

BOKARO POWER SUPPLY CO. (P) LTD.

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

**TENDER NOTICE NO.: BPSCL/CEO/P&C/08-09/C-142/NIT-
142/6334 dated 01/09/2008**

TENDER DOCUMENT

NAME OF WORK: Annual contract for Operation and Maintenance (both Elect. & Mech.) of Coal Handling Plant & Furnace Oil Station of BPSCL, (including Housekeeping).

**COST: 4000/-
(Rupees Four Thousand Only)**

INDEX

Sl.No	SUBJECT	Page No
1	NOTICE INVITING TENDER	3-4
2	NATURE OF WORK (Annexure – I)	5
3	Special Conditions (Annexure – II)	6
4	Scope of Work (Annexure – III)	7-12
5	Man power requirement (Annexure – IV)	13
6	Penalty clauses (Annexure – V)	14-15
7	Safety (Annexure – VI)	16
8	Schedule of Quantity (Annexure – VII)	17
9	Price Escalation Clause (Annexure – VIII)	18

Bokaro Power Supply Co. (P) Ltd.
(A Joint Venture of SAIL & DVC)
Hall No: - M-01, Old Administrative Building,
Ispat Bhavan, Bokaro Steel City – 827001
NOTICE INVITING TENDER

NIT No. : BPSCL/CEO/P&C/08-09/C-142/NIT-142/6334

Date : 01/09/2008

Sealed Tenders in four parts separately containing

- a) Part - I : Cost of Tender document and documents in support of eligibility criteria,
- b) Part-II : Earnest Money Deposit,
- c) Part- III : Technical & Commercial Offer in duplicate and
- d) Part – IV : Price Bid in duplicate

are invited on behalf of Bokaro Power Supply Company (P) Limited, from reputed, experienced and financially sound firms for the following work at our Thermal Power Station

Description of Work	Annual contract for operation and maintenance (both Elect. & Mech.) of Coal Handling Plant & Furnace Oil Station of BPSCL, (including Housekeeping).
Estimated Amount (in Indian Rs.)	Rs. 3,23,62,000/- (Rupees Three Crore Twenty three Lakh sixty two thousand only.)
Earnest Money (in Indian Rs.)	Rs. 6,50,000/- (Rupees Six Lakh Fifty Thousand Only)
Cost of tender documents (Non-refundable) (in Indian Rs.)	Rs. 4,000/- (Rupees Four Thousand Only)
Time of Completion	01 (One) year
Pre-Bid Discussion	13/10/2008 at 15.00 Hrs (IST)
Last date & time of submission of tender	17/10/2008 at 15.00 Hrs. (IST)
Bid opening Date & Time.	17/10/2008 at 15:30 Hrs. (Part I, II & III)

Qualifying Requirements :

1. Bidder firm should have ISO 9001 certification at the time of submission of tender document.
2. The bidder must have experience in annual maintenance / operation / erection, testing & commissioning of coal handling plant/material handling/conveying in power utilities OR the bidder must have previous experience of maintenance / operation of thermal power plant.
3. Annual turnover of the prime bidder shall not be less than Rs. 2,50,00,000/- (Rupees Two Crore Fifty Lakh only) during each of the three last consecutive years.
4. The net worth of bidder during each of the last consecutive years must be positive.
5. The bidder must have executed the following order value in last 03 years from the date of NIT.
 - a) One similar completed work costing at least Rs.2,50,00,000/-
 - b) Two similar completed works costing at least Rs.1,25,00,000/- each.
6. The bidder shall submit along with tenders documents Audited Balance Sheet, Profit & Loss Account or Annual Report for the last 3 consecutive financial years.
7. The bidder shall furnish up-to-date STCC, EPF Code & ST Regn. No.

