superheater.
 - v. Fitting of asbestos rope, clamps & bolts and ensure tightness of bolts for sealing.
 - vi. Sealing of headers opening from pent house.
 - vii. Apply refractory for sealing if required.
 - viii. Realignment of beams if required for repairing of pent house.
- h) Leakage arresting from main body of boiler, all peep holes, man holes, sealing of gooseneck, boiler 1st pass, 2nd pass & 3rd pass joint area. Repairing of Peep hole doors if required.
- i) Assistance in air tightness test (ATT). If any leakage found, it is to be rectified.
- j) Expected joints for HP tubes: **450 J.** Fins welding will be carried out as per the requirement of throughout the length of water wall tubes, ceiling tubes& side walls etc.
- k) Flushing of headers.
- 1) **100%** Radiography of all newly made joints.
- m) Re-visioning/Replacement of HP Valves of boilers:
 - a. Re-visioning / replacement of feed line valves (NB # 175mm): 06 Nos.
 - b. Re-visioning / replacement Safety Valves (NB # 100 mm): 04 Nos.
 - c. Re-visioning / replacement Feed injection valves, vent valves, sup. drain valves (Ø 25 mm):45 Nos.
 - d. Re-visioning / replacement PBD valve & drains (Ø 65 mm):14 Nos.
 - e. Re-visioning / replacement Startup valve (NB 100 mm): 02 Nos.
 - f. Re-visioning of valves includes dismantling, lapping & blue matching of disc with seat, inner and outer gland packing and re-visioning of actuators of valves.
- n) Stress Relieving (10 nos.): T Joint and HP valves Joints like safety valves, Start up valves & feed line valves in case of replacement.
- o) Boiler drum: Opening of main holes, inside cleaning & inspection of boiler drum and removal, repair & refitting of separators, scrubbers, driers and DPT of drum, manhole gasket replacement. No loose parts / defects should be unattended.
- p) Sample cooler systems: dismantling, cleaning, servicing/replacement of sample coolers.
- q) Repair of expanders at Zero meter level.

- r) Scope of Work is a guideline to carry out the Overhauling job of pressure parts but the work not specified hereunder and otherwise necessary to ensure the smooth running of the equipments is in the scope of work.
- s) Assistance in conducting in-situ corrosion mapping of water wall tubes.
- t) Assistance in conducting the Leak test & hydraulic test and inspection of boiler with BPSCL representative during these tests.

2. Replacement of varies sizes of compensators

- a) Erection of Scaffolding.
- b) Remove the damage Compensators.
- c) Shifting & Lifting the Compensator in position.
- d) Fitting and welding the new Compensator.
- e) Dismantling the Scaffolding.
- f) Shifting of damage compensators to scrap yard for disposal with cutting into pieces.

3. Repair /Revisioning of 2nd pass, 3rd pass, seal pot system and hydraulic seal

- a) Cleaning of Hoppers.
- b) Removal of damage seal pots, attachment of drains etc.
- c) Repair /Replacement of seal pots, drain pipes, nozzles.
- d) Revisioning / Replacement of low pressure valves.
- e) Repair / Replacement of chute pipes coming to seal pot.
- f) Replacement of Discharges pipes of seal pot with fabrication of bends (if required).
- g) All nozzles of systems to be changed / cleaned.
- h) All supports are to be rectified for proper expansion.
- i) Sealing of all opening.
- j) Cleaning of Seal chamber.
- k) Revisioning / Replacement of inlet pipes and over flow lines.
- 1) Revisioning / Replacement of connecting valves and nozzles.
- m) Repair of Seal Plats.
- n) Repair / Replacement of SS guards.

4. Inspection, window cutting, cleaning and repair of hot & cold air ducts, interconnecting duct & APH

- a) Erection of scaffolding for making approach to different ducts at different elevation as per requirement.
- b) Making windows at different position to go inside for inspection & cleaning.
- c) Cleaning and inspection of all ducts from distribution box to Boiler furnace and repairing of damaged ducts.
- d) Cleaning and inspection of all connecting ducts coming from distribution boxes.
- e) Repair of APH : It includes cleaning & inspection of APH. Repair of body of top & bottom Air Pre Heaters (flue gas & hot air sides), replacement/fitting of sleeves to APH tubes, blanking of leak tubes, apply refectory to leakage area, repairing of damage seal of top & bottom APH and repair of top area of APH including connecting compensators.

