### **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/13-14/C-253/NIT-446/4287 dated 22/05/2014



### **NAME OF WORK:** "Round the clock Assistance in Shift Electrical Operation of Complete Electrics of CPP"

COST : **Rs. 1000/-**(Rupees One Thousand only)

## I N D E X

Sl.No	Subject	Page No.
1.	Cover Page	1
2.	Index	2
3.	Notice Inviting Tender (with QR)	3-4
4.	Annexure – I (Conditions & Rules to be observed in submitting tenders)	5-6
5.	Annexure – II (General Terms and Conditions)	7-9
6.	Annexure – III (Scope of work)	10-11
7.	Annexure – IV (Special terms and conditions)	12-13
8.	Annexure – V (Schedule of Quantity)	14-17

## 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/13-14/C-253/NIT-446/4287

Date : 22/05/2014

For and on behalf of BOKARO POWER SUPPLY COMPANY (P) LTD, sealed tenders in four parts, **Part - A :** Cost of Tender document and documents in support of eligibility criteria, **Part-B** : Earnest Money Deposit, **Part- C** : Technical & Commercial Offer and **Part – D** : Price Bid. are invited, from reputed, experienced and financially sound firms for the following work at our Power plant.

Description of Work	Round the clock Assistance in Shift Electrical		
	<b>Operation of Complete Electrics of CPP</b>		
Estimated Amount (in Indian Rs.)	<b>Rs. 22,62,051/-</b> (Rupees Twenty Two Lakhs Sixty Two Thousand		
	Fifty One) only excluding Service Tax		
Earnest Money (in Indian Rs.)	<b>Rs. 45,200/-</b> (Rupees Forty Five Thousand Two Hundred) only		
Cost of tender documents	Rs. 1000/- (Rupees One Thousand) Only		
(Non-refundable) (in Indian Rs.)			
Period of contract	01 (one) Year from the date of commencement of work.		
Last date & time of submission of	20/06/2014 at 12:00 Hrs. (IST)		
tender			
Bid opening Date & Time.	20/06/2014 at 12:15 Hrs. (Part A, B & C)		

### **Qualifying Requirements / Eligibility Criteria :**

- **1.** The bidder must submit self attested copy of valid (up to date) **Electrical License** for conducting contractual jobs of electrical nature, or proof of application for renewal of the same (*if applicable*).
- 2. The bidder must submit self attested copy (copies) of recent work order (s) of which the work (s) has (have) been completed within last seven (07) years ending last day of month previous to the one of issue of the NIT, as a proof of similar work done in Thermal Power Plant having each unit of 50MW capacity or more of any PSU, Central or State Govt. Organization or Joint venture company thereof.

The value of such work order(s) should be not less than:

i. **Rs. 18,09,641/-** (Rupees Eighteen lakh nine thousand six hundred forty one) only excluding taxes, etc. for a single work order.

'OR'

ii. **Rs. 11,31,026/-** (Rupees Eleven lakh thirty one thousand twenty six) only excluding taxes, etc. for each of two work orders.

'OR'

- iii. **Rs. 9,04,820/-** (Rupees Nine lakh four thousand eight hundred twenty) only excluding taxes, etc. for each of three work orders.
- **4.** Sub-contractor are not allowed.
- 5. The bidder should have successfully completed similar nature of job i.e. working in power plant electrical operation having experience in generators (50MW & above), (132KV/11KV, 11KV/6.6KV, 6.6KV/415V) transformers, HT, LT & DC motors of different ratings and simultaneously working in all various level of mentioned voltages such as 132KV, 11KV, 6.6KV, 415V & 220V DC system & checking of control circuit (415V AC, 220V AC & 220V DC) along with fault finding and defect rectification.
- 6. The bidder must submit self attested copy (copies) of satisfactory **Work Completion Certificate** or **Performance Certificate not to be less than one year** for the work (s) for which copy (copies) of work order (s) is (are) being submitted as given above. The work should have been

completed within last seven (07) years ending last day of month previous to the one of issue of the NIT.

