



BID DOCUMENT

Name of work: "Requirement of 5 nos. of C&I supervisor for one year for C&I Maintenance job of Unit 3 & 4 including AHS and other offsite areas of 2X660 MW. (Two Parts)"

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ODISHA POWER GENERATION CORPORATION LTD. Unit# 3 & 4
1b Thermal Power Station, Banaharpali, Jharsuguda – 768234
(ODISHA)

Email: debesh.mohanty@opgc.co.in; pradipta.mohanty@opgc.co.in;
bkmishra@opgc.co.in



ODISHA POWER GENERATION CORPORATION LIMITED
IB THERMAL POWER STATION Unit # 3&4
At/PO: BANHARPALI, DIST: JHARSUGUDA – 768 234 (ODISHA)
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NOTICE INVITING TENDER

NIT No. ITPS/Unit 3 & 4/20-21/132

Date: 19/01/2021

Separate Sealed bids in the prescribed format are invited from bona fide and financially sound reputed Agencies / Registered Firms/Companies for execution of the following works at 2X660 MW IB Thermal Power Station, Banaharpali.

Sl	Name of the work	Tender Cost (Rs.)	EMD (Rs.)	Contract Period	Sale of Tender document	Date of receipt & submission /Opening of technical Bid
1.	"Requirement of 5 nos. of C&I supervisor for one year for C&I Maintenance job of Unit 3 & 4 including AHS and other offsite areas of 2X660 MW. (Two Parts)"	Rs.5600/- (Inclusive of GST)	Rs.20,000/-	01Year	19/01/2021 to 27/01/2021 (Hard & Soft copy only)	Up to 3:00 PM on 28/01/2021 3:30 PM onwards on 28/01/2021

NB: a) Bidders having the requisite qualifying requirements specified in the bid document shall only be considered for the work.

b) Further please note to submit your offer considering GST provision and its related input tax credit benefits to be passed on to OPGC

Cost of bid document (non-refundable) shall be paid by Demand Draft in favour of OPGC Ltd. drawn on State Bank of India (Code-9510) / Union Bank of India (Code-UBIN0806625) / Central Bank of India (Code-283899) payable at ITPS, Banaharpali. Cost of bid document shall have to be submitted along with the bid and the DD towards the tender cost (separate from EMD) should be prepared on or before the last date of sale of tender, otherwise the bid shall be liable for rejection. In case of any discrepancy found between tender document submitted by the agency and the master copy in our office, the latter should prevail. No claim on this account shall be entertained. Complete and signed sealed bids in hard copy form only shall be received at Contract Cell, ITPS. Bids shall be opened at Contract Cell, ITPS in the presence of the bidders or their authorized representatives, if present at the time of opening. If the last date of issue / receipt / opening happens to be a HOLIDAY/office closed, the tender will be issued/ received / opened at the respective time on the next working day. The photocopies of all the supporting documents required for participating in the tender mentioned in NIT/Tender paper shall be submitted along with the bid; otherwise the bid is liable for rejection. Bids without EMD will be rejected outright.

Bids received after stipulated date & time shall not be entertained. OPGC shall not take any liability on account of any postal/courier delay. OPGC reserves the right to accept / reject any or all tenders, seek additional clarifications, split up the scope among eligible bidders or cancel the tender altogether without assigning any reasons thereof.

N.B: For further details & downloading of Tender documents, please visit our web site www.opgc.co.in.

Important: Agenda/Corrigenda/ Extensions, if any, will be notified on the OPGC website only and will not be published in any other media. Bidders are requested to visit our website regularly for any amendment of the present bid till finalization of bidding process.

Sd/- GM- SCM

SAFE & CLEAN POWER IS OUR COMMITMENT



Information to Bidders

- 1) The bids complete in all respect must be submitted in a sealed envelope super scribed with tender enquiry number, name of the work and due date of opening. Both the Techno-commercial & Price Bid in separate sealed cover shall be put in a sealed third envelope. **The bid documents are not transferable.** The bidder must submit the following along with the bid:
- a) EMD of requisite amount as per NIT shall be put in a sealed envelope separately:
 - i) All Micro & Small Enterprises (MSEs) who are registered with DIC/KVIC/KVIB/Coir Board/NSIC/DHH/ Udyog Aadhar Memorandum are eligible to get the benefit of exemption from payment of EMD & Tender cost and to get the exemption, the participating bidders have to obtain/register as MSME for the specific service/supply of goods/both.
 - ii) To get the exemption of EMDs & tender fee, the party has to make an application to the head of supply chain management (SCM) who is conducting tendering process along with proof of documents regarding eligibility of the exemption at least 2 days before the last day of bid submission. The HOD after due examination will allow to participate without submission of EMD& tender fee & the same has to be communicated to bidder in writing.
 - b) Photocopies of Provident Fund Registration certificate, Income Tax PAN and GST certificate.
 - c) Bid documents duly signed & stamped in all pages as a token of acceptance.
 - d) In case of bidders submitting the documents downloaded from OPGC web site, the cost of bid documents (as per NIT) must be submitted (separately from EMD) in the form of Demand Draft. **The draft towards cost of bid documents must be drawn on or before the last date of sale of bid documents.**
 - e) Original price bid duly filled in, signed & stamped on each page shall be submitted. Any price breakup (if required) must be submitted separately. The rates offered by the bidder shall be clearly written in English (clearly hand written or typed) both in words and figures and shall be free from any aberrations, deletions, corrections and overwriting. In case of any illegibility of the offer submitted by bidder the interpretation by OPGC shall be final and binding on the bidder. Insertion, postscript, addition and alteration shall not be accepted after submission of the bid.

Note: Tenders submitted without the above requirements shall be liable for rejection.

- 2) Bidders are advised to submit the tender based strictly on the terms and conditions and specifications contained in the tender documents and not stipulate any deviations in normal case.
- 3) **OPGC will award the contract to the successful bidder whose bid (offered/evaluated) has been found the lowest i.e. on L-1 basis.**
- 4) OPGC reserves the right to evaluate the quotation on such deviations having financial implications by adding the cost determined by OPGC.
- 5) Wherever it is mentioned in the specification that the contractor shall perform certain work or provide certain facilities, it is understood that the contractor shall do so at his own cost.
- 6) Before quoting the rates the Bidder should go through the specifications, scope of work, special condition of contracts etc. and get himself fully conversant with them. The bid should include cost of mobilization and cost to adhere to all safety norms as described in the tender & OPGC contractor safety management program document no.EM4/61 (PART A). No relaxation or request for revision of quoted/accepted rates shall be entertained subsequent to the opening of bid on account of mobilization or Safety costs.
- 7) The details of items in the price schedule shall be read in conjunction with the corresponding technical specifications. Items of work provided in the price schedule but not covered in the technical specifications shall be executed strictly as per instructions of Engineer in charge.
- 8) The Bidders shall quote rates inclusive of the complete cost towards consumables, tools and tackles, equipments, labour, levies, taxes and duties if any, **all safety PPE's as per OPGC norms to all workmen**, rectification, maintenance till handing over, supervision overheads, profits and all incidental charges not specifically mentioned but reasonably implied and necessary to complete the work according to contract.
- 9) OPGC reserves the rights of accepting the whole or any part of the tender and bidder shall be bound to perform the same at their quoted rates.

GENERAL CONDITIONS OF CONTRACT



ODISHA POWER GENERATION CORPORATION LIMITED
7TH. FLOOR, ZONE – A, FORTUNE TOWERS,
CHANDRASEKHARPUR, BHUBANESWAR – 751 023
(ODISHA)