5. Repair & Re-visioning of secondary air dampers and other dampers of flue gas lines

- a) Opening of manhole & cleaning of wind box of SADC dampers and flue gas dampers.
- b) Delinking of dampers from actuator.
- c) Repairing of wind box.
- d) Inspection and repair of dampers plates of SADC and flue gas.
- e) Removal of jamming of dampers of SADC and flue gas.
- f) Re-visioning/replacement of bearings of dampers.
- g) Linking of dampers with actuators, operation checking and box up.
- h) Linking of Flue gas & SADC dampers with actuators, operation checking and box up & commissioning.

6. <u>Repairing of flue gas ducts</u>

- a) Erection of scaffolding for making approach up to duct.
- b) Cleaning of duct throughout the length of duct from APH outlet to Chimney inlet.
- c) Thorough inspection after cleaning.
- d) Cutting of damage duct area in small patch and repair the same by patch welding from inside.

7. Erection of air dampers including repairing of tertiary air line

- a) Shifting of fabricated dampers at site.
- b) Removal of damaged dampers.
- c) Positioning of new fabricated dampers.
- d) Alignment & fitting of dampers.
- e) Repairing of tertiary air line.
- f) Checking of operation of fitted dampers.

8. Replacement of Coal Burner and Replacement/Repairing of Oil Burner & their accessories including repairing of gas burners

- I. Removal and replacement of all 16 Nos. worn-out coal burners assembly. This includes:
 - a) Erection/Removal of scaffolding for making approach up to top coal burners.
 - b) Locking of all coal pipes & cutting of pipes and bends.
 - c) Marking, removing burner assembly from Burner Panel & Shifting worn out burner assembly to scrape yard.
 - d) Shifting of new coal burner assembly to coal burner area of boiler.
 - e) Repairing of all coal burner chambers. Repair/replacement of manual dampers plates of coal burner chamber.
 - f) Fitting of new coal burner assembly in repaired burner chambers.
 - g) Alignment of coal burner assembly.
 - h) Fitting and welding of coal dust pipe bends as per original.
 - i) During inspection any damage in coal pipes, bends & blanking piece is found, it should be changed by new one.
 - j) Replacement of Burner compensators (if required) and plugging of all leakage points of outside air.
 - k) Commissioning of coal burners assembly.

II. Replacement/Repair of 08 Nos. of oil burners in one boiler. It includes:

- a) Erection/Removal of scaffolding for making approach up to oil burners, if required.
- b) Removal of swelling disk.
- c) Repair / Replacement of internal housing.
- d) Replacement/repair of compensators.
- e) Repair /replacement of external housing.
- f) Repair / Revisioning/ Replacement of manual valves /pneumatic valves (NB 15-20mm)
- g) Filters cleaning.
- h) Cleaning of oil lances and fitting.
- i) Commissioning.

III. Repairing of 04 Nos. of Gas Burners. It includes :

- a) Erection/Removal of scaffolding for making approach up to gas burners, if required.
- b) Cleaning and removal of slag from burners opening.
- c) Repairing of burners in- situ condition, if required.
- d) Secured Positioning of gas burners.
- e) Opening of inspection door of hot air entry to gas burners and replace the gasket and fitting the same.
- f) Cleaning & repairing of gas burners and their accessories from outside of the boiler.

9. Inspection, Rectification, & Adjustment of all Hangers & Supports of Critical High Pressure Steam & feed water Pipelines

- a) Making approach up to all hanger supports.
- b) Inspection of all types Hangers Supports of HP steam header, feed line headers, main stream line header, aux steam line and all hanger supports located on the top of pent house.
- c) Cleaning, Servicing, Repositioning and Setting right the all Hanger supports.
- d) Load setting of the hangers supports for the thermal as well as statics loading.
- e) Repairing of Turn Buckle as required.
- f) Fixing of Bracket and others accessories properly by welding / bolting.