- 7. The bidder have sound financial back ground and should have an Average Annual Turnover of **Rs. 6,78,615/-** (Rupees Six lakh seventy eight thousand six hundred fifteen) only or more for last three (03) consecutive financial years.
- 8. The bidder shall submit authenticated (duly self attested with official seal) copies of 'Annual Balance Sheet, Profit & Loss Account' of preceding three (03) financial years as a proof of compliance of clause no. 07 above.
- 9. The bidder should submit authenticated (duly self attested with official seal) copy of latest IT Return, EPF, ESI, Service Tax Registration No.
- **10.** The bidding agency should submit a declaration, in original, duly signed (with official seal) by the bona-fide representative of the agency, that the agency is not debarred under any sort of Black List, Holiday List, etc. by any PSU(s) or Government/Govt. Undertaking Company (companies) or Joint Venture Company thereof.
- **11.** Offloading of work to subcontractor is not allowed.

*NOTE:* Original documents are to be produced, if so demanded by BPSCL authorities for verification on returnable basis.

### **General Terms & Conditions:**

i) Offer shall be accompanied with Cost of the tender documents of Rs. 1000.00 (non-refundable) in the shape of Demand Draft / Banker's Cheque drawn from any Nationalized / Scheduled Bank except Co-Operative Bank, in favour of Bokaro Power Supply Company (P) Ltd., Payable at Bokaro Steel City.

However Government organizations / Small scale industries registered with NSIC is not required to submit the cost of tender document subject to production of the documentary evidence like valid Registration certificate of the same item or group of item from appropriate Govt. Authority.

Offer shall be accompanied with Earnest Money Deposit (EMD) of Rs. 45,200.00 (Rupees Forty Five Thousand Two Hundred Only) in the shape of Demand Draft / Bank Guarantee from any Nationalized Bank / Scheduled Bank except Co-operative Bank drawn in favour of Bokaro Power Supply Company (P) Ltd., Payable at Bokaro Steel City.

However EMD exemption wherever applicable may be availed of by Government organizations / Small Scale Industries registered with NSIC against proper entitlement documents.

iii) The undersigned reserves the right to either reject any / all the tenders without assigning any reason thereof & also reserves the right to alter the qualifying requirements.

### Note:

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

For and on behalf of Bokaro Power Supply Company (P) Limited Sd/-(J.M Prasad) DGM (P&C)

### **Conditions & Rules to be observed in submitting Tenders**

### 1.01 Manner of Submission of the Tender

The tender shall be divided into 04 parts as follows:-

- a) **Part A:** This part Comprises of Cost of Tender document, Proof of Qualifying Requirements, marked with (Part-A) 'Qualifying Requirements', NIT No. & date
- b) **Part B**: This part comprises of the Earnest Money Deposit in the manner as stated in the tender which shall be in one envelope marked with (Part-B) 'EMD', NIT No. & date
- c) **Part C**: This part Comprises of Technical and Commercial details, consent on terms & conditions of NIT etc. marked with (Part-C) Techno-Commercial Bid, NIT No. & Date.
- d) **Part D:** This part shall contain only the price schedule comprising the rates filled in figures and words as per the instruction given elsewhere in this tender. This should be kept in a sealed cover marked Price Bid (Part -D), NIT No. and Date.
- 1.01.1 Each part should be sealed in separate envelopes, clearly superscribing on the top of each envelope the relevant part number and description along with NIT reference and date of opening and submit all the parts simultaneously in another sealed envelope clearly superscribing NIT reference and date of opening.

### **1.02 Tender Validity Period**

The tender shall be valid at least for 120 (One hundred twenty) days from the date of opening.