- 1.** Tenders are invited on behalf of the OPGC Ltd. for the work "Requirement of 5 nos. of C&I supervisor for one year for C&I Maintenance job of Unit 3 & 4 including AHS and other offsite areas of 2X660 MW. (Two Parts)".
- 2.** The Tender & rates shall be in the prescribed form provided by OPGC.
- 3.** The works are required to be carried out for 12 Months.
- 4.** Normally Bidders having corresponding class of license, PF Code, valid IT PAN & GST IN, expertise for the work required to be executed and financial capacity will be considered.
- 5.** The person who floats the NIT shall be the Accepting Authority herein after referred to as such for the purpose of this Tender.
- 6.** Applications for issue of tender documents shall be submitted to Accepting Authority so as to reach his office not later than dt.27/01/2021.
- 7.** A Bidder shall possess IT PAN, PF Registration certificate and GST IN.
- 8.** Tender documents consisting of plans, drawings, specifications, Schedule(s) of Quantities / Price Schedule of various classes of work to be done, the Conditions of Contract and other necessary documents.
- 9.** A Bidder should quote his rates in figures as well as in words. The amount for each item should be worked out and the requisite totals given. Special care shall be taken to write rates in figures as well as in words, and the amounts in figures only in such a way that interpolation is not possible. The total amount shall be written both in figures and in words. In case of figures, the words 'Rs.' should be written before the figure of rupees and the words 'Paise' after the decimal figures, e.g. Rs.2.15 P. In case of words, the words 'Rupees' should precede and the words 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'Only' it should invariably be up to two places of decimal.
- 10.** In the case of item rate Tenders, only rates quoted shall be considered. Any tender containing percentage below / above the schedule of rate quoted is liable to be rejected. In case of lump sum tenders, only quoted amount shall be considered.
- 11.** Any Bidder for the works shall not be witness in the Bid of any other Bidder for the same works. Failure to observe this condition shall render the Tender of the Bidder tendering as well as of those witnessing the Tender liable for rejection.
- 12.** Tender shall be received up to 3.00 P.M of dt.28/01/2021 and shall be opened at 3.30 P.M on 28/01/2021 in presence of those Bidders or their duly authorized representatives who may like to be present.
- 13.** The Tender shall be accompanied by Earnest Money @ Rs.20,000.00. The Earnest Money offered shall be in shape of Demand Draft/Pay Order in favor of ODISHA Power Generation Corporation Ltd. drawn on State Bank of India (Code-9510) / Union Bank of India (Code-UBIN0806625) / Central Bank of India (Code-283899).
- 14.** The Tender shall be accompanied with letter of undertaking on non-judicial stamp paper of appropriate value in the prescribed format.

15. The Earnest Money shall be made payable without any condition/demure to the Owner on demand. The Earnest Money shall be valid for a period of 03 (Three) calendar months from the date of opening of the bid

16. In consideration of the Owner opening and considering the Tender for purpose of award of Contract, the Bidder shall keep his Tender valid for a period of Ninety (90) days from the date of opening of the Tender, during which period the Bidder agrees not to vary, alter or revoke his Tender either in whole or in part. If the Bidder however, fails to keep his Tender valid for Ninety (90) days or varies its terms and conditions during the said period then the Owner shall be entitled to forfeit the Earnest Money amount without any notice or proof of damages etc. The Bidder shall submit his Tender as required in the Tender documents along with letter of undertaking in the proforma enclosed herewith.

17. The Earnest Money of all unsuccessful Bidders will be returned within thirty (30) days after the award of the Contract.

18. Any Tender not accompanied with Earnest Money in accordance with aforesaid provisions shall be rejected by the Owner as non-responsive Bid.

19. No interest will be payable by the Owner on the said amount covered under Earnest Money / other security deposits.

20. On finalization of Tender, Earnest Money deposited in form of DD of successful Bidder will be treated as part of the initial security at the option of the said Contractor or shall be returned to the successful bidder at his option.

21. A Bidder shall submit the Tender which satisfies each and every condition laid down in this notice and other tender documents, failing which the Tender will be liable to be rejected.

22. The ODISHA Power Generation Corporation Ltd. do not bind themselves to accept the lowest or any tender or to give any reasons for their decision. The Owner reserves the right to allow the Public Sector Undertakings price preference facilities as admissible under existing Govt. policy. The prospective Bidders may apprise themselves of the relevant Govt. notification in this regard before submission of their bid. The ODISHA Power Generation Corporation Ltd. reserves the right of accepting the whole or any part of the Tender or split the total scope of work among eligible Bidders and Bidder (s) shall be bound to perform the same at his/their quoted rates.

23. Except GST, Work Contract Tax or any other tax on materials in respect of this Contract shall be payable by the Contractor except service tax which shall be extra as applicable.

24. The right to accept the Tender rests with the Owner. The Owner further does not bind himself to accept the lowest tender and reserves the authority to reject any or all the Tenders received without assigning any reason whatsoever. The whole work may be split up between two or more Contractors or accepted in part (not entirely) if considered expedient. The rates shall be the lowest/negotiated for such eventualities. Tenders in which any of the particulars and prescribed information is missing or incomplete in any respect and/or the prescribed conditions are not fulfilled are liable to be rejected. The decision of the Owner in respect of the above shall be final and binding on the Bidders.

25. In case Contractor's labour go on strike with advance notice as per rule, it is responsibility of the Contractor to mobilize such manpower from their other sites or otherwise and continue the work so that execution of Contract is not affected. In such an event, the failure to perform shall lead the Owner to get the work done by any other agency, but at the cost & risk of the Contractor. Further, the Contract shall be terminated with seven (7) days' notice in O&M Contract and the Contractor may be debarred from participating in any future Bid in OPGC Ltd. In case of construction work, non-adherence to schedule shall lead to cancellation of Contract or imposition of penalty at the discretion of the Engineer-in-charge. If the labours go on strike without prior notice, the situation shall be treated as force majeure provided nonperformance is for a reasonable period only. If the situation is beyond reasonable control of the Contractor but has taken appropriate steps as a man of common prudence would have taken in his own case, Owner may consider in case to case basis to either terminate the Contract or otherwise get the work done by other means but at the cost & risk of the Contractor. Only events of such illegal strike, which make the performance impossible at the time of occurrence and for a considerable time period for mobilization, shall be considered as force majeure.

The period of Contract shall be specified in the Special Conditions of Contract. The Contract period shall reckon from the date of issue of LOI. OPGCL reserves the right to withdraw any item(s) of works from the scope by serving a 7 days' notice to the Contractor without giving

any reason for the same and take up the job departmentally or otherwise if performance of Contractor is found to be unsatisfactory. Value for the items of work thus withdrawn shall not be payable by the Owner. The Contractor shall not claim any compensation on this account. The period of Contract may be extended with mutual consent if the delay is beyond the control of Contractor at the discretion of the Engineer-in-charge.

26. SUSPENSION OF WORKS:

The Contractor shall, on receipt of the order in writing of the Engineer-in-charge, suspend the progress of the works or any part thereof for such time and in such manner, as the Engineer-in-charge may consider necessary for any of the following reasons:

- i) On account of any default on part of the Contractor; or
- ii) For proper execution of the works or part thereof for reasons other than the default of the Contractor;

In any of the above cases the Contractor shall properly protect and secure the works to the extent necessary and carry out the instructions given on that behalf by the Engineer-in-charge during such suspension period.

27. The Contractor shall employ labour in sufficient numbers to maintain the required rate of progress / attend the repair-maintenance on its occurrence and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the Engineer-in-charge. The Contractor shall not employ in connection with the works any person who has not completed his/her eighteen years of age.

28. The Contractor shall in respect of labour employed by him or his subcontractors comply with or cause to be complied with the Contractors Labour Regulations.

29. At present Employees State Insurance (ESI) Act is applicable to IB TPS, Contractor shall be liable to pay his contribution and the employees contribution to the State Insurance Scheme in respect of all labour employed by him for the execution of the Contract, in accordance with the provision of "The Employees State Insurance Act, 1948" as amended from time to time. In case, the Contractor fails to submit full details of his account of labour employed and the contribution payable, the Engineer-in-charge shall recover from the running bills of Contractor an amount of contribution as assessed by him. The amount so recovered shall be adjusted against the actual contribution payable for Employees State Insurance.

30. The Engineer-in-charge shall on a report having been made by an Inspecting Officer as defined in the Contractor Labour Regulations have been the power to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or worker by reason of non-fulfillment of the Conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said Contractors Labour Regulations.

31. In the event of the Contractor committing a default or breach any of the provisions of the aforesaid Contractors Labour Regulations as amended from time to time or furnishing any information or submitting or filling any Form/Register/Slip under the provisions of these Regulations which is materially incorrect, then on the report of the Inspecting Officers as defined in the Contractors Labour Regulations the Contractor shall without prejudice to any other liability pay to the Owner a sum not exceeding Rs.500.00 as liquidated damages for every default, breach or furnishing, making, submitting, filling materially incorrect statement as may be fixed by the Engineer-in-charge and in the event of the Contractor's default continuing in this respect the liquidated damages may be enhanced to Rs.500.00 per day for each day of default subject to a maximum of ten percent of the contract value. The Engineer-in-charge shall deduct such amount from bills or security deposit of the Contractor and credit the same to the Welfare Fund constituted under Contract Labour (R&A) Act 1970. The decision of the Engineer-in-charge in this respect shall be final and binding.

32. Model Rules for Labour Welfare: The Contractor shall at his own expense comply with or cause to be complied with Model Rules for Labour Welfare. In case the Contractor fails to make arrangements as aforesaid, the Engineer-in-charge shall be entitled to do so and recover the cost thereof from the Contractor.

