

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/21-22/C-077/NIT-1031/2210

Dated 05/08/2021



TENDER DOCUMENT

NAME OF WORK: Overhauling of CPP Boilers – 02 Nos.

I N D E X

Sl.No	S u b j e c t	Page No.
1.	Cover Page	1
2.	Index	2
3.	Notice Inviting Tender (with QR)	3-5
4.	Annexure – I (Conditions & Rules to be observed in submitting tenders with online Price Bids)	6-8
5.	Annexure – II (General Terms and Conditions)	9-10
6.	Annexure – III (Scope of work)	11-15
7.	Annexure – IV (Special Terms & Conditions)	16-22
8.	Annexure – V (Price Bid)	23-24
9.	Annexure – VI (Self Declaration)	25
10.	Annexure – VII (Checklist)	26
11.	Annexure – VIII (RA Acceptance)	27
12.	Annexure – IX (Declaration after RA)	28
13.	Annexure – X (Bid Securing Declaration)	29
14.	Annexure – XI (General EHS responsibility of Bidder)	30

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/21-22/C-077/NIT-1031/2210

Date: 05/08/2021

For and on behalf of BOKARO POWER SUPPLY COMPANY (P) LTD, sealed tenders in two parts, **Part - A :** Earnest Money Deposit and **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 qualifying criteria stipulated in the bidding documents for the following work at our Power Plant.

Description of Work	Overhauling of CPP Boilers – 02 Nos.
Estimated Cost	Rs. 1,04,01,294.00 (Rupees One Crore Four Lakh One Thousand Two Hundred Ninety Four Only) Excluding GST.
Earnest Money	Nil In lieu of EMD, the bidder shall submit either Bid Security Declaration as per clause 1.a of General Terms & conditions. OR Document for Exemption as per clause 1.b of General Terms & conditions.
Period of Contract	1. Work order will be valid for Two (02) years from the date of issue. However, actual working period will be of 35 days for each Boiler including mobilization as well as removal of scrap from the site. 2. Mobilization Period: The date of commencement of work depends upon situation of Plant, but you should mobilize the resource within ten (10) days after receiving intimation from BPSCL
Last Date & Time of submission of Tender	07/09/2021 at 12:00 Hrs. (IST)
Bid opening Date & Time	07/09/2021 at 12:15 Hrs.

Qualifying Requirements / Eligibility Criteria :

Financial Capability:

1. Bidder should have Minimum average annual turnover (MAT) of **Rs. 31.20 Lakhs** in preceding three (03) Consecutive Financial years.
 - 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 consecutive last three (03) years, ending 31st March of the previous financial year duly certified by CA.

Technical Capability:

2. Bidder should have experience of having completed **similar work** as principal contractor 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 work order shall be either of the following :
 - a. Three similar completed works each costing not less than to **Rs. 41.60 Lakhs**
OR
 - b. Two similar completed works each costing not less than to **Rs.52.00 Lakhs**
OR
 - c. One similar completed work costing not less than to **Rs. 83.21 Lakhs**

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

- 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)

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) along with the techno-commercial bid. In addition, bidder shall submit a self declaration as per format at **Annexure-VI**.
4. The bidder shall submit self certified copies of the following:-
IT Return (*Latest*), Copy of EPF, ESI Certificate, **Boiler repairer certificate (Class 1 or above) issued by Chief Boiler Inspector**, 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).
5. The bidder shall submit acceptance for finalization of rates through Reverse Auction as per **Annexure**.

General Terms & Conditions:

1. Earnest Money:
 - a) In lieu of EMD, Bidders shall have the option of submitting a Bid Securing Declaration accepting that if they withdraw / modify their Bids during the period of validity without assigning any valid reason for the same or refuse to submit Performance Security / Performance Guarantee as per the relevant Clause of this tender enquiry or refuse to accept the price quoted by them in Online Price Bid / Reversed Auction within the period of validity of the same or refuse to sign the Contract Agreement upon emerging as the successful bidder, they will be suspended for a period of one year from being eligible to submit bids against tender enquiries of BPSCL. A Format of Bid Securing Declaration is provided at **Annexure X**.
 - b) Micro & Small Enterprises (MSEs) / PSU /Govt. Undertakings and Co-operative societies will be exempted from submission of Earnest Money as per government policy. For MSEs, the exemption from submitting Earnest Money will be granted only on submission of valid copy of Udyam Registration Certificate. SSI/NSIC certificate holders should also submit Udyam Registration Certificate. Further, unit claiming exemption is required to submit copy of Udyam registration certificate clearly indicating the item category for which they are registered.