### 1.03 General

- i) Tenderer's are requested to visit site for actual assessment of the job before submission of their offer.
- ii) The tender rates shall be written in English, both words and figures. In the case of any discrepancy between the words & figures of the rates quoted, the rates expressed in words shall be taken as correct. In the case of discrepancy in the Unit Rate and Amount, Unit Rate will govern. Erasures, changes, and corrections of whatever type/nature shall be attested by the tenderer. The rates amount shall be written in Rupees and Paise only. The rates in words shall be written in one single line only without admitting any interpolations.
- iii) All pages of the tender documents, conditions, specifications & all enclosures must be signed with seal of the company at the lower left hand corner by the tenderer before submission of the tender.
- iv) If the intending tenderer is a Firm or Company, then they shall, in the forwarding letter, mention the number and names of all the partners & shall sign before submitting the same, unless the Power of Attorney holder has specifically been authorized in this respect.
- v) If any tenderer withdraws his tender before its acceptance or refuses within a reasonable time without giving any satisfactory and acceptable explanation thereof, the tenderer shall be disqualified for making any tender of the BPSCL for a minimum period of one year and the Earnest Money will be forfeited.

### vi) Handling of Earnest Money:

- a) Earnest Money will be refunded to the un-successful tenderer after finalisation of tender and no interest will be paid for the same.
- b) The amount of Earnest money will be adjusted against Security Deposit only in case of successful Tenderer.
- vii) In case the date of tender opening happens to be holiday, the tender will be opened on the next working day at the same time.

### viii) <u>Any conditional offer or offer having deviations from our qualifying requirement,</u> <u>specification & instruction sheets is liable to be rejected.</u>

ix) BPSCL reserves the right either to reject any/all the tenders without assigning any reason thereof.

### **General Terms and Conditions**

- 2.01 You will have to follow and observe the safety & statutory requirements.
- 2.02 You will have to fully responsible for any sort of unsafe activity of your workmen.
- 2.03 All working personnel should have proper safety certificates issued by BPSCL before start of work.
- 2.04 Supervision of the work has to be carried out by the agency.
- 2.05 Work is to be carried out as per instruction & satisfaction of the Engineer-In-Charge.
- 2.06 Rates are to be quoted on firm price basis. Any conditional offer is liable to be rejected.

### 2.07 **Payment Terms :**

90% of contract value will be paid on pro-rata basis on progressive jobs duly certified by Engineer In-Charge and balance 10% will be retained as security deposit which will be released after three (03) months of satisfactory execution of work.

The expression satisfactory execution of the order shall mean fulfillment of all obligation arising out of and the guarantees stipulated in the contract. In default at satisfactory execution of the order the security deposit shall be forfeited to the BPSCL.

Any penalty for which the successful tenderer shall be found liable or any liquidated damages which shall be payable to the BPSCL in terms of the Contract, shall also be recoverable by the BPSCL from the Security deposit. If such security deposit will not be adequate for the purpose of liquidating the amount of penalty and/or damages as contemplated, the amount in excess thereof shall be deducted from any sum or sums which may be due or may become due to the successful tenderer from the BPSCL on any account whatsoever.

Notwithstanding what has been stated above if the successful tenderer shall have duly performed all his obligation under and the guarantees stipulated in the contract and observe all the terms and conditions thereof and no penalty shall have been recoverable from him and / or the BPSCL shall not have suffered any damages whatsoever, then security deposit shall be refunded, on receipt of a certificate from the Engineer in - charge that there is no claim against the Successful tenderer under the Contract.

- 2.08 Safety of the contractor's workmen will be entirely the responsibility of the contractor. In case of any work injury, major or minor, the contractor or his representative will have to provide the medical aid. If adequate medical care is not provided by the contractor, the worker will be treated in BGH and the cost of treatment will be recovered from your running bill.
- 2.09 Contractor will produce medical fitness certificate for his workers prior to CLC clearance for working at height. Height passes to be obtained from safety department.
- 2.10 You will have to strictly adhere to the provision of various labour laws including payment of bonus Act 1965.