33. Safety code: The Contractor shall at his own expense arrange for the safety provisions.

34. REMOVAL OF WORKMEN:

The Contractor shall employ in and about the Execution of the works only such persons as are skilled and experienced in their several trades and the Engineer-in-charge shall be at liberty to object to and require the Contractor to remove from the works any person employed by the Contractor in or about the execution of the works who in the opinion of the Engineer-in-charge misconducts himself or is incompetent or negligent in the proper performance of his duties and such person shall not be again employed in the work without permission of the Engineer-in-charge.

35. WORK DURING NIGHT SUNDAYS AND HOLIDAYS: Subject to any provisions to the contrary contained in the Contract, none of the permanent works except emergency maintenance work & operation shall be carried out during night or on Sundays or on authorized holidays without the permission in writing of the Engineer-in-charge. But in case of maintenance Contract, the Contractor shall be required to work any time any day as required by Engineer-in-charge.

36. NEGOTIATION OF RATES:

In case Owner finds the lowest price to be at higher side in consideration of market price of various inputs including labour component, may call the lowest Bidders for negotiation of price based on analysis of their rate etc.

37. Payment of running bill:

a) 90% payment along with 100% taxes & duties shall be released on monthly basis within 30 days from the date of submission of bills duly certified by EIC.

b) Balance 10% of basic order value will be released within 30 days after completion of the contract & clearance from EIC.

39. LABOUR LAWS

Contractor shall comply with all laws, ordinances, regulations and notification / instruction of Govt. concerning the health, wages, welfare, safety and employment and non-employment of his workers and shall exclusively bear the consequences of failure to comply therewith.

The following points are to be observed strictly by the Contractor.

i) No labour below the age of 18 (eighteen) years shall be employed on the work.

ii) The Contractor shall not pay less than the notified wages by the appropriate government towards minimum wages from time to time and must comply with Minimum Wages Act. The payment has to be made to the labours in the presence of authorized representative of the Owner / Engineer-in-charge.

iii) The Contractor shall at his expense comply with all labour laws and keep the Owner indemnified in respect thereof.

iv) The Contractor shall pay equal wages for men & women in accordance with Equal Remuneration Act 1976.

v) The Contractor under the Contract Labour (Regulation and Abolition) Act, shall have a valid Labour license from appropriate licensing authority prior to starting / within 15 days of commencement of the work under the Contract. Validity of the license shall be maintained till expiry of Contract period & its extension, if any.

vi) The Contractor shall employ labour in sufficient numbers to maintain the schedule of work and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the Engineer-in-charge.

vii) The Contractor shall furnish to the Engineer-in-charge at the interval of every 15 days a statement of the workmen employed on the works and also furnish information under rule 73 of ODISHA Contract Labour (R&A) Rule, 1975 or rules made there under.

40. PREPARATION OF BID:

The Bidder(s) shall submit the bid in two part, namely-

I) Techno commercial Bid and

II) Price bid

PART-I: TECHNO-COMMERCIAL BID

A complete set of original Tender documents as issued to the Bidder duly filled in as prescribed in different clauses of the Tender documents with signature & stamp in all pages as token of unconditional acceptance shall constitute Techno-commercial Bid.

The Bidder shall enclose the following & documents mentioned in qualifying criteria in this Bid.

a) **Crossed Demand Draft** for requisite amount drawn in favor of ODISHA Power Generation Corporation Ltd. in the manner prescribed above towards the Earnest Money and Tender cost without which the Tender will be summarily rejected.

b) **Details of work order of similar nature** and magnitude executed by the Bidder as per the qualifying criteria & other documents as specified in tender qualification criteria.

Note: If required additional sheet may be used to furnish all above information but in the format provided in General Conditions of Contract.

The techno-commercial bid with all its enclosures as mentioned should be put in an envelope, sealed & super scribed as "TECHNO-COMMERCIAL BID". **This envelope must contain Name of the work, NIT No., Due date of opening and Name & Address of the Bidder on bottom left hand corner of the cover.**

PART-II: PRICE BID

Kindly submit the Price bid in a different envelope as per BOQ.

Price bids of only those bidders will be opened who meet as per qualification criteria given below. The Owner shall not entertain any correspondence with any Bidder in relation to the acceptance or rejection of any Price Bid.

For and on behalf of ODISHA Power Generation Corporation Ltd.

Signature...Sd/-

Designation: GM-SCM – Contract Cell Unit 3&4 , ITPS.

Date:

QUALIFYING CRITERIA

Name of work: "Requirement of 5 nos. of C&I supervisor for one year for C&I Maintenance job of Unit 3 & 4 including AHS and other offsite areas of 2X660 MW. (Two Parts)"

Bidders having the following criteria shall only be considered to be qualified in the Techno-commercial Bid:

1. Party must have carried out the Similar work* of Annual Maintenance Contract on Control & Instrumentation for the Equipment's like Boiler & Auxiliaries, Turbine & Generator and all their auxiliaries and BOP includes Oil handling plant(HFO/LDO System), Ash Handling Plant/ESP,DM/ETP/PTP Plant, Fire Fighting System(Smoke/Heat, DV System, Inert gas System), AC & Ventilation system including chiller plant, CEMS, AAQMS, Raw water & CW system, Chlorination plant, Weigh Bridges, River intake with their all instruments, DCSs, UPSs, PLCs and etc. for super critical unit of Thermal Power Plant of capacity greater than or equal to 660MW.

AND

2. Must have worked in Govt./ Public Sector Utility .

Or

Must have worked in Private IPPs/ CPPs having Station capacity of 1000 MW or above

AND

3. Must have executed Minimum one Contract works for similar work of annual Maintenance contract of Thermal Power Plant Equipment's of 660MW capacity in last two years, out of which at least one Contract work must have been executed within last two years.

AND

4. Safety Requirement- Bidder Loss Time Hours must have been less than 200 Hrs in last 3 years. (Contractor's Self Certification)

AND

5. Must have successfully completed similar nature of jobs during last Two years ending the last day of the month previous to the one in which tenders are invited.

- a) At least single contract of value not less than Rs. 30 Lakhs for Similar work.

Or

- b) At least of two contracts of value not less than Rs.20 Lakhs each for Similar work.

AND

*Similar Work – It implies the Annual Maintenance Contract of the following.

- a) Boiler & Auxiliaries in Thermal Power Plant
- b) Turbine & Generator and all their auxiliaries in Thermal Power Plant
- c) BOP includes Oil handling plant(HFO/LDO System),Ash Handling Plant/ESP,DM/ETP/PTP Plant, Fire Fighting System(Smoke/Heat, DV System, Inert gas System),AC & Ventilation system including chiller plant, CEMS, AAQMS, Raw water & CW system, Chlorination plant, Weigh Bridges, River intake with their all instruments in Thermal Power Plant.
- d) DCSs, UPSs, PLCs in Thermal Power Plant

The party should have carried out the Annual Maintenance Contract of Sections as mentioned above of which have Control & Instrumentation work is mandatory in Thermal Power Plant.

6. Average Annual financial turnover during last three years (2017-18, 2018-19 & 2019-20) should be Rs.50 Lakhs or more. Audited Balance Sheet and profit & Loss A/C must be submitted along with the Techno-commercial Bid. In case the account is not audited a certificate from a chartered accountant should be produced towards turnover.
7. The bidder must have own Provident Fund Code, Goods and Service Tax (GST) Code and Income Tax PAN. Photocopies of these documents must be submitted along with Techno-commercial Bid.

NOTE:

- 1) **The bidders who are found qualified in above will be invited for the opening of the price bids.**
- 2) **All the above documents along with supporting documents to be enclosed in the Techno-Commercial Bid (PART-I).**

Owner reserves the right to obtain necessary documents and also to assess the qualification of the Bidder, subsequent to submission of bid, as deemed necessary by Owner to establish bidder's qualification.

SCOPE OF WORK

C & I EQUIPMENTS AT IBTPS

Sl.No.01 : Pressure Gauges/Temp. Gauges/DP Gauges :

- i) Dismantling of different gauges after necessary Process isolation.
- ii) Pre-Cleaning of the gauges at site
- iii) Cleaning/Service/Repairing/Calibration of the gauges at C&I Lab in presence of Lab In charge/Supervisor Filled, Sign & Submit the Standard calibration Report
- iv) Flushing/Venting/Leakage Arresting of the respective impulse lines and Valves.
- v) Re-installation & commissioning of the gauges
- vi) Any leakage observed to be attended by the contractor.
- vii) Proper House Keeping to be done after completion of job at site.