Note: Offers not accompanied with Bid Security Declaration (*as per clause a*) or documents for exemption (*as per clause b*) will be treated as INVALID.

2. Consortium bids will not be considered unless the provision for consortium is specifically mentioned in Tender Document.
3. If you withdraw your bid after opening of bids without giving any satisfactory and acceptable explanation thereof, you shall be debarred from participating in any tender of BPSCL for a minimum period of 01 (one) year.
4. **SUBMISSION OF PERFORMANCE GUARANTEE BOND FOR QUOTING UNWORKABLE RATE:**
If you quote unworkable rates, i.e. if the quoted price is less than **75%** of the estimated price and is considered for placement of order, you will be asked to justify the rate quoted. On non acceptance of justification / refusal of the same, you will be asked to furnish Performance Guarantee Bond 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 your quoted price. In case you refuse to give Performance Guarantee Bond, you will not be considered for participating in any kind of Tender for next 01 (one) year from the date of issue of letter to you, if order / contract is not finalised from the present tender.

In case of forfeiture of Performance Guarantee Bond, you shall be required to reimburse the applicable GST to BPSCL.

5. **RATE FINALIZATION:** BPSCL reserves the right to finalize the rate through either of the following modes:
 - a. Opening of Online Price (*submitted on www.buyjunction.in*) submitted at the time of techno-commercial bid.
 - b. Through Reverse Auction to be conducted by our service provider **M/s. mjunction**.

Note: BPSCL may ask techno-commercially accepted bidders to submit decrement in percentage (%) on their online price submitted at the time of techno-commercial bid. On line price bid alongwith % decrement shall be considered together in case online price bid is opened.

6. **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

(A.K. Das)
GM I/c (MM)
Tel: 8986874119
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 shall comprise of Bid securing Declaration/ Exemption document.
- b) **Part B:** This part shall comprise 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:

GM I/c (MM)
Bokaro Power Supply Co. (P) Ltd.
Hall No.M-01, Old ADM Building
Ispat Bhawan, Bokaro Steel City – 827001
Ph: 06452 240380, Mob: 8986874119

*** 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.buda1@mjunction.in

Ms. Debalina Maity - 8336991451 - maity.debalina@mjunction.in

Ms Bingyasini Pradhan – 9163348173 – pradhan.bingyasini@mjunction.in

Ms. Priyanka Muzumdar – mazumdar.priyanka@mjunction.in

Mr. Mukesh Kumar Singh- 8873002741 – mukesh.singh@mjunction.in

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 / Opening Date", the validity will be counted from the extended bid opening date.