- g) Fabrication of Hanger supports, if required.
- h) Cold reading would be recorded.
- i) Hot reading would be taken after stabilization of unit full load.
- j) Arrange one no. of ex-BHEL /NTPC expert of this field to supervise this job.

10. Replacement/Re-visioning of ID Fans & FD Fans

- a) Removal of insulating material from the working surface.
- b) Removal of casing ID Fans & FD Fans.
- c) Repairing of Internals of casing.
- d) Repair / Replacement of suction cones.
- e) Re-visioning/Replacement of suction & discharge dampers.
- f) Dismantling of Bearing.
- g) Re-visioning of coupling.
- h) Replacement / Re-visioning of bearing NDE & DE sides.
- i) Replacement / Repairing of Impeller assembly.
- j) Repairing of common duct in between ID Fan A and B and removal / fitting of insulating material and cladding
- k) Fitting of all parts and Trial run

11. Replacement of attemperators SP-1

- a) Erection of scaffolding as per job requirement.
- b) Removal of insulation & cladding from existing attemperators header.
- c) Proper temporary supports to be provided to the line where attemperators are fitted before cutting.
- d) Cutting of existing attemperators with their connections from injection lines.
- e) Removal of attemperators from site and shifted at zero meter.
- f) Shifting of new attemperators at working site.
- g) Joint preparation of all joints as per IBR.
- h) Fitting of new attemperators.
- i) Welding of attemperators headers & injection lines as per IBR.
- j) UT of all joints.
- k) Stress relieving of all joints.
- 1) Hanger supports if any to the existing attemperators will be refitted to new attemperators.
- m) Inspection of newly prepared joints during hydraulic test.
- n) Commissioning of attemperators.
- o) Insulation and cladding of new attemperators.
- p) Removal of scaffolding.
- q) Removal of debris.

12. Painting of Boilers structures

- a) Erection of scaffolding for making approach up to required painting area and dismantling of the same after completion of job.
- b) Cleaning the required surface area of painting before painting.
- c) Painting of structures, platforms & railing (it includes angles, beams, channels, ribs & stiffeners) of complete boiler at all elevations, its auxiliaries, FD Fans and ID Fans with synthetic enamel paint (supply & application) to give an even shade by two or more coats with application of paint. (Synthetic enamel paint (Indigo Blue / Dark Blue, Black & Yellow of make Berger/Asian/Nerolac), thinner, brush etc. shall be supplied by contractor.)

13. Renovation of Thermal insulation and Al-cladding

- a) Collection of insulation material mattress, Refractory & cladding from BSL / BPSCL store.
- b) Inspection of damage/removed insulation from all area of boiler, hot air duct, cold air duct & flue gas duct.
- c) Erection of scaffolding & dismantling the same after work as per requirement.
- d) Breaking of damage insulation from the surface of all area of Boiler, Pent House APH, 2nd Pass hopper, 3rd Pass hopper, hot air duct, cold air duct & flue gas duct up to chimney.

- e) Lug welding for insulation.
- f) Fresh insulation and cladding on the surface damaged/removed insulation of all area of Boiler, Pent House APH, 2nd Pass hopper, 3rd Pass hopper, hot air duct, cold air duct & flue gas duct up to chimney.
- g) Refractory of the damage insulation portion of headers inside the pent house.
- h) Refractory of the surface near gas burners & deflection panels if required.
- i) Disposal of old insulation material.
- j) Area cleaning.
- k) Removal of damage insulating material from the site to BPSCL scrap yard.