General Terms & Conditions:

- i) Application along with supporting documents as per qualifying requirements and a Demand Draft drawn on any PSU Bank in favour of Bokaro Power Supply Company (P) Ltd., Payable at Bokaro Steel City may be submitted for issuance of tender paper in the office of the undersigned on any working day during office hours.
- ii) Tender shall be enclosed with EMD of **Rs. 6,50,000.00/-** (Rupees Six lacks fifty thousand Only) in shape of DD/Bank Guarantee drawn on any PSU Bank in favour of Bokaro

Power Supply Company (P) Ltd., Payable at Bokaro Steel City. EMD exemptions wherever applicable may be availed of by Government organizations/ SSI units against entitlement document.

- iii) Tender shall be received up to **15.00 Hrs. on 17/10/2008.**
- iv) The undersigned reserves the right to either rejects any/all the tenders without assigning any reason thereof & also reserves the right to alter the qualifying requirements.
- v) Tender papers shall not be sent by post/courier service.

Note:

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

For and on behalf of
Bokaro Power Supply Company (P) Limited

(Rakesh Ranjan)
Superintending Engineer (P&C)

Copy to:

- a) CEO, BPSCL
- b) GM (Power Plant), BPSCL
- c) Jr. Manager (F&A), BPSCL
- d) Notice Board
- e) Office Copy

Name Of Work:

Part-A:

- (I)-Job contract for assistance in operation of Coal Handling Plant & Fuel Oil Station (FOS).
- (II)-Supply, operation and maintenance of two (02) nos. dozers for coal feeding and coal yard management.

Part-B:

- (I)- Mechanical Maintenance job contract of : Coal Handling Plant (CHP) & Fuel Oil Station(FOS)
- (II)-Electrical Maintenance job contract of: Coal Handling Plant (CHP) & Fuel Oil Station (FOS).
- (III)-Structure Fabrication Work of 100 MT. Coal Handling Plant (CHP) & Fuel Oil Station (FOS).

Part-C:

Housekeeping job contract for all equipments of CHP & FOS including various areas (inclusive of offices, plant & machineries, transfer points, conveyor galleries, drains etc.) of CHP and FOS of BPSCL, complete with all labor, materials, tools & tackles. Material handling equipments etc as per detailed scope of work..

Special conditions applicable to all above parts viz, Part-A, Part-B & Part-C:

While contractor is free to engage sub-contractor for Mechanical, Electrical and Housekeeping jobs, the contractor will have to engage his own Graduate Engineers and Diploma Engineers, for overseeing the jobs and also his own Executives and Graduate Supervisors for operational job, round the clock basis and every shift in-charge should be Graduate Engineer.

1-All working personnel should have proper safety certificate issued by BPSCL before start of the work.

2- All the working tools and tackles, men, material, consumable etc., safety appliances and personnel protection equipments are to be provided to the labors by the contractor at their own cost.

3- As this is fire prone area, no cutting & welding is permitted without the arrangement of fire fighting.

4- Workman has to work with all safety precautions. Safety of the workman & equipment will be entirely contractor's responsibility. In case of any work injury, major or minor, contractor will have to provide medical aid. If contractor's representative is not available for medical care, the worker will be treated in BGH and the cost of treatment will be deducted from the monthly bill.

5- Contractor will have to follow and observe the safety & statutory requirements.

6- Contractor will be held fully responsible for any sort of unsafe activity of their workmen.

7-The work order rate will be firm during the entire contract period and no enhancement of any kind will be allowed.

8-The contractor shall comply labour statutory requirements such as PF, Insurance, and Labour Licences etc.

9-The contractor is bound to follow the Statuary laws and norms related to the wage payment of USW, SSW, SW and all other categories of industrial workers.

10-The contractor has to ensure the wage payment of all workers with in ten days of each month.

11-Interest free mobilization advance @10% of the contract value shall be provided to the contractor after signing of contract agreement and before commencement of contract against submission of BG for the equivalent value which will be adjusted against monthly bills.