- 2.11 Offer is to either type written or by handwritten and in no case partly type written and partly hand written. No corrections, overtyping shall be permitted. If so, the same shall be summarily rejected.
- 2.12 Paying authority DGM (F&A), BPSCL.
- 2.13 Tenderers shall quote their firm rates and no negotiations will be held except with the lowest tenderer, if required.
- 2.14 In accepting the order you are understood to accept to all responsibilities for completing the work in all respect.
- 2.15 Where a claim of Service Tax is preferred and admitted, the tenderer must satisfy that he is a registered contractor under Service Tax Act and possesses a Certificate of Registration in the firm's name in which the service is made and shall in proof thereof, while submitting bills for payment, furnish the number, date and other particulars of such Certificate.
- 2.16 <u>SUBMISSION OF BANK GUARANTEE FOR QUOTING UNWORKABLE RATE</u> If the tenderer quotes unworkable rate i.e. quoted rate of tenderer is lesser than 90.00% of estimated value and is considered for placement of work order, they/he will be asked to justify the rate quoted and will have to give **Performance guarantee bond** (in addition to the Security Deposit) either in the form of Bank Draft/Bank Guarantee (In prescribed format of BPSCL) issued by any Nationalized/Scheduled Bank in favour of **Bokaro Power Supply Company (P) Limited**, payable / duly endorsed in favour of BPSCL at **B.S.City**. The amount of PBG will be equivalent to difference of 90% of estimated value and quoted value.
- 2.17 **FORCE MAJEURE** : Vendors / Contractor shall not be considered in default if delay occurs due to cause beyond their control such as acts of God, natural calamities, civil wars fire, strike, frost, floods, riot and acts of unsurpassed power. Only those causes which have duration of more than seven days shall be considered in force majeure clause. In the event of delay due to such clause the delivery / completion period will be extended for a length of time equal to the period of force majeure of at the option of owner order may be cancelled without any liability what so ever on the part of the owner.

## 2.18 The Parties should clearly indicate their prices firm in all respects till execution of the work order.

2.19 In case of asking any variation on any account whether sales tax or Service tax, excise duty or transportation etc. (wherever applicable) will not by treated as firm price on that account and hence parties should state everything clearly.

- 2.20 **Special Instruction:** Tender will be opened on **20.06.2014 at 12:15 PM.** If it is declared a holiday by BPSCL then in the next working day at the same time in the presence of Tenderer's Authorized Representatives, who wish to be present.
- 2.21 **SAFETY CLAUSE :** Without prejudice to the right conferred by the clause above for stoppage of work for violation of safety requirements, you shall be liable for penalties mentioned below:
  - i. Upto Rs.5000/-by DGM (safety)/Head of safety Engg. Department /Head of the Department where work is being done for 1<sup>st</sup> violation of safety norm, non use of PPEs(Personal Protective Equipments ) like safety shoes, hand gloves, safety helmets, goggles etc as per work requirements by you or your workers. This condition is applicable in case of violations of Road Safety norms also.
  - ii. Fine upto Rs. 20,000/- on 2<sup>nd</sup> Violation as mentioned in clause (i) above
  - iii. You shall be debarred for one year / deregistered from taking up further contractual work in BPSCL from the date of issue of debarring / deregistering order on 3<sup>rd</sup> violation as mentioned in clause no (i) above.
  - iv. Fine upto Rs. 10,000/- for violation in use of Full Body Harness by you or your worker for working at height (above 1.8 meter from immediate floor).
  - v. Fine Rs. 25,000/- (minimum) to Rs. 50,000/- (Maximum) for serious injuries and disabilities caused by violations as mentioned in Clause No. (i) and (iv) above.
  - vi. Independent of the above, you shall be fined Rs. 1,00,000/- (1 Lakh) or more and debarred / deregistered from taking up further contractual work in BPSCL from the date of issue of debarring / deregistering order in case any Fatal accident occurs due to violations as mentioned in Clause (i) and (iv) above.

### Scope of Work

- A. Assistance in the following jobs related to the 132KV, 11KV, 6.6KV, 415V, 220V, indoor switchgear, outdoor switchyards, transformer yards, GVDCs, PDBs, MCCs, etc., as per SOP & Safety norms:-
  - 1. Racking-in & racking-out of breakers, isolators, PT carriages, etc.
  - 2. Shifting (to & away from the associated cubicles) by means of trolley or otherwise.
  - 3. Opening & closing of panel doors, back covers, etc., for various requirements.
  - 4. Shifting of trolley, rubber insulation mats, guide rails, etc., for various purposes.
  - 5. Meggering of equipment proper, and out going parts.
  - 6. Arrangement of heating of cubicles or out going parts, and removal of the same after completion of heating.
  - 7. Checking of operation of equipment proper, and out going parts, etc.
  - 8. Isolation & normalization.
  - 9. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices & other equipments.