SPECIAL TERMS & CONDITIONS:

- 1. 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.
- 2. Work shall be carried out round the clock including holidays & Sunday.
- 3. The contractor has to depute individual Diploma & Non-Diploma supervisors for all area as per scope of work, skilled & semi-skilled and un-skilled work force for execution of the subject job as per scope of work.
- 4. Sufficient no. of HP welders with their valid competency certificates and LP welders must be engaged for execution of the subject job.
- 5. The contractor shall bring the required material from the store / other sites to the site of work and dispose off the dismantled / damaged parts to the store etc. as per the instruction of the engineer in charge. However, truck / trolley / crane will be provided by BPSCL subject to availability.
- 6. During contract period there will be no consideration of idle & escalation charges.
- 7. Following consumable will be provided by BPSCL (free supply), as per requirement of job:
 - a. Spare parts
 - b. Steel (plate, channel, angle, sheet etc.)
 - c. Insulating materials
 - d. Electricity
 - e. Water
 - f. Uncovered / open space for site office / store depending upon requirement / availability
- 8. Following T&P will be provided by contractor:
 - 1. All Ring & D. E. Spanners up to 36mm
 - 2. Slogging spanners from 36mm to 100mm
 - 3. Adjustable Spanners
 - 4. Allen key set up to (17mm)
 - 5. Hammer up to (05 Kg)
 - 6. Screw Driver all sizes
 - 7. Hack saw frame
 - 8. Files (smooth, rough) round, half round
 - 9. Inside & Outside Circlip pliers
 - 10. Wire rope (sling) 8mm, 12mm & 16mm (duly tested) in appropriate length
 - 11. D. Shackle 2T, 3T, 5T (duly tested)
 - 12. Cutting torch along with regulator & hoses
 - 13. Straight grinder
 - 14. Chain pulley block (2T, 3T) (duly tested)
 - 15. Chain pulley block (5T,10 T) (duly tested)
 - 16. Lifting & pulling machines (3T, 5T) (duly tested)
 - 17. Angle Grinder
 - 18. FF2 Grinder
 - 19. Welding Generator (with welding cables)

- 20. Chisel 5", 12"
- 21. Try Square
- 22. TIG set with Argon regulator
- 23. Heating torch along with regulator & hoses
- 24. Portable Electrode Heating oven
- 25. Vernier calipers
- 26. Measuring Tape (5 M)
- 27. Chop saw for tube cutting
- 28. Torch
- 29. 24 V lamps and transformers
- 30. SR M/C if required
- 31. Lighting/ Extension Boards with proper plugs 5 point
- 32. D-meter
- 33. Hand hole cutting M/C, tools & fixtures if required
- 34. Multipoint Welding Transformer
- 35. Winch machine
- 36. Radiography machine
- 37. Scaffolding material (Bamboos are strictly not allowed)
- 38. Pressure water jet pump with Accessories

Note:

- 1. Above items are indicative only. Arrangement of any other tools & tackles that may be required for successful execution of the work, will be in the Bidder scope.
- 2. All tools & tackles should be adequate enough to meet the requirement at every point simultaneously

8. List of consumables to be provided by contractor

- a. Grinding / Cut of Wheels for all types of Grinders
- b. Torch lights & cells
- c. Welder's goggles / Grinding Goggles
- d. Cotton & Asbestos hand gloves
- e. Welding accessories like, chipping hammer, wire brush, gas cutting sets.
- f. Hack Saw blades
- g. Screws for fitting of cladding to insulation.

- h. Coir rope (25 mm), Manila rope
- i. Filler rod 2.4mm for TIG welding for ECO, SPH tubes etc. General & special electrodes(*including SS Electrodes*) with prior approval from BPSCL
- j. Industrial gases DA, Oxygen & Argon with adequate quantities at each front
- k. All necessary safety appliances.
- 1. Synthetic enamel paint (*Indigo Blue / Dark Blue, Black & Yellow of make Berger/Asian/Nerolac*), thinner, brush etc.

However consumables which are permanently fitted in the Boiler like gaskets, gland seals, asbestos ropes, rubber items, nut-bolts etc. will be supplied by BPSCL free of cost.

- 9. 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.
- 10. The contractor should not keep / leave any scrap / items hindering the walk ways and working areas.
- 11. All unused, removed spares and un-used consumables shall be returned to the departmental stores.
- 12. Any machining works will be done by BPSCL. However, any welding / cutting works required for the maintenance job will done by the contractor at no extra cost liability to BPSCL.
- 13. <u>SUBLETTING</u>: The contractor may engage Skilled and Unskilled workmen through their sub-contractor only after approval of BPSCL. Sub-contractor shall have adequate experience in such jobs and they will work under contractor's supervision and control.