12- BPSCL will supply free of cost following items (as per requirement).

a) Water and Electricity.

b) Hydraulic jacks, cranes, hoist, hydraulic torque wrenches etc.

c) Raw Materials.

13 – AGREEMENT TO BE SIGNED. The contractor has to enter into an agreement or Non-Judicial Stamp Paper of Rs.100/- within ten days from the date of issue of the Work Order.

Part-A: Detailed Scope Of Work:

A-1) Operation of CHP, FOS (Fuel Oil Station) and feeding of coal has to be carried out daily round the clock in three shifts on all days including Sundays & Holidays (including National Holidays).

A-2) Feeding of coal @ of at least 400 T/Hr. on the direction of Engineer-in-charge has to be done using Dozer which will be provided and maintained by the contractor. Stand by capacity of Dozer is to be placed to ensure two(02) running dozers in yard.

A-3) Recording of all operational problems and defects (Electrical & Mechanical) for both CHP &FOS and informing promptly to shift in-charge-engineer.

A-4) Operation of ventilation and dust extraction system.

A-5) Follow up with BSL for placement of wagons.

A-6) Complete emptying of wagons, if required by sweeping of wagon floors especially during rainy season.

A-7) Transfer points are to be monitored for observation of belt sway , chute overflow, jamming of idlers for prevention of belts damage due to rubbing and localized heating.

A-8) Yard management for scientific/ systematic storage of coal and belt pulling during belt change/maintenance of any of the conveyors with the help of the dozer is in the contractor's scope of the work.

A-9) Boulder picking from the running conveyors is the unavoidable job in our CHP, Shift-in-charge has to ensure zero feeding of boulder and any foreign material to RC bunker.

A-10) Crushing of bigger size /ROM Coal whenever received by available (02) nos of crushers.

A-11) Uninterrupted filling of 22 Nos of coal bunkers each of capacity 270 meter cube for coal supply in coal mills of power plant.

A-12) Unloading of coal wagons received through rail by operation of a single wagon tippler and pusher car.

A-13) Manual unloading of coal wagon is sometime needed, due to oversize wagon with respect to our wagon tippler, inferior (slurry) quality of coal or derailment of wagon. So shuffling & management of men power for manual unloading of coal wagon is in the scope of the contractor's job.

A-14) Unloading of furnace oil tankers and filling of eight (08) Nos. of oil tanks whenever oil tankers are received. All operations like operation of pumps, connecting of hoses etc. are to be done by contractor.

A-15) Operation of conveyor 1A,1B, 2A,2B, 3A,3B, 4A,4B, 5,6,7,8,11,12,13, CC-1, CC-2, Belt feeder under wagon tippler and silos and any other CHP & FOS equipments.

A-16) Chute inspection, Proper Damper positioning in each shift must be attended by the contractor's diploma engineers .

A-17) Complete operation of wagon tippler, car pusher, on line coal crusher, hammer crusher, furnace oil pipes, EOT crane of wagon tippler, dewatering in conveyor galleries, FOS & operation of driving water pumps of conveyor 4A/4B.

A-18) Covering and uncovering of coal heaps with heavy duty PVC sheets (to be supplied by BPSCL free of cost.).

A-19) Operation of Electrical sub-station and switch room as per requirement and direction of Engineer-in-charge by deploying qualified diploma holders in engineering with at least two years experience of operation of such equipments.

A-20) Providing coal sample for testing by collection of a sample round the clock from coal belt in each shift and handing over a composite coal sample for each source and hand over them to chemical laboratory for analysis.

A-21) Uninterrupted coal feeding by pushing coal to four(04) underground hoppers over underground conveyors located at four(04) different places in the coal yard.

A-22) Participation in daily planning meetings conducted by BPSCL with defect list and operational constraints by the contractor's Resident Manager.

Penalty for mal-operation:-

Mal –operation of equipment causing:

(i) Damage of equipments: 1% of equipment Book value.