## **B.** Assistance in the following jobs related to various valves of CPP, as per SOP & Safety norms:-

- 1. Limit Switch setting.
- 2. Removal & fixing of limit switch boxes as a part of isolation & normalization procedures.
- 3. Replacement of defective parts of limit switch boxes or the entire assembly.
- 4. Connection & disconnection (after proper marking) of power & control circuits related to motors and limit switch boxes.
- 5. Fixing, removal & checking of healthiness & operation of motors.
- 6. Checking of control circuits, along with fault finding and defect rectifications.
- 7. Operation checking of the valves as a whole.
- 8. Isolation & normalization.
- 9. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices & other equipments.

## C. Assistance in the following jobs related to control circuits & power circuits (energy calculation) of the HT & LT drives, as per SOP & Safety norms:-

- 1. Checking of control circuits, along with fault finding and defect rectifications.
- 2. Checking of various interlocks of electrical control circuits, along with fault finding and defect rectifications.
- 3. Isolation & normalization.
- 4. Shift wise energy calculation.
- 5. Daily energy calculations (including those of generators, transformers, motors & 6.6KV, 11.5KV, 132KV feeders).
- 6. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices & other equipments.

## D. Assistance in the following jobs related to carbon brush gears of Turbo Generators, DC motors, MG sets, etc., of CPP, as per SOP & Safety norms:-

- 1. Inspection of carbon brushes & brush holders.
- 2. Replacement of defective or worn out carbon brushes as per SOP & safety norms.
- 3. Cleaning of brush gears by air blowing, Replacement of defective brush holders.
- 4. Checking & adjustment of spring tension of brush holders.
- 5. Polishing of commutators.
- 6. Filling of Hydrogen gas cylinder in Turbo Generator.
- 7. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices & other equipments.

- E. Assistance in the following jobs related to low capacity LT motors, high capacity LT & HT motors (at odd hours) of CPP, as per SOP & Safety norms:-
  - 1. Connection, disconnection (after proper marking), fixing, removal, checking of healthiness, de-coupled, & coupled trial runs of low capacity LT motors, on a regular basis.
  - 2. Connection, disconnection (after proper marking), removal, fixing and alignment checking of high capacity LT Motors at odd hours.
  - 3. Connection and disconnection (after proper marking) of HT motors at odd hours.
  - 4. De-coupled & coupled trial run of both high capacity HT & LT motors.
  - 5. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices & other equipments.

## F. Assistance in the following jobs related to indicating and signalling systems of CPP equipments, as per SOP & Safety norms:-

- 1. Regular inspection of indications & signals in various control rooms, local panels, and switchgear rooms & panels.
- 2. Checking of indications & signals, along with fault finding, & defect rectifications.
- 3. Replacement of defective parts like indicating bulbs & holders.
- 4. Replacement of defective parts of signalling system like bulbs, holders & other devices like semaphore, etc.
- 5. Disconnection & connection of circuits related to indication systems (after proper marking) as per requirement.
- 6. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices & other equipments.

## G. Assistance in the following jobs related to control panels of CPP equipments, as per SOP & Safety norms:-

- 1. Regular inspection of control panels, and checking of ammeters, voltmeters, etc.
- 2. Repair & replacement of defective parts like control switches, selector switches, ammeters, voltmeters, etc, in various panels in control rooms and local panels.
- 3. Connection and disconnection of various panels of control panels after proper marking and shorting of CT terminals.
- 4. Safe handling, shifting & safe keeping of defective switches, ammeters, voltmeters, etc, for repair after proper marking.

## H. Assistance in the following jobs related to cables of various drives and equipments of boilers, turbines, and generators of CPP, as per SOP & Safety norms:-

- 1. Meggering of cables.
- 2. Repairing like taping, minor jointing & dressing of cables.
- 3. Replacement of burnt cables of (minor size & length) with proper laying.
- 4. Dressing, marking and ferruling of replaced cables of minor size & length.
- 5. Shifting and safe handling of all the materials like tools, tackles, consumables, measuring instruments, devices & other equipments.