14. SITE ORGANISATION:

- a. The contractor shall authorize one of his representatives (*either BE or Diploma holders*) to act as overall site in charge for this particular contract with sufficient experience.
- b. The site in charge shall co-ordinate all activities to ensure satisfactory working, in addition to his normal duties. He shall receive and abide by all instructions given by the engineer-in-charge or his representative for smooth, safe and satisfactory execution of work.
- c. Site in charge will submit time schedule and attend daily progress review meeting.
- d. Site in charge should be available at the work site during the execution of the job & should have mobile for proper coordination.
- e. Site in charge shall co-ordinate the work and for night shift he should depute one site supervisor as authorized representative of the contractor.
- f. The contractor shall authorize one of his supervisors to look over all safety during execution of work and for all safety aspects of the work.
- g. The contractor shall authorize two or three person to collect materials from BPSCL stores.
- h. The names of site-in-charge, safety supervisor, material collector, and shift site in charge shall be communicated in writing to engineer-in-charge prior to commencement of work.
- i. Contractor shall have to maintain a register and duplicate book showing details of the job to be done against each schedule / sub-schedule on daily basis. Planning meeting will be conducted in morning and evening for reviewing work progress and next day planning and spare and consumable requirements assessment issues related of safety and housekeeping.
- j. Records of spare & consumables used against each job and equipment is to be maintained by the site supervisor and to be made available on daily basis in planning meeting and he should maintain a computer with printer at site for proper record keeping and planning.
- k. Contractor will submit detailed report of all executed jobs as per scope of work to engineer-in-charge or his representative within 30 days after completion of work.
- 15. The contractor shall intimate the names of the persons in advance to the concern engineer in-charge/his representative for preparation and issue of gate passes required for entry into the plant premises. If the gate pass is lost, the cost of renewal will be borne by the contractor. In case of completion / termination of the contract or any individual worker leaving the job or his services being terminated by contractor, the gate passes of such workers will be surrendered immediately by contractor's to the engineer in-charge/his representative, failing which it will be considered as a breach of contract.
- 16. The contractor shall on instructions of engineer in charge/his representative immediately remove from work any person employed thereon who may misbehave or cause any nuisance or who otherwise in the opinion of the engineer in charge, is not adequately qualified to be retained on the job and such person shall not be employed again.

17. QUALITY OF WORK:

- a. Engineer-in-charge or his representatives will carry out checks and inspections, however, maintaining the quality of work is primarily the 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 be done in the presence of BPSCL representatives.
- d. All work being done on the equipment are 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 are to be kept in a clean place, well covered and responsibility of theft / pilferage / damage to dismantled parts shall lie 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 or any other source. Decision of engineer in- charge/his representative will be final in this regard.
- g. **Guarantee:** The contractor shall be responsible for the workmanship of the job executed by him. For this purpose, he should stand guarantee for three 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 the contractor fails to do the same, BPSCL reserves the right to get it attended by some outside agencies at the contractor's risk and cost.

18. STATUTORY COMPLIANCE:

- a. Statutory compliances regarding valid labour license, insurance (as per height) & statutory requirements of boiler 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. No additional financial compensation shall be paid by BPSCL to the contractor on account of increased expenditure caused due to above point.
- d. T&P like lifting and pulling tools etc. being used by the contractor must have been tested and inspection must be carried 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.
- e. The contractor shall compulsorily provide personal protective equipments to his employees and in the event of his not providing the same before the start of work it may be provided by BPSCL at contractor's cost and the cost will be recovered from his bills.
- f. All welding machines should be in good working condition and safe for usage.
- g. Labour license for engaging labour for the work should be submitted before start of work.
- h. Before the trial of the equipment written declaration regarding clearance of men & materials removed to be given.
- i. Prior to demobilization of men & materials, permission is required from engineer in-charge/his representative.
- 19. The contractor has to strictly follow the safety regulations for safe working of men and equipments, particularly with respect to electrical connections, welding, cutting, pulling and lifting, grinding and of working at high elevations and scaffolding for detailed instructions kindly refer following clauses:
 - a. The contractor should clearly understand that safety of men at work is more important than the work itself.
 - b. The contractor shall ensure that safety of highest standard is ensured by his entire work force. The contractor will be fully responsible for the safety of his workers including those supplied for manpower assistance.