(ii) Coal feeding with the help of dozer has to be started & continued as per instruction from shift-in-charge of BPSCL (CHP). If instruction is not followed within two hours, it will be considered as the case of mal – operation and penalty will be imposed on the contractor at the rate of Rs.4000/hour.

PART-B: Scope Of Work

(I) Mechanical Maintenance:

1- Carrying out preventive maintenance of various Mechanical equipments as per schedules. The contractor has to develop preventive maintenance schedule for mechanical equipments including FOS and get examined by BPSCL engineer-in-charge.

2-Maintenance of any breakdown, major or minor of all the equipments of CHP which will include Conveyors, Gear boxes, Conveyor structures, Trippers, Chutes, Rollers, Pulleys, Drums, Counter Weight, Trolleys, Guide Rubbers, Scrappers, Dampers, Couplings, Deck plates, Crushers & Wagon tippler, Pusher Car. Total system of wagon tippler, car-pusher, on-line coal crusher, hammer crusher, shuttle feeder, grills, fire fighting pipe lines both above and under the ground and drinking water pipe lines including valves, hoppers, metallic stairs, magnet EOT crane of wagon tippler, telphers, dust extraction & ventilation system.

3- All pumps pertaining to FOS, Heater oil pipelines & steam pipelines, valves and filters etc and all storage tanks of FOS.

4- Changing of any parts of any equipment where repair is not possible.

5- Replacement of the hammers of on-line-crusher and hammer crusher by the new ones will be done by the contractor as per the instruction of the Engineer- in- charge.

6-Gear Box-dismantling & assembly of gear box with experienced & knowledgeable fitter with required maintenance data.

7- Maintaining history book for each and every equipment of CHP & FOS is in the scope of contractor's scope.

8- Re-Conditioning of Gear Box.

9- Strict adherence to Preventive maintenance and inspection schedule.

10- Providing condition monitoring equipments and monitoring equipment conditions by vibration meters, shock pulse meters, temperature monitors etc.

11-Troughing roller, Bottom roller, Tipper roller, fasteners, Grease, Gear Oil, and Gasket, special electrodes will be provided to the contractor as per the requirement by BPSCL free of cost, it is mandatory for the contractor to maintain a stock and inventory register for all the items provided by the BPSCL.

12- Cutting & welding gases, oxygen, general purpose electrode, cotton waste, emery paper, kerosene oil for cleansing purpose and all other required consumables has to be supplied by the contractor only.

13-To have sufficient tools & tackles, cutting & welding sets so that maintenance job may be attended at more than three sites simultaneously is in the contractor's scope.

II-) *Electrical Maintenance:*

- 1- Carrying out preventive maintenance of various Electrical equipments as per schedules. The contractor has to develop the preventive maintenance schedule for both electrical & mechanical equipments including furnace oil station and get the same examined by BPSCL engineers- in-charge for immediate implementations.
- 2- Replacement of motors/ equipments, shifting of motors/ equipments bringing from zero meter for repair if required and again back to the place of installation after repair, greasing / replacements of bearings, coupling mounting/ removing/ repair/ replacement of motors, repair of foundation structures by welding and gas cutting if needed alignment of motors/ equipment with mechanism, ear thing connection/ disconnection, connection of power cables/ disconnection of power cables and control cable if needed , taking trial run after maintenance, assembly/ dismantling of motors / equipment if needed keeping spare ready for use, removal laying/ changing of cables if needed ,lugging / re-lugging of cable ends, connection/ disconnection of cables in the equipments/ panels. Vacuum cleaning / blowing of panels/ contractors and all other electrical equipments. loosening and tightening of nuts and bolts of motor/ equipments/ foundation bolts/ terminal box/ end shields/ bushing wherever required. Removal / mounting of fan /slip rings/ brushes on motors, o/l relay, pull cord/ contact cleaning/ replacement whatever needed, limit switch checking / replacement etc.
- 3- Preventive and breakdown maintenance of MCC, L.T. Circuit breakers, isolators contractors, fuses replacement/ repair of defective parts totally/ partially.
- 4- Cleaning of above, lubricating of moving / rubbing parts, tightness checking of power and control terminals, spring charging mechanism, limit switches, jaws auxiliary contact checking & rectification of defect notice, replacement of closing/ trip coils if required.
- 5- H.T. Breaker (6.6 KV): General cleaning, oil level checking, checking of trip/ closing coils/ auxiliary contacts, oil top up, leakin arresting, tightness checking, replacement of defective parts totally or partially if required for contact tips, spring charging motor, engagement checking and its adjustment, checking of contact resistance if found more than permissible limit cleaning of contacts, oil charging, closing and opening time checking, support insulator and CT circuit checking meggering after completion of work.
- 6- Transformers: cleaning, blowing, tightness checking, silica gel replacement, oil leakage arresting, replacement of oil if needed, replacement of worn out parts, oil filtration if required.
- 7- Magnetic separator: tightness checking, cleaning, contactors cleaning, repair/ replacement of defective parts/ total replacement if required.