# I. Assistance in the following jobs related to housekeeping & record keeping of various electrical panels, generators, motors, equipments, etc, of CPP as per SOP & Safety norms:-

- 1. Regular cleaning by air blowing.
- 2. Regular dusting off by dry mops.
- 3. Housekeeping of control room MCB.
- 4. Hourly reading of parameters of generators, transformers, 132KV & 11KV feeders, 11KV sections, 132KV buses, 6.6KV sections, 415V sections.
- 5. Hourly reading of DC system & its parameters.
- 6. Hourly reading of winding and oil temperature of transformers.

### **Special Conditions for the Job**

- 1. The successful bidder & the workmen employed by him will have to follow and observe all the safety & statutory rules, norms & requirements for electrical jobs.
- As the area of work is highly sensitive with respect to safety hazards, the successful bidder must take proper work permit, shutdown clearance and other instructions from Engineer-In-Charge, daily before starting the work.
- 3. The bidder has to provide all the resources like men, materials like working tools and tackles, consumables, safety helmets, safety boots, hand gloves, and other safety appliances of general & special type.
- 4. BPSCL will provide spares required for the job.
- 5. The portion of the job planned to be completed within a particular time frame of a particular day as directed by the engineer-in-charge of BPSCL, should not be delayed beyond the stipulated time schedule.
- 6. No job should suffer due to shortage of manpower. Any lapse on the part of the bidding agency to provide adequate manpower will be viewed seriously and if it results in loss of production, deduction of payment will be done.
- 7. Industrial waste & all types of scraps generated by the job are to be removed by the successful bidder to the dumping ground as directed by the engineer-in-charge.
- 8. The supervision & execution of all jobs and the safety of workmen will solely be the responsibility of the bidding agency. BPSCL will not be responsible in any way in case of any violation of safety or statutory rules, or any illegal / unworthy incident, major or minor, caused by the workmen employed by the successful bidder.
- 9. All the jobs which may be required to be done in a particular shift (like attending the complaints of the operation wings of Boiler, Turbine, CHP, WCTP, FOS, ESP, RCPH, etc) as per the scope of the job, are to be completed promptly as per demand & satisfaction of the electrical engineer in-charge of the concerned shift.
- 10. The work should be done strictly as per the guidance of and as per the demand & satisfaction of the electrical engineer in-charge of the concerned shift, and the overall engineer in-charge of BPSCL for the job. The work completion will also be certified by him. In case of any dispute regarding work, the decision & judgment of the engineer in-charge of BPSCL will be final & abiding.
- 11. The bidder is required to depute at least Five (05) Skilled workers & One (01) Un-skilled workers in each of the running A, B, & C Shifts on regular basis, excluding weekly off days, for execution of the subject job.

- 12. You shall have to pay an **Amount of Rs. 38.46 per day an actual attendance** per month (not exceeding Rs. 1000/- per month) to the workers engaged by you in the job, as Additional Welfare Amenity (AWA)" and the same will be reimbursed by BPSCL.
- 13. You have to pay your-workmen as per circular/notification published by the state government in regard to rates or payments of VDA in vogue. Nevertheless should there be any enhancement/increase in the rates of VDA circulated and notified by the State Government thereafter the VDA shall be reimbursed to you subject to production/submission of authenticated certification of the actual payment to the actual workmen deployed for the work under contract and certified by the agency as per the wages in the contract.

### **14.** The base date of increased VDA payment will be considered as Bid Opening date.

**15.** You will have to pay Rs.4.00 extra to be working persons as per BPSCL rules above minimum wage of one day.

### 16. Guarantee clause:

Workmanship of any particular portion of the job should be guaranteed for six (06) months after completion of the job. If any defect arises anywhere in the scope of the completed job, within the guarantee period under normal operational conditions, then the bidder is to redo the same job, free of costs.