- c. Besides the various statutory requirements prescribed to ensure safety, special attention is here by drawn to the following safety precautions in particular.
 - i) All persons deployed by contractor should be medically fit.
 - ii) Work should be started only after ensuring that valid permit to work is available for working in the relevant area.
 - 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.
 - iv) Proper illumination should be provided in working area.
 - v) Hand railings / toe guards etc. Wherever removed shall be restored as soon as possible after completion of work.
 - vi) 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.
 - vii) 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.
 - viii) Contractor shall ensure that all of his workmen deployed for the work have understood safety requirement for the assigned work.
 - ix) Before the start of work, safety requirements are to be briefed by concerned supervisor. Violation of any safety norms shall attract penalty as per the safety clauses of BPSCL

20. 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 necked 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.

21. 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.

22. 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.

23. 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 can/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.

24. Penalty Clauses:

- 1. During trial run of rotary parts if vibration beyond permissible limit and any undue/abnormal sound from any part of the systems is found, a penalty of Rs. 1000/defect will be imposed in addition to rectification of defect by contractor at no extra cost within the schedule time.
- 2. For any incomplete scaffolding erection work, a penalty of Rs. 5,000 /missing floor will be imposed in addition to erection of the same at no extra cost.
- 3. Delay in scaffolding erection (*reason attributed to contractor*) beyond maximum allowed period (05 days) will invite penalty of @ Rs 15000.00/day.
- 4. In case thickness readings taken are found to be incorrect or readings taken are not at appropriate location or contact media is contaminated then entire readings of that area will have to be repeated and a penalty will be imposed @ Rs 200/ reading.
- 5. Any vertical tube cut should be necessarily capped immediately with proper cap otherwise penalty @ Rs.500 per tube will be imposed.
- 6. For any leakage & cracks of newly made joints found during hydraulic test, a penalty @ Rs 250 /joint will be imposed and contractor has rectified it at no extra cost.
- 7. For Any leakage found during hydraulic test a penalty will be imposed @ Rs 1000, and the same shall be rectified by contractor at no extra cost.
- 8. After 72 hrs. of commissioning of boiler if a leakage from manhole gasket is found, it will be rectified by contractor at no extra cost and a penalty will be imposed @ Rs 5000.
- 9. In case of passing/gland leakages of valves during hydraulic test due to poor workmanship, a penalty @ Rs 1000.00 per valve will be imposed, and required rectification shall be done by contractor at no extra cost.

- 10. After commissioning of sample cooler, no choking & leakage should be found in any tubes or in any part of the system. Otherwise a penalty of Rs 1000.00/defect will be imposed and same should be rectified by contractor at no extra cost.
- 11. After commissioning of all dampers if jamming in the movement is found a penalty @ Rs 250.00/damper will be imposed and same should be rectified by contractor at no extra cost.
- 12. For Any leakage (air, water and flue gas) found due to poor workmanship a penalty @ Rs 10000.00/Leakage area will be imposed in addition to rectification of defect by contractor at no extra cost.
- 13. If any defect is found in the job of insulation of boiler, a penalty of Rs. $50/m^2$ of damage area of insulation will be imposed in addition to rectification of defect at no extra cost.
- 14. All generated scraps shall be shifted to designated scrap yard within the scheduled time of 35 days. Otherwise penalty @ Rs.2000 per day will be imposed.
- 15. For delay in completion of work (attributed to contractor) beyond scheduled time of 35 days, a penalty @ Rs. 5000/day will be imposed.
- 16. Due to any defect or failure of job carried out by you causing the forced outage of Boiler within 03 months, a penalty of Rs. 50,000/forced outage subject to maximum 5% of contract value will be imposed on you.