- 8- Pusher car: control and power circuit checking, contactors cleaning replacement of worn out parts, slip ring, brush, resistance boxes checking, replacement of holders, pantograph checking / adjustment/ replacement. Changing of brushes, limit switch checking/ replacement if needed.
- 9- Wagon tippler: cleaning of contactors and panel, checking of slip ring and its brushes, checking of rotor circuit, resistance boxes, rotary limit switches, and alignment with the mechanism, repair/ replacement of defective parts/ equipments. Spare motor's readiness should be insured.
- 10- EOT Cranes & Telfers: cleaning, greasing and oiling to be done periodically, healthiness of brake and limit switches should be assured, power and control circuit should be kept healthy. Tightness to be checked. Trolley line and current collector should be checked.
- 11- Maintenance of main oil pumps, transfer pumps; unloading pumps, drain pumps (fixed & portable) to be done and their availability should be assured. Defective parts / equipments to be replaced.
- 12- Crushers: cleaning, blowing greasing and tightness check to be done. Insulation resistance checking and alignment checking to be done. Replacement of defective parts/ equipments to be done. Power and control circuit should be kept healthy.
- 13- Area lightening: maintenance of area lightening of CHP& FOS should be done and defective parts should be repaired/ replaced regularly. Routine cleaning and maintenance of circuit beaker, LDB, all lightening panels of the area including replacement of fittings, bulbs, igniters, choke, tube, burnt switches should be done, repair/ replacement of cable, providing additional light at the places of works in CHP & FOS, maintenance of supply for welding machines, providing supply for portable pumps and other works connected with area light of railway track etc.
- 14- Belt feeders: vacuum cleaning of belt feeder panel undergone tippler and silo, power and control circuit checking. Replacement of fuses and its base if required. Replacement of motor and its mechanism. Contactors cleaning of silo belt feeder o be done.
- 15- Any other work connected o the subject Electrical works which seems o be necessary for the drives/ equipments of CHP & FOS: signal lamps replacement for all drives of the area, pusher car, wagon tippler, ventilation fans, dust extraction fans, vibrators, magnets, belt feeder motors, conveyors#1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 5,6,7,8,9,10,11,12,13,CC-1,CC-2,hammer crushers, on-line crushers, transformers, circuit breakers, pumps, main oil pumps, unloading pumps, pumps of oil trapping units, dewatering pumps, belts, sirens, pull cords, pull cord switches, lightening installation, MCC, LT & HT Breakers, transformers etc.
- 16- Contractor has to bring all required tools and tackles and instruments for maintenance of the subject installations.
- 17- Grease, lubricant and cleaning materials are in the contractors scope of work.