Sl.No.02: Pres Switch/Temp. Switch/Flow switch/Diff Pre Switch/Vacuum Switch etc:

- i) Dismantling of different switches after necessary Process and Power isolation.
- ii) Pre-Cleaning of the switches at field.
- iii) Cleaning/Service/Repairing/Calibration of the switches against the standard instruments at C & I Lab in presence of Lab In charge/Supervisor and Filled, Sign & Submit the Standard calibration Report
- iv) Flushing/Venting/ Leakage Arresting of the respective impulse lines & Valves.
- v) Re-installation of the switches with proper glanding of the cables & dressing of the cables in the terminals & junction boxes.
- vi) Loop checking from the control room in presence of the concerned Engineer.
- vii) Respective J.B. terminal to be cleaned and tightened, glanding & dressing of the cables.
- viii) Proper House Keeping to be done after completion of job at site.

Sl.No.03: Pressure transmitter / dP transmitter / Flow Transmitter / Level Transmitter:

- i) cross check with other instruments installed in same process line.
- ii) inlock/protection to be bypass
- iii) Dismantling of different types of transmitters after necessary Process & Power isolation.
- iv) Removal of wires from the transmitters after proper insulation (PVC Tape).
- v) Pre-Cleaning of the above transmitters at site
- vi) Cleaning/Service/Repairing/Calibration of the above Transmitters against the standard instruments at C & I Lab in presence of Lab In charge/Supervisor and Filled, Sign & Submit the Standard calibration Report.
- vii) Flushing/Venting/ Leakage Arresting of the respective impulse lines & Valves.
- viii) Re-installation of the transmitters with proper glanding of the cables & dressing of the cables in the terminals & junction boxes.
- ix) Respective J.B. should be cleaned and tightened, glanding & dressing of the cables.
- x) Loop checking from the control room in presence of the concerned Engineer.
- xi) Proper House Keeping to be done after completion of job at site.

Sl.No.04: Temp Tx / Thermocouple / RTD with/without Thermowell:

- i) cross check with other instruments installed in same process line.
- ii) inrlock/protection to be bypass
- iii) Removal of Temp Tx. / Thermocouple/RTD from its location.
- iv) Removal of wires from the transmitters after proper insulation (PVC Tape).
- v) Checking of Thermocouple erosion in the presence of concerned Engineer.
- vi) Orientation of the Thermocouple/RTD/Thermowell after necessary erosion checking.
- vii) Cleaning of the Thermocouple/RTD.
- viii) Replacement of the defective Thermocouple/RTD/Thermowell.
- ix) Loop checking from the panels/MCR.
- x) Cleaning/Servicing/Repairing/Calibration of the above Transmitters against the standard instruments at C & I Lab in presence of Lab In charge/Supervisor and Filled, Sign & Submit the Standard calibration Report
- xi) Respective JB & Insts. should be cleaned and tightened, glanding & dressing of the cables
- xii) Proper House Keeping to be done after completion of job at site.

SL. No. 05: HEA Arc Igniters:

- i) Dismantling of Igniters full assembly, Igniters rod, Oil gun limit switch, Igniter transformer, Flexible cable, Igniter advance/Retract limit switch after necessary Process & Power isolation.
- ii) Proper insulation to be made after removing the wires.
- iii) Pre-Cleaning of the above instruments.
- iv) Healthiness checking of the above instruments in presence of the concerned Engineer.
- v) Re-installation of the instruments after necessary clearance by the operation department.
- vi) Respective JB should be cleaned and tightened, Proper glanding & dressing of the cables.
- vii) Igniter rod travel checking and switch adjustment in presence of the concerned Engineers.
- viii) Ground checking of the wires.
- ix) Testing of instruments at field by giving command from panels with C&I Engineer.
- x) J.B./Terminal Box to be cleaned and tightened.
- xi) Loop checking from MCR with C&I Engineer.
- xii) Re-commissioning of the complete igniters assembly in presence of concern Supervisor/Engineer.
- xiii) Proper House Keeping to be done after completion of job at site.

SL. No. 06: Flame scanner:

- i) Dismantling of instrument with Proper insulation to be made.
- ii) Cleaning of the instruments to be done.
- iii) Checking of optical fiber, scanner head card, jam nut, lens, collimator tube, lens barrel assembly.
- i) Servicing/Repairing & Calibration of the scanner at C & I Lab in presence of Lab In charge/Supervisor and Filled, Sign & Submit the Standard calibration Report.

- iv) Re-installation of the scanner after necessary clearance from the Operation Department.
- v) Ground checking of wires.
- vi) Flame scanner panel checking in the presence of concerned Engineer/Supervisor.
- vii) Respective J.B. should be cleaned and TB tightened, glanding & dressing of the cables.
- viii) Loop checking from MCR with Engineer/Supervisor.
- xiv) Re-commissioning of the complete scanner assembly in presence of concern Supervisor/Engineer.
- xv) Proper House Keeping to be done after completion of job at site.

Sl.No.07: ON & OFF Pneumatic valves:

- i) Dismantling of all the accessories of ON/OFF Control Valve after proper process & Power isolation.
- ii) Cleaning / Servicing of various limit switches and solenoid valve air lock relays, booster relays, different pneumatic gauges & other related instruments.
- iii) Respective JB should be cleaned and TB tightened, glanding & dressing of the cables, proper wiring to be made. Ground checking of the wires to be made.
- iv) All valves to be checked by giving command from MCR in presence of concern Supervisor/Engineer.
- v) Re-commissioning of the Complete ON/OFF valve in presence of concern Supervisor/Engineer.
- vi) Painting/Labeling of the valves
- vii) Proper House Keeping to be done after completion of job at site.

Sl.No.08: Control valve / Dampers /SADC & Scoop positioners:

- i) Cleaning of the control valves/Dampers.
- ii) Checking of proper air line tubing, any leakage of air from the copper tube to be arrested.
- viii) Dismantling of Copper Tubes, Volume Boosters, I/P Converters, Air filter regulators, Air Lock relay, Solenoid Valve, Pneumatic Positioner, Position Feedback Tx. and all other accessories after proper process & Power isolation.
- ix) Cleaning/Servicing/Repairing/Calibration of the above Instruments against the standard instruments at C & I Lab in presence of Lab In charge/Supervisor and Filled, Sign & Submit the Standard calibration Report.
- iii) Re-installation of I/P Converter and proper connection wires to be made.
- iv) Cleaning of the positioner of the control valve/damper.
- v) Servicing of the positioner of the control valve/damper.
- vi) Cleaning& servicing of the air filter regulator/lubricator.
- vii) Functional checking of all the small gauges of the control valve/damper.
- viii) Replacement of the defective small gauges of the control valve/damper.
- ix) Cleaning of the position feedback transmitters, functional checking of the position feedback transmitter with their links.
- x) Respective JB should be cleaned and TB Tightened, Glanding & Dressing of the cables, Proper wiring to be made.
Ground checking of the wires to be made
- xi) Signal checking/Loop checking of the position feedback transmitter from the MCR.
- xii) Cleaning of the other associated instruments of the control valve/dampers, like solenoid valves, limit switches etc.
- xiii) Painting of the control valves with suitable colour supplied.

- xiv) Loop checking of the limit switch from MCR.
- x) Calibration of the control valves/dampers with Feedback at the field after proper signal given from the MA source and Filled, Sign & Submit the Standard calibration Report.
- xv) Final Operation of the control valves/dampers should be checked from the MCR in presence of C&I and Control Room engineers with commands.
- xvi) Proper House Keeping to be done after completion of job at site.

Sl.No.09: Float (Magnetic) Type Level Switch/Bar (Capacitance/Float) probe level switch, Level Transmitter:-

- i) Removal of level switches/ Level Transmitters from its location after dis-connection of power supply & Process Isolation with proper insulation.
- ii) Cleaning of the level switches/level transmitter (V.Automat & others).
- iii) Cleaning of the internal float, micro switches and other accessories of the level switches/level transmitters.
- iv) Checking & Replacement of the gasket damaged, worn out parts.
- v) Re-installation of the level switches/transmitters with proper care so that no damaged should occur to the equipment as V. Automat Transmitters have sensitive links.
- xi) Calibration of the level switches/transmitter by filling water to the equipment in presence of the concerned Engineer/Supervisor and Filled, Sign & Submit the Standard calibration Report.
- vi) Respective JB should be cleaned and TB Tightened, Glanding & Dressing of the cables, proper wiring to be made. Ground checking of the wires to be made & re-connection of the wires and loop checking from MCR in presence C&I Engineers
- vii) Proper House Keeping to be done after completion of job at site.

Sl.No.10 Oxygen Analyzer:

- i) Cleaning of O2 probes, Analyzer and its accessories.
- ii) Removal of O2 probes & Analyzer from the field after proper isolation (the power supply made off).
- xii) Checking of the O2 probe & O2 Analyzer at C&I Lab and Calibration the O2 Analyzer with sample gas and Filled, Sign & Submit the Standard calibration Report.
- iii) Installation of O2 probe with Analyzer at field.
- iv) Loop checking of the output signal.
- v) Switch ON the power supply in presence of the concerned Engineer/Supervisor.
- vi) Functionality checking of the O2 Analyzer at site
- vii) Re-commissioning assistance of oxygen analyzers as per the time schedule.
- viii) Proper House Keeping to be done after completion of job at site.