### 17. Penalty clause:

- a) Delayed response to start any job will be penalized @ Rs. 500/- each time of such an occurrence.
- b) A work, if started without proper permission (work-permit, duly issued by competent authority), will be penalized @ Rs. 200/- each time of such an occurrence.
- c) Any case of non removal of scrap generated after completion of job will be penalized @ Rs. 250/- each time of such an occurrence.
- d) Any delay in completion of a portion of the job planned to be completed within a particular time frame of a particular day, resulting in loss of production, will be penalized @ Rs. 500/- each time of such an occurrence.
- e) If the manpower deployed is less than that given in the minimum manpower clause (clause No. 11 of Special Conditions for the job), a penalty @ of the existing labor rate in proportion to the short supply will be deducted from the payment.

### Schedule of Quantity:

Sl. No	Description of Job	Qty.	Rate per month (Rs.)	Amount for one year (Rs.)
<b>A.</b>	<ul> <li>Assistance in the following jobs related to the 132KV, 11KV, 6.6KV, 415V, 220V, indoor switchgear, outdoor switchyards, transformer yards, GVDCs, PDBs, MCCs, etc., as per SOP &amp; Safety norms:-</li> <li>1. Racking-in &amp; racking-out of breakers, isolators, PT carriages, etc.</li> <li>2. Shifting (to &amp; away from the associated cubicles) by means of trolley or otherwise.</li> <li>3. Opening &amp; closing of panel doors, back covers, etc., for various requirements.</li> <li>4. Shifting of trolley, rubber insulation mats, guide rails, etc., for various purposes.</li> <li>5. Meggering of equipment proper, and out going parts.</li> <li>6. Arrangement of heating of cubicles or out going parts, and removal of the same after completion of heating.</li> <li>7. Checking of operation of equipment proper, and out going parts, etc.</li> <li>8. Isolation &amp; normalization.</li> <li>9. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices &amp; other equipments.</li> </ul>	As per requirement in Shifts.		
В.	<ul> <li>Assistance in the following jobs related to various valves of CPP, as per SOP &amp; Safety norms:-</li> <li>1. Limit Switch setting.</li> <li>2. Removal &amp; fixing of limit switch boxes as a part of isolation &amp; normalization procedures.</li> <li>3. Replacement of defective parts of limit switch boxes or the entire assembly.</li> <li>4. Connection &amp; disconnection (after proper marking) of power &amp; control circuits related to motors and limit switch boxes.</li> <li>5. Fixing, removal &amp; checking of healthiness &amp; operation of motors.</li> <li>6. Checking of control circuits, along with fault finding and defect rectifications.</li> <li>7. Operation checking of the valves as a whole.</li> <li>8. Isolation &amp; normalization.</li> <li>9. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices &amp; other equipments.</li> </ul>	As per requirement in Shifts.		

	<ul> <li>Assistance in the following jobs related to control circuits &amp; power circuits (energy calculation) of the HT &amp; LT drives, as per SOP &amp; Safety norms:-</li> <li>1. Checking of control circuits, along with fault finding and defect rectifications.</li> <li>2. Checking of various interlocks of electrical control circuits, along with fault finding and defect rectifications.</li> <li>3. Isolation &amp; normalization.</li> <li>4. Shift wise energy calculation.</li> <li>5. Daily energy calculations (including those of generators, transformers, motors &amp; 6.6KV, 11.5KV, 132KV feeders).</li> <li>6. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices &amp; other equipments.</li> </ul>	As per requirement & regular schedule	
D.	<ul> <li>Assistance in the following jobs related to carbon brush gears of Turbo Generators, DC motors, MG sets, etc., of CPP, as per SOP &amp; Safety norms:-</li> <li>Inspection of carbon brushes &amp; brush holders.</li> <li>Replacement of defective or worn out carbon brushes as per SOP &amp; safety norms.</li> <li>Cleaning of brush gears by air blowing, Replacement of defective brush holders.</li> <li>Checking &amp; adjustment of spring tension of brush holders.</li> <li>Polishing of commutators.</li> <li>Filling of Hydrogen gas cylinder in Turbo Generator.</li> <li>Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices &amp; other equipments.</li> </ul>	As per requirement in Shifts.	
E.	<ul> <li>Assistance in the following jobs related to low capacity LT motors, high capacity LT &amp; HT motors (at odd hours) of CPP, as per SOP &amp; Safety norms:-</li> <li>Connection, disconnection (after proper marking), fixing, removal, checking of healthiness, de-coupled, &amp; coupled trial runs of low capacity LT motors, on a regular basis.</li> <li>Connection, disconnection (after proper marking), removal, fixing and alignment checking of high capacity LT Motors at odd hours.</li> <li>Connection and disconnection (after proper marking) of HT motors at odd hours.</li> <li>De-coupled &amp; coupled trial run of both high capacity HT &amp; LT motors.</li> <li>Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices &amp; other equipments.</li> </ul>	As per requirement in Shifts.	