(III) *Structure Fabrication Work Of 100 MT.:*

- 1- Fabrication of structure.
- 2- Fabrication of conveyor structure.
- 3- Fabrication of supports, dismantling of old damaged structure & erection of fabricated structures.
- 4- Painting of fabricated structure.
- 5- Fabrication of coal conveying chute along with liners and dismantling of old damaged chute.
- 6- Before start of the fabrication work, contractor's engineer has to report and make daily plan with Engineer-in-charge of BPSCL
- 7- All the jobs has to be attended by the contractor as per the direction of Engineer- in-charge.

Part-C: Detailed scope of work of House keeping job contract.

This part of contract involves maintaining cleaning of all equipments including various areas (inclusive of office, terminal points, conveyor galleries & drains, etc.) of CHP & FOS of BPSCL. These are classified as below:

Scope of work:

- 1- Removal of dust and dirt.
- 2- Sweeping and washing of all floors of the various building like crusher house transfer conveyor house ,transfer point conveyor galleries, bunker floors and various other areas of CHP.
- 3- Cleaning of all drains in the CHP area.
- 4- Water washing of the plinth protection of various building and adjoining drains.
- 5- Cleaning of window glass panes.
- 6- Removal of cow-webs.
- 7- Making cable galleries dust free and cable trays and broom it to remove settled dust.
- 8- Cleaning of all equipments like gearboxes etc by dried clothes to make them dust free.
- 9- Cleaning of roof girders at least on fortnightly basis.
- 10- All deck plates, walkways take up areas, floors, platform, structure, walls, roofs, staircases etc. are to be cleaned thoroughly and are to be freed from spilled coal, coal dust, slurry coal, oil, grease, water, garbage by using belchias, spades, pans, broomsticks, phool jharu etc.on regular basis. When cleaning is over, these areas are to wash thoroughly using water. However regarding water washing, decision of EIC shall only be applicable and binding.
- 11- All machines such as feeder, crusher, belt feeder, vibro feeders, gear boxes, pulley bearings are to be broomed, cleaned & kept free of coal dust.
- 12- All the sumps, drains (inside, out side coal crusher house, track hopper). GTU pits are to be kept totally clean on regular basis.
- 13- Choking of chutes, track hopper pockets, jamming of pulleys crusher and any other equipment are to be cleaned. these type of jobs are of emergency nature and need immediate action on regular basis.
- 14- The contractor has to remove all maintenance scrapes, foreign materials, boulders, garbage etc. from work site and has to dispose in the areas as directed by EIC.
- 15- Cables ray along the conveyor galleries and in transfer points are to cleaned daily, except in cable trenches.
- 16- In emergency cases, like snapping of belt etc, as directed by EIC coal is to be offloaded from conveyors to run the system and afterwards again offloaded coal is to be lifted on the conveyor by the agency.
- 17- Water washing of hopper top both walkways & side roads and cobweb removal from the inside the track hopper structures shall have to carried out every day along with removal of coal, boulders as directed by EIC.
- 18- VF cleaning is to be done by the agency everyday during shift changeovers.
- 19- In case of Tippler choking coal & boulder removal shall be carried out round the clock in each shift by engaging labors as directed by EIC. Boulder picking (manually) on daily basis from the coal yard for at least 08 hours with deploying more than 10 workers is in contractor's scope of work.
- 20- The contractor has to bring listed items one day before commencement of the job and deposit these items in CHP operation store along with relevant document like challan, CISF gate entry permission etc.
- 21- The contractor maintain the attendance register and wage register of the labors and the supervisors, in proper manner as per factory act and as per standard norms of the BPSCL and the are to be produced to the EIC, when he desires so.
- 22- The contractor shall have to ensure that their worker maintain proper discipline. if BPSCL has reasons to believe that any workman is involved in unlawful activities,