1.03 General Instructions:

- i) You shall have to 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 you do not quote price in terms of percentage or quote in more than one option, your offer will be rejected.
- b) In the tender schedule at the place where you have 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) You are requested to visit site for actual assessment of the job before submission of offer.
- iii) You shall clearly indicate that your quoted prices shall remain firm in all respects 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.
- You are advised to mention page no. on each page of documents submitted by you. BPSCL shall not bear any responsibility in case of any loss of documents submitted by the bidder during tender opening or thereafter.
- vi) If you are a Firm or Company, then you 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 **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 Material Management, 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 to individual communication to the techno-commercially eligible bidders will be sent only to their e-mail address given in the tender documents.
- xi) Offers from two or more bidders shall summarily be rejected if they have any of the following parameters in 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. You are requested to visit site for actual assessment of the job before submitting of your offer.
2. You shall make yourself fully conversant with the actual site condition, nature of subject job(s) to be executed and terms and conditions of contract, cost of all the input materials and facilities, cost of labor, transport, incidentals, royalties etc. or any other taxes and duties before submitting the tender.
3. You will have to arrange necessary Gate Passes for your workmen.
4. You will have to deploy proper category of manpower for execution of the job.
5. You have to comply with all labor laws, ESI Act, EPF rules & AWA rules applicable in the Industry.
6. You will have to strictly adhere to the provision of various labor laws including Payment of Bonus Act 1965.
7. **Payment Default Clause:** You must ensure that payment is made to the workers as per provisions of Payment of Wages Act and CLC norms failing which BPSCL shall make payments to concerned workers directly. The amount so paid along with 15% of Administrative cum Service charge shall be deducted from any of the concerned Contractor's bill. If the provision of Payment of Wages Act is not adhered to second time, the Contractor shall be liable for banning of business dealing with BPSCL as per procedure in Vogue. Such Contractor shall not be permitted to work in BPSCL through sub-contracting also for the banning period.
8. **You have to pay your workmen as per circular / notification published by the State Government in regard to rates of payment of VDA in vogue.**
9. You will have to pay an additional amount of **Rs.4/-** to every worker engaged by you for the subject work over and above their daily minimum wages, as per BPSCL rules.
10. **AWA CLAUSE:** You shall have to pay an amount of Rs 96.15 per day on actual attendance per month (not exceeding Rs 2500/month) to the workers engaged by you in this job as Additional Welfare Amenity (AWA) as per relevant circular/notification of BPSCL.
11. You shall execute the work in compliance with the provisions of contract and contract Technical Specification and/or design drawings furnished by BPSCL in terms of the contract and as per codes and standards specified therein, wherever applicable.
12. Supervision of the work is your responsibility. Inspection of executed work will be done by Site Engineer/BPSCL.
13. If situation demands, you will have to execute the work round the clock.
14. After completion of work, Engineer-in-charge or his representative will review the work(s), you will have to rectify any defect, if found, at no extra cost.
15. You shall remove all debris, surplus materials, etc., if any, and dump the same at place as directed by the Engineer-in-charge.
16. All the applicable taxes will be deducted from your bills. During contract period there will be no consideration for idle & escalation charges.
17. You will be fully responsible for any sort of unsafe activity of your workmen and all your workmen should be trained for operational safety and to avoid fire hazards of Power Plant and must have proper safety certificates issued by BPSCL before start of work.
18. You will have to follow and observe the safety & statutory requirements and comply with all safety rules & regulations applicable in the plant area as per Booklet of Safety rules for BPSCL contractors. If you are not having that booklet, same may be collected from the safety department with a request letter.
19. For working at height, you shall produce medical fitness certificate for your workmen. Height passes to be obtained from safety department, if required.
20. All the working tools & tackles, men, material etc. and safety appliances like personal protection equipment are to be provided to your workmen by you at your own cost. All safety appliances of reputed make are to be provided by you to your workmen in presence of Safety Officer of BPSCL. The list and make of safety appliances may be obtained from safety office.
21. In case any documents/information submitted by you 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 you.
22. **GST RELATED CLAUSES:**
 - a. You should quote GST as extra. If not mentioned in offer it will be considered as extra.
 - b. You have to pass on the tax benefit/savings, if any, on account of output taxes to BPSCL.