SL. No. 11: ANALYTICAL INSTRUMENTS INCLUDING SOX,NOX, CO, OPACITY:

Preventive/Breakdown Maintenance Which Includes the Followings:

- i) Cleaning and flushing of probes and electrodes.
- ii) Cleaning and servicing of analyzer.
- iii) Calibration (providing assistance) of analyzers.
- iv) Replacement and repair of defective parts.
- v) Overall maintenance of the system to ensure proper operation.
- vi) Ensure signal up to DCS if required.
- vii) Filling of checklist and calibration report.

SL. No. 12: SWAS System:

- i) Cleaning of SWAS Instruments, Transmitters, Analyzers, Sensors, Probes and SWAS Panels and its accessories.
- ii) Servicing/ Repairing/ Replacement of the SWAS Instruments and its accessories like Temp Gauges, Pre Gauges, Solenoid Valves, Connectors & fittings.
- iii) Calibration of SWAS system instruments and Filled, Sign & Submit the Standard calibration Report.
- iv) Loop checking of SWAS system instruments from MCR.
- v) Proper House Keeping to be done after completion of job at site.

SL. No. 13: UPS / 24 V DC System:

- i) The Voltage & Current readings of the DC system & Batteries to note down as per the instruction of Supervisor/Engineer before isolation of the system
- ii) Isolation of the panels from its input & output the supply & discharge any start up volt.
- iii) Cleaning of all panels of UPS and 24 Volt DC systems along with distribution boards and batteries.
- iv) Inspection/Servicing/Replacement of its various components, like Electronics Module, cooling fans, filter assemblies, capacitor banks, inductors assemblies etc.
- v) Tightening of all power distribution terminal points, chokes, capacitor banks, filters & other related power points.
- vi) Final checking of voltages/setting to be carried out in the presence of concerned Engineer/Supervisor.
- vii) Re-commissioning assistance of the panels as per the time schedule.
- viii) Proper House Keeping to be done after completion of job at site.

Sl.No.14: All Control Panel & Desks:

- i) Cleaning / servicing / overhauling / replacements of its individual components like Cooling Fans, MCBs, Terminal Blocks, modules etc, Healthiness checking of power supplies along with Terminal Tightness checking of TBs & MCBs
- ii) Checking of Ethernet & Power supply Cables, Tagging and its Dressing/rerouting
- iii) Carefully Cleaning of Desk Top/ Work Station/ Server/ Monitors as per the instruction of Engineer in-charge / Supervisor.
- iv) Proper House Keeping to be done after completion of job at site.

SL. No. 15: PC, MONITORS, PRINTERS & AUXILIARIES OF DCS AND PLCS.:

Preventive/Breakdown Maintenance

Which Includes the Followings:

- i) Isolate the printer, computer, Monitor & other related instruments electrically
- ii) Replace cooling fans in computers of DCS & PLCs if required.
- iii) Clean the printer, monitor, CPU, keyboard, mouse, large video screen & other peripherals by vacuum cleaner. Assist in replacement of faulty parts if required.
- iv) Normalize the connection.
- v) Assist in checking the printer, monitor, computer & electronic modules of DCS & PLCs.

- vi) Assist in attending the problems in DCS & PLCs.
- vi) Filling of checklist/work completion report.

SL. No. 16: IMPULSE LINES FOR GAUGES, SWITCHES & TRANSMITTERS:

Preventive/Breakdown Maintenance Which Includes the Followings:

- i) Isolate the gauge/transmitter/switch.
 - ii) Remove the gauge/transmitter/switch.
 - iii) Flush/purge the impulse line & check any leakages by soap solution
 - iv) Remove blockage attends the leakages in impulse line by welding if required.
- Normalize the gauge/transmitter/switch.
- v) Charge the impulse line and check for leakages and attend the same.
 - vi) Normalize the isolations. Ensure healthiness of the system after completion of the work.
 - viii) Filling of checklist/work completion report.

Sl.No.17: HPBP system:-

- i) Isolation of oil supply units & isolation of BP, BPE & BD valves.
- ii) Isolation of cables, plugs by proper procedure.
- iii) Dismantling of servo valves, blocking elements, Position feedback transmitters, fast opening devices of BPs, BPEs & BD valves
- iv) Servicing & cleaning of above servo valves & blocking elements, PFB transmitters in C&I lab in presence of LAB in-charge/Supervisor
- v) Installation of the above all devices into their original positions with taking all type of precaution after getting the Mechanical clearance.
- vi) Replacement of the defective items of the above Valves.
- vii) Re-commissioning of the BP, BPE & BD valves, Calibration & operation checking of the control valves from control room with C&I Engineer/Supervisor.

Proper House Keeping to be done after completion of job at site

Sl.No.18: Junction box:-

- i) Cleaning of the Junction boxes, tightening of the terminal Blocks.
- ii) Glanding/Tagging of all types of cables properly, redressing of the cables, terminal checking, Labeling, Sealing & door locking of the junction boxes.
- iii) Closing of all unnecessary holes of the JB & doors of the junction boxes.
- iv) Painting of the JBs
- v) Junction Box to be changed as per the chart handed over to you.
- vi) Proper House Keeping to be done after completion of job at site

Sl.No.19: Turbo Supervisory System:-

- i) Isolation of oil supply units & isolation of Turbo Supervisory Instruments & Valves
- ii) Isolation of cables, plugs by proper procedure/ as per instruction of Supervisor/Engineer
- iii) Dismantling of Turbo Supervisory Instruments like Diff Expansion. Overall expansion, Axial Shift, vibration sensors, Bearing Thermocouples/RTD, Turbine casings

- Thermocouples/RTD and all Stop & Control valve and its position feedback transmitter, remote position indicators and Limit Switches etc.
- iv) Servicing, Cleaning, Inspection, overhauling of all above Instruments with proper care and also in presence of Supervisor/Engineer
 - v) Installation of the above all devices into their original positions with taking all type of precaution after getting the Mechanical clearance.
 - vi) Replacement of the defective items as per the proper instruction of Engineer/Supervisor.
 - vii) Re-commissioning of above Instruments, Loop Checking, Cable Dressing/Rerouting of the Instruments and Calibration & operation checking of the control valves from control room with C&I Engineer/Supervisor.
 - viii) Proper House Keeping to be done after completion of job at site.

SL. No. 20: FIRE, SMOKE, HEAT & GAS DETECTORS:

Preventive/Breakdown Maintenance Which Includes the Followings:

This includes fire, smoke, gas & heat detectors. This also includes chlorine gas leak detectors.

- i) Removal of detector from location and carry the same at the site of servicing.
- ii) De-assembling (if required), checking and cleaning of all parts including detector base. Replacement of defective parts or defective detector.
- iii) Tightening of all loose parts including cable terminations at local junction box.
- iv) Assembly and re-mounting of the detector.
- v) Checking for proper healthiness.
- vi) Calibration (providing assistance) checking, where ever applicable.
- vii) Filling of checklist / calibration report.

SL. No. 21: Sonic Leak Detection system:

- i) Dismantling, inspection, cleaning/ servicing / overhauling / Installation, calibration and loop checking of Sonic Leak Detector, Control Module & Its Control Panels etc. in main plant. * PM Nature Jobs

SL. No. 22: CO2 Flooding system:

- i) Dismantling, inspection, cleaning/ servicing / overhauling / Installation, calibration and loop checking of CO2 Detector, Hooters, Lamps, Control Module & Its Control Panels in main plant. * PM Nature Jobs

SL. No. 23: Hydrogen/Chlorine & ammonia Detection system:

- i) Dismantling, inspection, cleaning/ servicing / overhauling / Installation, calibration and loop checking of Hydrogen/Ammonia. Chlorine Detectors, Hooters, Lamps, Control Modules etc. in main plant & BOP. * PM Nature Jobs

SL. No. 24: DIFFERENT SOLENOIDS:

Preventive/Breakdown Maintenance Which Includes the Followings:

- a. Isolating the solenoid.
- b. Removing the solenoid.

- c. Cleaning the plunger, ports.
- d. Replacing the plunger & seals if required.
 - e. Re-install the solenoid.
 - f. Normalize the isolation. Successful trial to be ensured from local & DCS if required.
 - g. Filling of checklist/work completion report.