- BPSCL may reuse permission to the concerned worker or supervisor to enter into the plant premises and may ask the contractor to take immediate suitable action.
- 23- If contractor fails to continue with the job or does not take much interest in the job or show any negligence in execution of the contract BPSCL may get the job done by engaging any other agency at the risk and cost of the contractor, besides suitable recovery on the contractor. The contractor has to attend weekly Thursday meeting and give daily job feedback in writing.
 - 24- To deploy requisite no. of their worker for manual unloading of coal is in contractor's scope of work.
 - 25- The contractor should not deploy any minor (below 18 years) labor, supervisor at work site. The contractor should not deploy any physically and mentally unfit worker.
 - 26- Coal should not be washed down from the high raising conveyor. All coal is to be lifted on the conveyor.
 - 27- Area representative of the agency must move with torch at site.
 - 28- Ground floor and their surround areas should be washed conditions and if any local coal accumulation is there, it should be transported within 16 (sixteen) hours.
 - 29- Non Availability of contractor worker at site. If observed by the equivalent amount of wages for the numbers of workers absent will be deducted from the bill.
 - 30- Deployment of resources will be in appropriate basis on all days including Sundays & holidays as decided by EIC.

Following Tools & Tackles and Consumables for Housekeeping.

S.NO.	ITEMS	QUANTITY	
1	Belcha	75	
2	Spades / kudal	20	
3	Pocking bar / bari	20	
4	Wipers with rubber	20	
5	Torch 3 cell	20	
6	Phenyl	50 liters / month	
7	Acid/ harpic	50 liters/month	
8	Cubweb cleaners	30	
9	Phool jharu	30	
10	Cotton jute	50 Kg / month	
11	Buckets	20	
12	Narial jharu	30	
13	Bamboo rods	20	
12	Detergent	50 Kg/ month	

Man power requirement for a day in CHP & F.O.S.**Operation Of CHP & FOS (Mechanical & Electrical):**

Graduate Engineer	03	
Diploma Engineer	08	
Supervisor	08	
Electrician	09	
Operators	66	
USW	39	
TOTAL	133	

Maintenance Of CHP & F.O.S.(Mechanical):

Graduate engineer	01	
Diploma Engineer	02	
Supervisor	05	
Welder	04	
Fitter	09	
Rigger	09	
U.S.W.	30	
Total	60	

Maintenance of CHP & F.O.S.(Electrical):

Graduate engineer	01	
Diploma engineer	03	
Electrician	07	
Welder	01	
Fitter	03	
Rigger	02	
Helper	10	
Total	27	

House Keeping:

Diploma Engineer	01	
Supervisor	05	
U.S.W.	80	
Total	86	

Miscellaneous job (applicable to Part-A, Part-B, Part-C):

Accountant-cum- store keeper	01	
Commercial officer	01	
Office boy	01	

Penalty Clause:

The penalty clause for non fulfillment of men power (applicable to Part-A, Part-B, Part-C):

A-) Graduate Engineer: For absence in work for more than 15 days a stretch from site, deduction @ Rs.20,000/ month(30 working days) will be made proportionately from the contractor's bill for the period of absence beyond 15 days provided contractor fails to provide with an engineer of his category in replacement.

B-) Diploma Engineer: For absence in work for more than 15 days a stretch from site, deduction @ Rs.8,000/ month(30 working days) will be made proportionately from the contractor's bill for the period of absence beyond 15 days provided contractor fails to provide with an Diploma engineer of his category in replacement.

C-) Supervisor: For absence in work for more than 05 days a stretch from site, deduction @ Rs.6,000/ month(30 working days) will be made proportionately from the contractor's bill for the period of absence beyond 05 days provided contractor fails to provide with an supervisor of his category in replacement.

D-) Workers: For absence in work for more than 10% workers than the minimum requirement in any shift at site, deduction at the 02 (two) times of approved rate will be made from contractor's bill for the period of absence for the entire absentee, if contractor fails to provide with a replacement.