- c. You 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.
- d. In case the Input Tax Credit of GST is denied or demand is recovered from BPSCL on account of any non-compliance by you, including non-payment of GST charged and recovered, you 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 you, BPSCL will not be liable to reimburse any part of such differential tax, interest, penalty etc. It will be your responsibility to discharge appropriate taxes, as applicable.
- e. You have to maintain high GST compliance rating track record at any given point of time.
23. **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, you 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 and can be viewed on our website www.bpscl.com.
24. **RISK AND COST:** Failure on your 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 your risk and cost by alternate arrangements.
25. **SAFETY CLAUSE:** You shall be liable for penalties mentioned below for violation of safety norms:
- i. Up to Rs.5000/-by Head of safety Engineering Department /Head of the Department where work is being done for 1st violation of safety norm, non-use of PPEs (Personal Protective Equipment) 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 up to 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 3rd violation as mentioned in clause no. (i) above.
 - iv. Fine up to 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 order in case any Fatal accident occurs due to violations as mentioned in Clause (i) and (iv) above.
26. **FORCE MAJEURE:** You shall not be considered in default if delay occurs due to causes beyond your 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 cause the delivery / completion period will be extended for a length of time equal to the period of force majeure without imposition of LD at the option of BPSCL.
27. **Work accident**
- a. You will be fully responsible for the safety of the workers employed by you. In the event of any work-accident, major or minor, your representative must take care of the injured person immediately and provide him the required treatment as suggested by the doctor. If you or your representative is 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 own workmen 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.
28. **You shall also maintain all records/register/return/cards such as:**
- i) Register of workmen employed by contractor
 - ii) Employment card
 - iii) Muster Roll
 - iv) Register of wages-cum-muster roll
 - v) Submission of Return
 - vi) Order book

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 up to 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, allbends, alloy steel pipe, T – Joints, super heater blow down, down comers at various elevations. 5000 nos. of thickness samples will be required to be taken for thickness measurement. All scaffolding required for thickness measurement will be arranged by contractor.
- 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.
- l) Revisioning / Replacement of HP Valves of boilers:
 - i. Revisioning / replacement of feed line valves (NB # 175mm):**06 Nos.**
 - ii. Revisioning / replacement Safety Valves (NB # 100 mm): **04 Nos.**
 - iii. Revisioning / replacement Feed injection valves, vent valves, sup.drain valves (Ø 25 mm): **45 Nos.**
 - iv. Revisioning / replacement PBD valve & drains (Ø 65 mm):**14 Nos.**

- v. Revisioning / replacement Startup valve (NB 100 mm): **02 Nos.**
- vi. Revisioning of valves includes dismantling, lapping & blue matching of disc with seat, inner and outer gland packing and re-visioning of actuators of valves.
- m) Stress Relieving (10 nos.): T – Joint and HP valves Joints like safety valves, Start up valves& feed line valves in case of replacement.
- n) 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.
- o) Sample cooler systems: dismantling, cleaning, servicing/replacement of sample coolers.
- p) Repair of expanders at Zero meter level.
- q) Assistance in conducting in-situ corrosion mapping of water wall tubes.
- r) Assistance in conducting the Leak test & hydraulic test and inspection of boiler with BPSCL representative during these tests.

Note: Scope of Work is a guideline to carry out the Overhauling job of pressure parts. Any work not specified hereunder and otherwise necessary to ensure the smooth running of the equipments is in the scope of contractor at no extra cost of BPSCL.

2. **Replacement of various sizes of compensators :**

- a) Erection of Scaffolding.
- b) Remove the damaged Compensators.
- c) Shifting & Lifting the Compensator in position.
- d) Fitting and welding the new Compensator.
- e) Dismantling the Scaffolding.
- f) Shifting of damaged 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) Hoppers are to be cleaned.
- b) Removal of damaged 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.
- l) 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 refractory to leakage area, repairing of damage seal of top & bottom APH and repair of top area of APH including connecting compensators.
5. **Repair & Revisioning 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) Revisioning / 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. **Repairing of flue gas ducts :**
- 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. **Replacement of Coal Burner and Replacement/Repairing of Oil Burner & their accessories including repairing of gas burners.**
- 7.1 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.

7.2 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.

7.3 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.

8. 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) Arranging one no. of ex-BHEL /NTPC expert of this field to supervise this job.

9. 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) Revisioning / Replacement of suction & discharge dampers.
- f) Dismantling of Bearing.
- g) Revisioning of coupling.
- h) Replacement / Revisioning 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.

10. Painting of Boiler structures

- a) Erections of scaffolding for making approach up to required painting area and dismantle 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)

11. Renovation of thermal insulation and Al-cladding

- a) Collection of insulation material mattress, Refractory & cladding from BSL / BPSCL store.
- b) Inspection of damaged/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 damaged insulating material from the site to BPSCL scrap yard.