SL. No. 25: VFD & THEIR AUXILIARIES:

Preventive/Breakdown Maintenance Which Includes the Followings:

- a. Isolate the VFD power & other related instruments electrically.
- b. Replace cooling fans of VFD if required.
- c. Clean the peripherals by vacuum cleaner. Assist in replacement of faulty parts if required.
- d. Normalize the connection.
- e. Assist in checking the rectifier, inverter, & electronic modules of VFDs.
- f. Assist in attending the problems in VFDs.
- g. Filling of checklist/work completion report.

SL. No. 26: PA SYSTEM:

Preventive/Breakdown Maintenance Which Includes the Followings:

- a. Isolating the power supply, Cleaning, servicing, checking,
- b. Replacing faulty parts and trial taking of PA systems.
- c. Filling of checklist/work completion report.

SL. No. 27: WEIGH BRIDGE:

Routine Preventive/Breakdown Maintenance Which Includes the Followings:

Isolating the power supply, cleaning, servicing, checking and calibration of weigh bridge load cell (including to and fro shifting/transporting of standard weights), Process Indicator, replacing faulty parts and trial taking of Weigh Bridge located inside plant. Filling of checklist/work completion/calibration report.

SL. No. 28: PAINTING:

Preventive/Breakdown Maintenance Which Includes the Followings:

Scope of work consists of painting of C&I panels, Local Instrument Enclosures (LIE/LIR) Instrument Gauge Racks (IGR), Marshalling Boxes, cable tray supports, impulse lines etc. Painting should be done carefully in an aesthetic manner and by properly covering the nearby areas not to be painted. Paint shall be provided by Contractor. Required consumables like brush, emery paper, cloth, etc are to be supplied by the contractor. Spray Painting m/c (as per requirement) shall also be arranged by the contractor at their own cost. The requirement of painting work is as per the instruction of Execution in charge.

SL. No. 29: HYDRATEST :

- i) Isolation of HYDRATEST vessel.
- ii) Isolation of cables, plugs by proper procedure.
- iii) interlock/protection to be bypass
- iv) If a serious probe leak occurs the standpipe should be isolated.
- v) Replace probe use meta-flex gasket during replacement of sensor.
- vi) Taking in service
- vii) Proper housekeeping after job completion.

SL. No. 30: LP BYASS system:

- i) Isolation of oil supply units & isolation of valves.
- ii) Isolation of cables, plugs by proper procedure.
- iii) Dismantling of servo valves, blocking elements, Position feedback transmitters of valves
- iv) Servicing & cleaning of above servo valves & blocking elements, PFB transmitters in C&I lab in presence of LAB in-charge/Supervisor
- v) Installation of the above all devices into their original positions with taking all type of precaution after getting the Mechanical clearance.
- vi) Replacement of the defective items of the above Valves.
- vii) Re-commissioning of valves, Calibration & operation checking of the control valves from control room with C&I Engineer/Supervisor.
- viii) Proper House Keeping to be done after completion of job at site

SL. No. 31: Vibration monitoring system:

- i) Isolation of oil supply units & isolation of valves.
- ii) Isolation of cables, plugs by proper procedure.
- iii) interlock/protection to be bypass
- iv) Cleaning/servicing/calibration if required.
- v) Vibration controller checking
- vi) power supply checking
- vii) normalization of system
- viii) Proper House Keeping to be done after completion of job at site.

SL. No. 32: DRIVE START/STOP CHECKING:

- i) Isolation of the system.
- ii) check the interposing relay is operative according to command.
- iii) 24vdc supply not available then check the fuse betwn. DCS card & T.B.
- iv) Cleaning/servicing/replacement of contactors.
- v) Mount back the instrument and put it in service.
- ix) Proper House Keeping to be done after completion of job at site.

SL. No. 33: Universal indicators/Converters checking:

- i) Isolation of the system.
- ii) Cleaning/servicing/replacement/ calibration to be done.
- iii) Mount back the instrument and put it in service.
- iii) Proper House Keeping to be done after completion of job at site.

SL. No. 34: EHTC System:

- i) Isolation of oil supply units & isolation of valves.
- ii) Isolation of cables, plugs by proper procedure.
- iii) Dismantling of Position feedback transmitters of valves
- iv) Servicing & cleaning of feedback transmitters in C&I lab in presence of LAB in-charge/Supervisor
- v) Installation of the above all devices into their original positions with taking all type of

- precaution after getting the Mechanical clearance.
- vi) Replacement of the defective items of the above Valves.
 - vii) Re-commissioning of valves, Calibration & operation checking of the control valves from control room with C&I Engineer/Supervisor.
 - viii) Proper House Keeping to be done after completion of job at site

SL. No. 35: MISCELLANEOUS:

Preventive/Breakdown Maintenance Which Includes the Followings:

Scope of work consists of providing assistance in miscellaneous C&I maintenance work. Services of technician along with helper for daily basis shall be considered as one unit of BOQ. Work under this includes cable laying, transportation of material from stores/site & vice versa (within plant premises), assisting to OPGC engineer for taking readings of plant special parameters, maintenance of C&I lab instruments, House keeping of Pneumatic and electronic LAB, fixing of tags in all instruments for ISO/IMS requirement, etc.. One dedicated technician will be deputed for Electronic lab who has basic knowledge of electronic circuitry. Small additions/deletions/modification works involved in the cable route, cable tray, cable termination, impulse lines, copper & PVC tubing, instruments, panel cutouts, welding and any other miscellaneous C&I maintenance works. Filling of checklist/work completion report. To assist Mechanical & Electrical maintenance in areas like Boiler, TG, BOP & AHP for removal/installation of instruments as per their requirement.

SL. No. 36: Exclusion:

- a. Cable Laying more than 300 mtrs will be paid separately as per the standard approved rate given in company SAP service job list.
- b. Installation of equipment which involves huge manpower (more than 10 person for single job) and tolls will be excluded from this contract and will be paid separately as per the standard approved rate given in company SAP service job list OR as per the job, rate approval taken by the management.
- c. High pressure welding is excluded.

SL. No. 37: SHIFT PREVENTIVE / ROUTINE MAINTENANCE AT EVENING / NIGHT SHIFT.

- a. All Preventive Maintenance / Routine maintenance arising during evening / Night shift as per the instruction of Execution in charge / Shift In-charge.
- b. Attending to defects of various equipment as per the instruction of Execution in charge / Shift In-charge.

**SCOPE OF
MATERIALS**

**LIST OF TOOLS & TACKLES, MEASURING INSTRUMENTS, CONSUMABLES TO BE
ARRANGED BY THE CONTRACTOR**

A. TOOLS & TACKLES (including but not limited to the following):

- 1. DE spanners (both mm and inches) – Normal size upto – 30 Min. 05 sets.
- 2. Ring spanners (both mm and inches) – Normal size upto 30 Min 05sets.
- 3. Box spanners (both mm and inches) – Normal size upto 36 Min 03 sets.

4. DE spanners (both mm and inches) – Normal size upto – 50 Min. 03 sets.
5. Slide wrench 6, 8 & 12 – 05 Min Sets
6. Pipe Wrench 300mm – 3 Min Sets
7. Combinational Pliers – Min 05 Min sets
8. Line Tester Taparia Make – 05 Min sets
9. Champion Set – 05 Min sets
10. Connector Taparia (932) - 05 Min Nos.
11. Watch Maker - 05 Min sets
12. Junior Hacksaw with Frame – 05 Min sets
13. Hammer Teflon - 05 Min sets
14. Copper Tube Cutter - 05 Min sets
15. Slide Cutting Pliers - 05 Min sets
16. Nose Pliers - 05 Min sets
17. Soldering Iron - 01 Min sets
18. Multimeter(Fluke) - 05 Min sets
19. Wire Stripper – 05 Min sets
20. Flat Screw Drives Small, Medium & Large - 05 Min sets
21. Torch Light(03 CELL) – 05 Min sets
22. Allen key set (both mm and inches) – Normal size, Min 05 sets.
23. Portable drilling machines -01 nos min
24. Drilling Bits spanners (both mm and inches) – Normal size upto 12 Min 01 sets.
25. General file set, needle file set- Min 02 sets.
26. Chisel set, Hacksaw frame with sufficient qty of blades (02 sets min)
27. Centre and hole punch set, letter and number punch set,
28. Flaring Tool- 2 nos
29. Pointer Puller- 2 nos.
30. Hand Lamp set (24V/240V) & Power Extension Board With RCCB - 3 nos
31. Filler Gauge- 2 Set
32. Thread Gauge 2 Set
33. Tube Benders 3 set
34. Surclip Plier Inner, Outer 4 Nos Each
35. Air Blower 02 Nos
36. Anti spark spanner set 1 set
37. Spray Painting Machine As Required.
38. Magnetic Spanner 01 set
39. Measuring tapes of 3m (05 set)

MEASURING INSTRUMENTS (including but not limited to the following):

B. CONSUMABLES (including but not limited to the following):

1. Cotton waste, Markin cloth, etc. as per requirement
2. General purpose cleaning & washing agents, Liquid soap for leak tests, etc as per requirement
3. Teflon tapes, PVC Tapes, emery sheets, wire brushes, hacksaw blades etc.
4. Silicon sealent,CRC,Petrol,Rustolin etc

C. SAFETY ITEMS To be provided to the men at job (including but not limited to the following):

1. Safety helmets, safety shoes, safety belts, safety goggles, earplugs, Leather gloves etc, of good quality.

NOTE: If EIC or OPGC safety officer feels that any of the tools or equipments being utilized for any work is of poor quality and may cause incident/accident, the contractor shall replace the same immediately

LIST OF OWNER ISSUE MATERIALS – FREE OF COST

The following items shall be issued on free of cost returnable basis

1. Special tools available for Turbine, BFP, CEP MILL,PA,FD ID FAN, etc.
2. Special equipments like Breathing apparatus shall be provided free of cost, if available.