PENALTY CLAUSE:-

For Unsatisfactory Cleaning, Recovery will be imposed as per following table (for House Keeping).

	Item	Penalty Per Case
1	Spillage Coal, Accumulated Coal	Rs.100/- Per sq. meter
2	Floor, Wall, Walkways cleaning and Washing.	Rs.100/- Per sq. Meter
3	Drains Jamming	Rs.50/- Per 10 running meter
4	Deck Plate not Cleaning / Washing.	Rs.50/- Per sq. meter
5	Non-Cleaning of Surround Areas	Rs.50/- per 10 sq. meter
6	Non-Cleaning of Head Pulley / Snub Pulley, Tail Pulley, GTU Pulley.	Rs.100/- Per Pulley
7	Non- Cleaning of Chute, Track Hopper Pocket.	Rs.100/- Per Chute
8	Sump, GTU Pit not Cleaning.	Rs.50/- Per Pit
9	Structures Cables Tray not Cleaning.	Rs.50/- Per 10 running meter.
10	Boulders, Foreign materials Sand Bags and maintenance scraps removal not done.	Rs.50/- Per case.
11	Crusher House – Operators Room Cleaning.	Rs. 50/- Per day
12	Removal of Coal From Floor, Walkways, Deck Plates etc. Directly using only High Pressure Water Jets if observed at site.	Rs. 200/- Per conveyor gallery.
13	Non-Submission of Daily Check List.	Rs.50/- per day
14	Non-Adherence of Safety Norms (use of PPEs)	Rs.50/- Per Persons
15	Non-Adherence to any specific instruction pertaining to job contract (either verbal or written).	Rs.50/- Per Case
16	Non-Attending Weekly Meeting.	Rs.100/- Per Case

Safety Norms:

- 1-The contractor will have to obtain safety clearance certificate from safety department before start of work.
- 2-The contractor will have to submit the medical fitness certificate of his employees.
- 3- The contractors along with his employees will have to undergo safety training program in T&D center of SAIL/BSL.
- 4-Safety of workers employed by contractor is entirely his responsibility and in the even of any accident, major or minor the worker can be treated in BGH if his responsibility is not available for adequate medical aid, and the cost of treatment will be recovered from bills.
- 5-As the area of work is highly sensitive with respect to safety hazards, he contractor must take proper work permit, shut down clearing and other instruction from Engineer-in-charge daily before starting the work. The contractor will have to follow all the safety precautions and rules in this regard.

Safety Items:

- 1-Safety helmet
- 2-Safety boot
- 3-Hand gloves (cotton)
- 4-Safety belts
- 5-Hand gloves (leather)
- 6-Gum boot
- 7-Nose mask
- 8-Cutting goggles
- 9-Flash back arrester in Cutting Torch
- 10-Electrical hand gloves
- 11-Dust mask
- 12-Asbestos hand gloves, etc.

Schedule of Quantity:

S.NO.	Description of job	Duration	Rate(in Rupees)/month	Total Value(Rs.)
1.	Part-A : Job contract for assistance in operation in CHP & FOS	12 Months		
2.	Part-B : (I) Mechanical maintenance in CHP & FOS	12 Months		
	(II) Electrical maintenance in CHP & FOS	12 Months		
	(III) Structure and fabrication job of 100 MT.	12 Months		
3.	Part-C: Housekeeping job contract for whole CHP & FOS area and all equipments.	12 Months		

Price Escalation clauses :

Price Variation of HSD

Any revision in price of High Speed Diesel after the date of opening of tender shall be paid by the following formula :-

$$A=H \times F \times R$$

Where,

A= Amount in Rupees on account of change of HSD price

B= running Hrs. of dozer

F= Diesel consumption per hour. (Diesel consumption by dozer will
Be considered at fixed rate of 34liters/hour through out the contract period.

R= Change in rate of diesel per liter in Rupees from the rate prevalent at the time of
tender opening Date.