12. Assistance in different in-situ tests related to RLA study of boilers by providing manpower support and Cutting of Header of Header end cap/stub and welding after RLA study.

- a) Erection & dismantling of scaffolding outside the furnace wherever required.
- b) Removing of sticky refractory material from header stub joints to make them suitable for DPT/MPI.
- c) De-rusting & points making by grinding/filing for different tests as per requirements.
- d) Cleaning of drum body joints, different drum stubs for their testing.
- e) Inside cleaning of headers.
- f) Carrying of different test equipment from store to site and vice versa, removal of generated scrap and debris if any.
- g) Assistance in dimensional measurements of different components.
- h) Sample collection from drum and headers as per direction.
- i) Tube samples collection from different zones and proper packing as per direction.
- j) Any other assisting jobs not mentioned but related to RLA study of boilers.
- k) Making proper approach.
- l) Cutting of clamps supports as per requirement.
- m) Cutting & welding of cap/stub as **per IBR**, proper Clamping after welding.
- n) Stress relieving wherever required
- o) Assistance in Hydraulic testing, rectification of defects.

SPECIAL TERMS & CONDITIONS:

1. Work shall be carried out round the clock including holidays & Sundays.
2. **Minimum resources to be deployed by the Contractor :**
 - a. 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.
 - b. Sufficient no. of HP welders with valid test certificates and LP welders must be engaged for execution of the subject job.
3. 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.
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 supply basis)
 - a. Spare parts
 - b. Steel (plate, channel, angle, sheet etc.) as per job requirement
 - c. Insulating materials
 - d. Electricity
 - e. Water
 - f. Uncovered / open space for site office / store depending upon requirement / availability
6. **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 Machine if required
31. Lighting/ Extension Boards with proper plugs 5 point
32. D-meter
33. Hand hole cutting Machine, 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. Contractor must arrange other tools & tackles, if required.
2. All tools & tackles should be adequate to meet the requirement at every point simultaneously

7. 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.
- l. Synthetic enamel paint (Indigo Blue / Dark Blue, Black & Yellow of make Berger/Asian/Nerolac), thinner, brush etc.
- m. 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

Note: Above condition are only guidelines for smooth start up of the jobs. There may be deviations as per site conditions.

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 unused, removed spares and unused consumables shall be returned to the stores.

9. Any machining works required 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.

10. Safety :

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.

11. Site organization :

- 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 normally 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.

12. Gate Passes :

- a. The contractor shall intimate the names of the persons in advance to the concern engineer in-charge/his representative for preparation and issues of gate passes required for entry in to 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 you, 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.
- b. 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.

13. 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 or any other source plus BPSCL overheads @ 25%. Decision of engineer - in- charge/his representative will be final in this regards.
- g. The contractor should be responsible for the workmanship of the job executed by him. For this purpose, he should stand guarantee of 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 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.

14. **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 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 by the start of work it may be provided by BPSCL at contractor's cost and the cost will be recovered from their 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.

15. **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.

16. 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.

17. 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,

18. 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.

19. 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.

20. 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.
 - a. Drum/jerry cane/trays for waste liquid cleaning agent.
 - b. Identified container for waste jute.
 - c. Identified container for waste gasket / asbestos/rubber.
 - d. Identified container / sack for keeping waste insulations wool.
 - e. Sufficient no of trays for keeping equipment parts for maintenance.
 - f. 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.

21. **Guarantee:** Guarantee shall be given for a period of 03 months from completion of overhauling. If any of the two overhauled boiler suffers forced outage due to arising of any defect or failure of any job carried out by contractor, a penalty of Rs. 50,000.00 per such instance of forced outage will be imposed.

22. All the working tools & tackles, men, material, welding machine, scaffolding materials etc., safety appliances like safety helmet, safety boot, hand gloves and personnel protection equipment are to be provided to your workmen by you at your own cost and proper use of the same should be ensured by contractor.