The following items shall be issued as consumables as required

1. All spare parts
2. Paints, thinner, primer.
3. Special compounds like steel putty, anti-seize, etc.
4. Nitrogen Gas for pressure testing/ purging/ etc.

ANNUAL MAINTENANCE CONTRACT FOR CONTROL & INSTRUMENTATION WORKS

SPECIAL TERMS & CONDITIONS OF THE CONTRACT

A) Contract period & Quantities:-

1. The contract shall be for a period of one year from the date of start of execution of contract.
2. However, the contract can be extended further for the period of one year at same terms

& condition, if the job is found satisfactory to EIC.

3. OPGC however reserves right to terminate the contract any time before its scheduled completion date by giving 30 day's advance notice.
4. This is a rate contract. Quantities mentioned in the Schedules against each item are indicative only. During actual execution, the quantities of the items may vary in the plus or minus side depending upon exigencies of work. The contractor shall not have any extra claims over the agreed rates on account of increase or decrease in quantities during the contract period. Also execution of all items and their respective quantities are not binding on OPGC.

B) Familiarization:-

1. Bidder shall make himself familiar with the equipment and system of the Boiler & Auxillaries, Turbine & Generator and all their auxiliaries and BOP includes Oil handling plant(HFO/LDO System), Ash Handling Plant/ESP, DM/ETP/PTP Plant, Fire Fighting System(Smoke/Heat, DV System, Inert gas System), AC & Ventilation system including chiller plant, CEMS, AAQMS, Raw water & CW system, Chlorination plant, Weigh Bridges, River intake with their all instruments, DCSs, UPSs, PLCs and etc. under the scope of subject contract. If the contractor needs any technical details or additional information regarding equipment or work procedure in relation to the proposed work, he should do so before submitting the bid to OPGC.
2. It is imperative on each bidder to fully acquaint himself of all local conditions & factors, which may have effect on the execution of the work covered under the specifications. OPGC shall not entertain any request for clarifications from the bidder regarding such local conditions post-bid.
3. OPGC shall entertain no claim, whatsoever, nor any change in the time schedule of the contract thereof which arise on account of clear information or its effect on the cost of works to the bidder.

C) Type of work:

1. The plant area consists of 2 x 660MW coal fired Power plant. The area of work shall be Control & Instrumentation Work pertaining to Boiler & Auxillaries, Turbine & Generator and all their auxiliaries and BOP includes Oil handling plant(HFO/LDO System), Ash Handling Plant/ESP, DM/ETP/PTP Plant, Fire Fighting System(Smoke/Heat, DV System, Inert gas System), AC & Ventilation system including chiller plant, CEMS, AAQMS, Raw water & CW system, Chlorination plant, Weigh Bridges, River intake with their all instruments, DCSs, UPSs, PLCs and etc.
2. Contractor shall be responsible for all Preventive and Break down maintenance work of all equipments as mentioned in BOQ and to be executed as directed by engineer in charge. All manpower and tools required for the execution of the jobs are to be arranged by the contractor and is a part of the contract. In addition to these the contractor has also to arrange for necessary & sufficient manpower for carrying out other related plant/township jobs and emergency jobs.

3. Contractor may also be required to carry out works on Sundays and holidays, at odd hours, even in shift hours
i.e. morning/ evening and night. The maintenance works do not have any limitation of day and time and requirement may arise any time depending upon emergency of work to be attended. This will be at discretion of OPGC.
4. All the waste material generated has to be handled /disposed as per the instruction of the engineer-in- charge.
5. The contractor and his employees shall co-operate with all other agencies working at site.
6. All damaged and replaced materials or scrap generated during maintenance work shall be kept in safe custody and shall be handled / shifted and returned to OPGC Store/department/ Scrap yard as directed by Engineer-In-Charge.

D) Manpower:-

1. The contractor shall deploy High Skilled manpower as per requirement by OPGC for attending the jobs.
2. Only experienced, qualified and medically fit persons shall be deployed for specified jobs including working at height/ confined spaces.
3. The manpower deployed by the maintenance contract should be adequately qualified with experience in similar work and should be capable of executing the maintenance works independently. They must meet the statutory requirements for executing all the related jobs.

Requisite qualification/experience of the man power:-.

- A. Supervisor: Diploma/Degree in Electronics/Instrumentation with 5 years of exp. In Instrumentation & Control system in Thermal power plants of capacity more than 300MW.
4. EIC shall be the final authority in deciding the competency of the deployed persons and will take interview for competency before issuing the gate pass.
5. The contractor may have to deploy the manpower round the clock to meet the job requirement and as instructed by EIC.
6. The contractor will provide minimum 05 nos. of manpower on daily basis to carry out the jobs per month as per instruction of Engineer in-charge.

Manpower Break-up:

1. Supervisor: 05 nos.

E) Safety:-

1. The Contractor shall ensure that JSA, JSB, Permit-to-work is available for the equipment and the necessary isolations, electrical and process, have been done before proceeding for the work.
2. The contractor is fully responsible for the safety of his workmen especially during working at height and shall provide necessary safety appliances to them and also shall comply with all safety rules and regulations coming under the purview of statues and RGPPL rules.
3. The contractor has to take special precaution to ensure that the personnel under his control do not carry any combustible materials such as matchbox, cigarettes, etc. Smoking is strictly prohibited inside plant premises.
4. The people on job should have all personnel protective equipments like Safety shoes, helmets, hand-gloves, goggle, aprons etc as required for the job. These are necessarily to be arranged by the agency. Special protective equipments like breathing apparatus, etc. shall be issued by OPGC free of cost.
5. Party shall ensure that the tools and tackles used for execution of the C&I job are tested and certified by competent person before deployment on job and re-certified annually.

F) GENERAL:-

1. The contractor or his authorized representative shall report to EIC in the morning in time and shall remain available at site and shall give work progress and completion report on daily basis. The site in charge should have mobile phone for better communication and to facilitate the day to day work.
2. Any fault in the equipment, which is attributable to the poor workmanship of the contractor, has to be borne by the contractor free of cost & no extra payment will be made for the work.
3. The contractor and his employees should maintain the House Keeping of the equipment and their surroundings and no material, waste items, lubricants etc. can be left at site.
4. A weekly level meeting will be held with EIC for reviewing progress for the previous week and scheduling programmed for the next week.
5. OPGC will provide electricity, compressed air, water, etc. free of cost and at specific locations to facilitate maintenance.
6. Contractor shall be responsible for safe custody of all materials, consumables, spares, tools & tackles, special tools etc. issued to him by OPGC including his own supply items as per contract. The contractor, however, shall provide boxes, lockers, locks etc. to his staff for staff custody of the items.
7. The contractor shall make his own arrangements for transportation of materials and

Manpower from store, sub-store or any stock yard.

8. Collecting material from stores transporting to work site shall be responsibility of the contractor.
9. The owner shall provide him space for storage of materials tools in plant. The contractor however shall provide box lockers to his staff for safe custody of items.
10. Necessary entry gate pass for plant Premises will be required for the contractor employees as per rules pertaining at the time of contract. Contractor shall sufficiently in advance, complete the necessary formalities required to get the gate pass.
11. Any other miscellaneous work not mentioned but required for completion of job is included in the scope of work and contractors will not be paid any extra amount for the same.
12. If any type of defect persists after completion of Preventive Maint. of particular Equipment, the same is to be attended free of cost by the contractor.
13. Proper housekeeping of the area after completion of work is also the responsibility of the contractor. If proper housekeeping is not maintained inside the plant a **penalty of Rs 5000/ per job** of the contract value will be deducted from the contractor.
14. If the contractor fails to carry out any PM or any job due to lack of manpower, **its amount will be deducted** from his running bill.
15. In case work is suffered /delayed due to non availability of proper tool & tackles penalty of **Rs 10000.00** will be levied for each work.
16. Safety of tool handling and personnel shall be ensured by the contractor & it is mandatory, If safety instruction is not followed by contractor workman then penalty of **Rs 10000.00** will be levied for every unsafe act.
17. Over time will be paid to contractor if job is extended due to job continuation after shift hours (including General shift)in case of emergency .The cost of maximum over time period will not exceed Rs 30000.00 per month.
18. In case of manpower shortfall in deployment of manpower of the contract, deduction shall be made on **pro-rata basis of RA Bill** (for example suppose manpower shortfall is 10%. then deduction **RA Bill for Rs X** shall be **Rs 0.1 X** .i.e. amount payable shall be only **90% of RA Bill**).