F.	<ul> <li>Assistance in the following jobs related to indicating and signalling systems of CPP equipments, as per SOP &amp; Safety norms:-</li> <li>1. Regular inspection of indications &amp; signals in various control rooms, local panels, and switchgear rooms &amp; panels.</li> <li>2. Checking of indications &amp; signals, along with fault finding, &amp; defect rectifications.</li> <li>3. Replacement of defective parts like indicating bulbs &amp; holders.</li> <li>4. Replacement of defective parts of signalling system like bulbs, holders &amp; other devices like semaphore, etc.</li> <li>5. Disconnection &amp; connection of circuits related to indication systems (after proper marking) as per requirement.</li> <li>6. Shifting and safe handling of all the associated materials like tools, tackles, consumables, measuring instruments, devices &amp; other equipments.</li> </ul>	As per requirement in Shifts.	
G.	<ul> <li>Assistance in the following jobs related to control panels of CPP equipments, as per SOP &amp; Safety norms:-</li> <li>1. Regular inspection of control panels, and checking of ammeters, voltmeters, etc.</li> <li>2. Repair &amp; replacement of defective parts like control switches, selector switches, ammeters, voltmeters, etc, in various panels in control rooms and local panels.</li> <li>3. Connection and disconnection of various panels of control panels after proper marking and shorting of CT terminals.</li> <li>4. Safe handling, shifting &amp; safe keeping of defective switches, ammeters, voltmeters, etc, for repair after proper marking.</li> </ul>	As per requirement in Shifts.	
H.	<ul> <li>Assistance in the following jobs related to cables of various drives and equipments of boilers, turbines, and generators of CPP, as per SOP &amp; Safety norms:-</li> <li>Meggering of cables.</li> <li>Repairing like taping, minor jointing &amp; dressing of cables.</li> <li>Replacement of burnt cables of (minor size &amp; length) with proper laying.</li> <li>Dressing, marking and ferruling of replaced cables of minor size &amp; length.</li> <li>Shifting and safe handling of all the materials like tools, tackles, consumables, measuring instruments, devices &amp; other equipments.</li> </ul>	As per requirement in Shifts.	

I.	Assistance in the following jobs related to housekeeping & record keeping of various electrical panels, generators, motors, equipments, etc, of CPP as per SOP & Safety norms:- 1. Regular cleaning by air blowing.			
	<ol> <li>Regular dusting off by dry mops.</li> <li>Housekeeping of control room MCB.</li> <li>Hourly reading of parameters of generators, transformers, 132KV &amp; 11KV feeders, 11KV sections, 132KV buses, 6.6KV sections, 415V sections.</li> <li>Hourly reading of DC system &amp; its parameters.</li> </ol>	As per requirement in Shifts.		
	<ol> <li>6. Hourly reading of be system to its parameters.</li> <li>6. Hourly reading of winding and oil temperature of transformers.</li> </ol>			
			Total	
Ru	pees			only

Note: Service Tax : EXTRA as applicable ( ) / Not applicable. ( )

(Please tick ( $\sqrt{}$ ) the one which is applicable and cut (x) the another) In case no option is marked, price quoted will be assumed as inclusive of service tax.

Signature with seal of the tenderer