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 shall be suspended for a period of six months from the date of issue of suspension order.
- 2. Breakup of quoted amount shall be submitted by the L1 bidder. In case of refusal of bidder to submit price break up, the bidder shall be suspended for a period of six months from the date of issue of suspension order.

3. Price Basis: L1 bidder will be decided on mathematically lowest PERCENTAGE quoted

Sl. No.	Description of work	Qty.*	Estimated Cost (excluding GST)	To be quoted by Bidder
1.	Overhauling of Boiler # 8		Rs. 56,88,759.00	Online Price Bid
	(As per scope of work)	As	(Rupees Fifty Six Lakh	(% above / % below/ at par
		mentioned	Eighty Eight Thousand	with respect to Estimated
		below	Seven Hundred Fifty	Cost excluding GST)
		Delow	Nine Only) Excluding	through URL :
			GST.	http://www.buyjunction.in

Note:

1. Goods & Service Tax: EXTRA as applicable

	Price Break-up For	mat	
Sl. No	Description of work Qty.*		Rate/ Unit (Rs.)
1	Overhauling of High Pressure Parts including valves and repairing of pent house (<i>As per scope of work</i>)	01 Boiler	
2	Replacement of various sizes of compensators (<i>As per scope of work</i>)	20 nos. compensators	
3	Repair/Revisioning of 2 nd pass, 3 rd pass, seal pot system and hydraulic seal (<i>As per scope of work</i>)	01 Boiler	
4	Inspection, window cutting, cleaning and repair of hot & cold air ducts, interconnecting duct & APH (<i>As per scope of work</i>)	01 Boiler	
5	Repair & Revisioning of secondary air dampers and other	16 nos. Secondary Air Damper	
3	dampers of flue gas lines (As per scope of work)	08 nos. Flue gas damper	
6	Repairing of flue gas duct (As per scope of work)	One Boiler	
7	Erection of air dampers in oil burners including repairing of tertiary air line (<i>As per scope of work</i>)	08 Nos.	to be submitted by L-1 Bidder
		16 Nos. Coal Burners	
8	Replacement of Coal Burner and Replacement/Repairing of Oil Burner & their accessories including repairing of gas burners	08 Nos. Oil Burners	
	(As per scope of work)	04 Nos. Gas Burners	
9	Inspection, Rectification, & Adjustment of all Hangers and Supports of High Pressure Steam lines & feed water Pipelines (<i>As per scope of work</i>)	01 Boiler	
10	Replacement/Revisioning of ID Fans & FD Fans (As per scope of	02 nos. ID Fan	
10	work)	02 nos. FD Fan	
11	Replacement of attemperators SP-1 (As per scope of work)	02 Nos.	
12	Painting of Boilers structures (As per scope of work)	One Boiler	
13	Renovation of thermal insulation and Al-cladding (As per scope of work)	One Boiler	

Signature with seal of tenderer

ANNEXURE - VI

Self Declaration

	Ison/daughter of ShriAged
	resident ofStatedo hereby declare that:
1.	I am the authorized representative and signatory of M/s(name of the firm/company).
2.	All document(s) submitted/ information provided by M/salongwith the
	Bid Document submitted against Tender No
	dated
	for
	<i>Name of work)</i> has/have been submitted under my knowledge and are authentic , genuine and true. No part of the document(s) / information is false, forged or fabricated.

- 3. The above declaration in respect of genuineness of the documents/ information has been made having full knowledge of provisions of bidding conditions which entitle the Owner/BPSCL to initiate action in the event of such declaration turning out to be a false.
- 4. I undertake to produce all documents in original for verification as and when asked for the same by BPSCL.

(Name & Signature of Authorized person):
Designation:

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.

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

CHECKLIST OF DOCUMENT SUBMITTED BY TENDERER

Signature of tenderer with seal

(To be submitted on bidder's Letter Head)

Format for Acceptanc	e of Genera	l Terms &	Conditions,	Commercial	Terms	and a	ll other	Terms	of the
Reverse Auction									

We	(Contractor Name) having
PAN & registered office at	(Address)
agree to all the Commercial, General & other Terms &	c 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

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 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 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.