19. Terms of Payment:-

- a. The contractor shall comply with all the statutory requirements covered under Minimum Wages Act, PF, Safety, Insurance, ESI etc. He should have a valid labour license.

- b. Contractor may raise RA bills once in a month against work executed in a month through work measurement record duly certified by the section engineer, along with certified wage sheet of the month, PF & ESI statement of the previous month after depositing in the individual accounts.

- c. The contractor shall comply with all rules and regulations of local authorities during the performance of the contract. He shall comply with minimum wages act and the payment of wages act and the rules made under in respect of any employee or workmen employed by him and he has to keep the all necessary records with him as required under different labour laws and if required, he has to produce the same to OPGC.

- d. The contractor shall have the group insurance for the working manpower at site looking the scope of work and as per the statutory rules for the complete period of contract.

**BOQ & PRICE BID FORMAT
ENCLOSED**

Bank MANDATE FORM for e-payment
(To be submitted in Duplicate)

To.
Odisha Power Generation Corporation Ltd.,
Ib thermal power station,
Banharpali,
Odisha.

Dear Sir,

Sub: - Authorization for release of payment due from OPGC Ltd through e-mode facilities of RTGS / NEFT / Internet Banking.

We are the regular contractor/Supplier to your organization and are executing work /supplying materials under different Contracts/ Purchase Orders to OPGC Ltd. We request you to release the payment of the outstanding amount electronically i.e, through RTGS, NEFT, Fund Transfer or any other suitable way. The details of our bank account are as follows: -

(Please fill in the information in CAPITAL LETTERS. Please TICK wherever it is applicable)

1. Name of the Party:

2. Address of the Party

.....

City Pin Code

E-mail ID

Permanent Account Number

Telephone/Cell No.....

3. Particulars of Bank :

Bank Name		Branch Name	
Branch Place		Branch City	
Pin code		Branch Code	
MICR No			
Account Type	Savings:	Current:	Cash Credit:
Account No. (as appearing in the Cheque Book) :			
(9 Digits code number appearing on the MICR Bank of the cheque supplied by the Bank. Please attach Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name & code and Account number)			
IFSC Code			

4. Date from which the mandate should be effective :

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information, I shall not hold Odisha Power Generation Corporation Ltd responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through internet / RTGS / NEFT.

Place:

Date : Signature of the Party / Authorized Signatory

.....
Certified that particulars furnished above are correct as per our records.

Bank's Stamp:

Date: (Signature of the Authorized Official from the Banks)

(On Non Judicial stamp paper of Appropriate value)

Ref:
Date:
Bank Guarantee
No.

To
Odisha Power Generation Corporation Ltd.,
1b Thermal Power Station,
At/Po- Banharpali, Dist-
Jharsuguda-768234.

Dear Sir,

In consideration of Odisha Power Generation Corporation having its Registered office at 7th.Floor, Zone – A, Fortune Towers, Chandrasekharpur, Bhubaneswar-751 023 (hereinafter called the "Owner" which expression shall unless repugnant to the subject or context include its successors and assigns) having issued Tender Specification Against NIT

No _____ dt. _____ to M/s _____ having its Registered / Head office at _____ (hereinafter called the Bidder) who wishes to participate in the said tender for and you, as a special favour, have agreed to accept an irrevocable and unconditional Bank Bid Guarantee for an amount of Rs. _____ valid up to _____. On behalf of the Bidder, as a condition for participation in the said tender.

We, the _____ Bank incorporated under _____ law and having one of our branches at _____ and having our Registered office/Head office at _____ do here by unconditionally and irrevocably guarantee and undertake to pay to the "Owner" immediately on demand without any demur reservation, protest, contest and recourse to the extent of the said sum of Rs. _____ (Rupees _____ only). Any such claim/demand made by the said "Owner" on us shall be conclusive and binding on us irrespective of any dispute or differences raised by the Bidder. This guarantee shall be irrevocable and shall remain valid up to _____. If any further extension of this guarantee is required, the same shall be extended to such required period on receiving instructions from M/s _____ on whose behalf this guarantee is issued.

We, the said Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the owner in writing and agree that any change in the constitution of the said tenderer or the said Bank shall not discharge our liability. In witness where of the Bank, through its authorised officer, has set its hand and stamp on this _____ day of _____ 20_____

Witness:

(Signature)

Name _____

(Signature)

Name _____

(Designation with Bank stamp) Official Address

Attorney as per Power of Attorney

No. _____

_ Date _____

PROFORMA OF BANK GUARANTEE FOR CONTRACT PERFORMANCE

(On Non-Judicial Stamp paper of Appropriate Value)

1.0 In consideration of OPGC Ltd. Having its registered office at Zone-A, 7th Floor, Fortune Tower, Chandrasekaharpur, Bhubaneswar-751023, Odisha herein-in after called the “Owner” which expression shall unless repugnant to the subject or context include its successor & assignees) having awarded to M/swith its Registered/Head office at..... here-in after referred to as the “Contractor” which expression shall unless repugnant to the subject or context include its successor, executors & assignees) a contract by issue of Owner’s Letter of Intent No. dt. and the same having been unequivocally accepted by the contractor resulting in a contract bearing No.dated valued at Rs.....for and the contractor having agreed to provide a contract performance (Scope of work) Guarantee for the faithful performance of the entire contract equivalent Rs. 10% (ten percent) of the said value of the contract to the owner for satisfactory performance of the equipment/materials supplied (as detailed in the said agreement) during the Guarantee period (as detailed in the said agreement) and for the due fulfillment by the contractor(s) of the terms and conditions contained in the said agreement.

2.0 We(here-in after referred to as “ the bank”
(Name & address of Bank)
having its Head Office at do hereby guarantee and undertake to pay the owner, on demand any and all amount payable by the contractor not exceeding Rs.(Rupees.....) only as aforesaid at any time upto (days/month/year)

3.0 We do hereby
(Name of Bank)
undertake to pay the amounts due to and payable under this guarantee without any demur, reservation, contest, recourse or protest and/or without any reference to the contractor. Any such demand made by the owner on the Bank shall be conclusive and binding notwithstanding any difference between the owner and contractor or any dispute pending before any court, tribunal or any other authority. The bank undertakes not to revoke this guarantee during the currency without previous consent of the Owner and further agrees that the guarantee herein contained shall continue to be enforceable till the owner discharges this guarantee.
The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s)/suppliers shall have no claim against us for making such payment.

4.0 We further agree that the
(Name of Bank)
guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all dues of OPGC have been fully paid and its claims satisfied or discharged until OPGC certifies that the terms & conditions of the said Agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.

5.0 We further agree with the
(Name of Bank)
OPGC that OPGC have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the OPGC against the said contractor(s) and to for bear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, postponement or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the OPGC or any indulgence by the OPGC to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

6.0 This guarantee will not be discharged due to the change in the name, style and constitution of the Bank or the contractor(s)/suppliers(s).

7.0 Notwithstanding anything contained herein a)Our liability under this bank guarantee shall not exceed Rs.....[Rupees]
b) This bank guarantee shall be valid uptoc) We are liable to pay the guaranteed amount or any part thereof under this B.G only and only if the beneficiary/Govt. serves upon the bank a written claim or demand on or before

8.0 Welastly undertake not to revoke this
(Name of Bank)
guarantee during its currency except with the previous consent of the OPGC in writing.
Dated theday of200...

9.0 Notwithstanding anything contained hereinabove our liability under this guarantee is restricted to Rs.....(Rupees..... only) and this guarantee is valid upto We shall be released and discharged from all liabilities hereunder unless a written claim for payment under this guarantee is lodged on us within three months from the date of expiry of the guarantee i.e on or before Irrespective of whether or not the original guarantee is returned to us.

The confirmation of this Bank Guarantee is available within our controlling office. The beneficiary in his own interest should obtain such confirmation from the controlling office at the following address

WITNESS with address

- 1.
- 2.

For and on behalf of (the Bank)

- Signature
- Name
- Designation
- Authorisation No.
- Seal of the Bank