23. Penalty Clauses :

- a. If the job is not completed in scheduled duration of thirty five (35) days, a penalty of Rs. 5000.00 (Five Thousand) per day will be imposed.
- b. During Trial run of rotary parts no vibration, undue/abnormal sound from any part of the systems should be found. Any defects found due to poor workmanship, a penalty of Rs. 1000/defect will be imposed in addition to rectification of defect by contractor free of cost within the schedule time.
- c. Total washing time of boiler internals and externals is 04 (Four) days from Zero date. In case of incomplete cleaning or delay due to non availability of special Tools & Tackles and insufficient manpower Rs 5000.00/day as penalty amount will be imposed.
- d. For any incomplete scaffolding erection work, a penalty of Rs. 5,000 /missing floor will be imposed in addition to erection of the same free of cost.
- e. Delay in scaffolding erection (attributed to contractor) beyond maximum allowed period(05 days) would invite penalty of @ Rs 15000.00/day.

- f. In case of 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 would have to be repeated and a penalty will be imposed @ Rs 200/ reading.
- g. Any vertical tube cut should be necessarily capped immediately with proper cap otherwise penalty @ Rs. 500 per tube will be imposed.
- h. Any leakage & cracks of newly made joints found during hydraulic test, all be rectified by contractor free of cost in addition to this a penalty @ Rs 250 /joint will also be imposed.
- i. Any leakage found during hydraulic test, shall per instance rectified by contractor free of cost. However, a penalty will be imposed @ Rs 1000. After 72 hrs. of commissioning of boiler if a leakage from manhole gasket will be found it will be rectified by contractor free of cost. However a penalty will be imposed @ Rs 5000 per instance.
- j. During hydraulic test, in case of passing/gland leakages of valves due to poor workmanship found, problem will be rectified free of cost by contractor in addition to it a penalty @ Rs 1000.00/ valve will be imposed.
- j. After commissioning of sample cooler no choking & leakage to be found in any tubes and no leakages should be found in any part of the system. If failed it should be rectified by contractor free of cost and in addition to it a penalty of Rs 1000.00/defect will be imposed.
- k. After commissioning of all dampers if jamming in the movement is found in the system it should be rectified by contractor free of cost and in addition to it a penalty @ Rs 250.00/damper will be imposed.
- l. 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 free of cost.
- m. If any defect is found in the job of insulation of boiler, a penalty of Rs. 50/m² of damage area of insulation will be imposed in addition to rectification of defect free of cost.
- n. All generated scraps should be shifted to designated scrap yard within the scheduled time of 35 days otherwise penalty @ 2000 per day will be imposed.

24. Payment Terms :

97% of contract value will be paid on pro-rata basis duly certified by Engineer In-Charge and balance **03%** 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 obligations 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 you do not pay the balance amount, the same shall be deducted from any sum or sums which may be due or may become due to you from BPSCL on any account whatsoever.

PRICE BID / RA FORMAT

Special Instruction –

1. In the event of L1 Bidder backing out prior to placement of order, the bidder shall be suspended for a period of 01 (one) year from the date of issue of suspension order.
2. Breakup (*as per given format*) shall be submitted by the L1 bidder. In case of refusal of L1 bidder to submit the same, the bidder shall be suspended for a period of 01 (one) year from the date of issue of suspension order.
3. **Price Basis: L1 bidder will be decided on mathematically lowest percentage.**

Sl. No.	Description of Job	Duration	Total Estimated Cost (excluding GST)	To be quoted by Bidder
1.	Overhauling of CPP Boilers – 02 Nos. (As per Scope of work)	As mentioned below	Rs. 1,04,01,294.00 (Rupees One Crore Four Lakh One Thousand Two Hundred Ninety Four Only) Excluding GST.	Online Price Bid (% above / % below with respect to Total Estimated Cost excluding GST) through URL : http://www.buyjunction.in

Note:

1. Goods & Service Tax: EXTRA as applicable
2. Please provide following details :

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

Price Break-Up Format

Sl. No.	Description of work	Quantity	Rate / Unit (Rs)	Amount (Rs.)
1	Overhauling of High Pressure Parts including valves and repairing of pent house (As per scope of work at sl. no. 1)	01 Boiler		
2	Replacement of various sizes of compensators (As per scope of work at sl. no. 2)	20 Nos.		
3	Repair / Re visioning of 2 nd pass, 3 rd pass, seal pot system and hydraulic seal (As per scope of work at sl. no. 3)	01 Boiler		
4	Inspection, window cutting, cleaning and repair of hot & cold air ducts, interconnecting duct & APH (As per scope of work at sl. no. 4)	01 Boiler		
5	Repair & Re visioning of secondary air dampers and other dampers of flue gas lines (As per scope of work at sl. no. 5)			
	a. Secondary Air Damper	16 Nos.		
	b. Flue gas damper	08 Nos.		
6	Repairing of flue gas ducts (As per scope of work at sl. no. 6)	01 Boiler		
7	Replacement of Coal Burner and Replacement/Repairing of Oil Burner & their accessories including repairing of gas burners (As per scope of work at sl. no. 8)			
	a. Coal Burners	16 Nos.		
	b. Oil Burners	08 Nos.		
	c. Gas Burners	04 Nos.		
8	Inspection, Rectification, & Adjustment of all Hangers and Supports of High Pressure Steam lines & feed water Pipelines (As per scope of work at sl. no. 9)	01 Boiler		
9	Replacement / Revisioning of ID Fans & FD Fans (As per scope of work at sl. no. 10)			
	a. ID Fan	02 Nos.		
	b. FD Fan	02 Nos.		
10	Painting of Boilers structures (As per scope of work at sl. no. 12)	01 Boiler		
11	Renovation of thermal insulation and Al-cladding (As per scope of work at sl. no. 13)	3500 m ²		
12	Assistance in different in-situ tests related to RLA study of boilers by providing manpower support and Cutting of Header end cap/stub and welding after RLA study.	01 Boiler		

Signature with seal of tenderer

ANNEXURE - VI

Self Declaration

I.....son/daughter of Shri Aged.....
years

resident ofPS.....District.....State.....do
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/s.....
alongwith the

Bid Document submitted against Tender No.....

.....dated

- for.....
..... (
Name of work) 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.

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 forfor Bokaro Power Supply Co. (P) Ltd., Bokaro Steel City.

Market No.	Last Quoted Percentage
	<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 :

Format for Bid Securing Declaration (In lieu of EMD)

Date: _____

Tender Enquiry no.: _____

To
The GM In-charge (Material Management)
Bokaro Power Supply Company (P) Ltd.
Hall No. – M 01
Old Administrative Building
ISPAT Bhawan, Bokaro Steel City

I/We*, the undersigned, declare that:

I/We* understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration in lieu of Earnest Money Deposit.

I/We* understand that if I/We* withdraw or modify my / our* Bids during the period of validity, or if I am /We are* awarded the Contract and I/We* fail to honour my /our* offer by way of either withdrawing my / our* bid within the bid validity period without assigning any valid reason for the same or refusing to submit Performance Security / Performance Guarantee as per relevant Clause of the tender enquiry or refusing to accept the price quoted by me / us* in Online Price Bid or Reverse Auction within the period of validity of the same or refusing to sign the Contract Agreement, I/We* will be suspended for a period of one year from being eligible to submit Bids for all future Contracts.

I/We* understand that this Bid Securing Declaration shall cease to be valid if I am / We are* not the successful Bidder and I am / We are* not awarded the Order against the tender enquiry.

Signed _____ in the capacity of _____

Name: _____

Duly authorized to sign the Bid for and on behalf of: _____

Dated on _____ day of _____, _____

Corporate Seal (where applicable)

[Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the Bid.]

* *Please delete as appropriate*

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

You 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 you should be of internationally recognized standards. All tools and tackles bought by you for use during the contract period should have proper and valid certification by competent authority.
8. All lifting equipment, tools and accessories provided by BPSCL should be maintained and returned by you 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. You must ensure that all machinery and equipment 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 equipment/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. You must ensure optimum use of water with minimum wastage.
15. You shall ensure that the work area is kept clean, tidy, & free from debris. You are 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 your 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. You and your 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. You 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 your personnel. An investigation report assessing the root cause, corrective action, and preventative action shall be submitted by to BPSCL within 24-hours of the incident's occurrence.