

Name of Work: AMC for Operation & Maintenance of Route Relay Interlocking (RRI) Panel & S&T System, Electrical Maintenance of all five (05) Stations (ITPS, Chharlla, Ghidghara, Kechobahal & Manoharpur), Operation of Weighbridges at ITPS & Manoharpur Station and other misc. works at MGR, OPGC for the Period of 02(Two) Years.

Brief Description of Merry Go Round (MGR) System at Ib Thermal Power Station of M/s OPGC Ltd.

Odisha Power Generation Corporation Ltd (OPGC Ltd) a 100 % Government of Odisha owned PSU has Ib Thermal Power Station (ITPS) at Banharpali, Dist. Jharsuguda, Odisha. ITPS has a comprehensive MGR private siding network for transporting coal from M/s Mahanadi Coalfields Ltd (MCL), Lakhanpur (A subsidiary of Coal India Ltd) mines to our siding at a distance 9 km and from M/s Odisha Coal and Power Limited, OCPL mines of Manoharpur at a distance of 47 KM. The MGR System is to transport coal from M/s MCL, Lakhanpur area for OPGC I Units and from M/s OCPL, Manoharpur for OPGC II Units.

The Power Station has two generating stations of 2x 210 MW since the year 1994 and uses fossil fuel Coal to meet its requirement of steam and also completed 2x660 MW thermal power plant in July 2019. The present 2X210 MW & 6 x 660 MW Units use about 30,000 MT of coal daily. The transportation of coal is facilitated through an elaborate railway network called the Semi Merry-Go-Round Railway System (MGR) owned by the OPGC for M/s MCL siding and MGR system for M/s OCPL siding. The coal from both siding is transported by using 02 WDM2A (2600HP) LOCO, 02 WDG3A (3100 HP), 03 WDG4D loco (4500HP) ,147 BOBR coal hopper wagons , about 84 ETKM track and five RRI signal station each station about 10 KM apart .

The MGR System has about 84 ETKM of Broad-Gauge track. The Chharlla coal loading yard at Chainage 9/300 KM is connected to MCL line for connection to Indian railway network at Chainage 14/800 KM and OCPL siding at 47/283 KM. The 84 ETKM of Broad Gauge (1676 mm) track consists of 60 Kg Rail & 60 points & crossings in loading (two loading yard and unloading yard) , single and SWR length railway track , associated accessories, S&T System (Route Relay Inter-locking Arrangement at five signal panel from Chainage 0 / 000 Km to 47/283 Km) & MGR Workshop / Loco maintenance Work shop.

At present, loaded coal wagons travel from Chharlla loading yard at Chainage 9/300 KM of M/s MCL and Manoharpur loading yard at 45/ 000 KM of M/s OCPL to the Power Plant and discharge the coal on the two track hoppers located at coal handling area inside Plant. The coal rake travels on a single track and takes a loop inside the Plant area from the Workshop panel building to enable the weighment of coal and discharge of coal on the hoppers. The entire movement of locomotives and wagons are controlled from five signal panel buildings through a Signaling and Telecommunications network.

Scope of Work

The Scope of Work are mentioned below for items mentioned in bill of Quantity (BOQ).The agency shall have to carry out the O & M work for the following items of the MGR system. The details are mentioned for each category of work as under.

A)The Detail Scope of Work for maintenance of S&T system of 05 Stations

BOQ SL No 01 to 05:

- Maintenance of S &T System of MGR at ITPS.
- Maintenance of S &T System of MGR at Chharlla Station.
- Maintenance of S &T System of MGR at Ghidghara Station.
- Maintenance of S &T System of MGR at Kechobahal Station.
- Maintenance of S &T System of MGR at Manoharpur Station.

Detail Maintenance Schedule for 05 Stations

- Maintenance of the signaling system shall be carried out as per the guidelines stipulated in the Indian Railway Signal Engineering Manual.
- Routine Maintenance/Periodical Maintenance/Preventive Maintenance. Maintenance of communication system between ITPS to Manoharpur.
- Attendance of failures related to Breakdown Maintenance and related to Signaling/Telecommunication System.
- Deployment of Skilled and experienced manpower for maintenance of RRI Station.

Control Panel Room

- Check that when SM key is taken out is shall not be possible to do any operation.
- Checking of buzzer and indicator for signal failure, point failure, button held operation.
- Check that the panel indication of flasher is working.
- All emergency button should be tested for proper functioning.

Relay Room

- Relay should be inspected for dust free.
- Check for proper fuses in relay rack and ensure that no fuse is bypassed.
- Check for clean and neat soldering on contact pins of relay, tag block.
- Visual inspection of different Relays.
- Hanging of wires shall be neatly dressed up.
- Testing of earth resistance of Relay Rack & CT Rack.
- No short cut methods shall be adopted in case of rectification of failure.

Axle Counter Room

- Visual inspection of healthiness of cards and Relays.
- Measurement of Voltages and frequency of VESBA card and record it.
- Checking of fuses of evaluation computer (EC).
- Checking of output voltage of outdoor Unit.

IPS Room

All IPS Panels, class-B Surge Protector, ASM Box

- External cable routing and termination checking.
- Checking of Earth resistance.
- Checking status of lighting and surge protection arrangement.
- Checking of Cleanliness of the rack Panel

SMPS Panel

- Check main supply voltage in IPS switched off Condition
- Check AC voltage switching of the IPS 15 minutes later all the loads should work.
- Check voltage drop in AC between switched off and on condition.
- Check AC Current
- Check mode of charging (float/boost) of SMPS Module
- Check DC voltage of the module
- Check DC Current of the module
- Check DC voltage on the battery terminals, point machine interconnection terminal.

AC Panel

- Check input DC voltage for inverter
- Check the voltage of Inverter
- Check input to CVT/AVR
- Check the output voltage of CVT

- Check signal load current
- Check the changeover between inverter and CVT

DC Panel

- Check DC input voltage for DC-DC Converter
- Check DC output voltage for DC-DC Converter
- Check output load current

Battery Room

- Specific gravity and voltage of each cell should be measured periodically and recorded.
- Proper level of electrolyte to be maintained.
- Secondary cell vents should be proper.
- Functioning of exhaust fan.

DG Room

- Checking of Mobil level topping if required.
- Checking of voltage and current of Generator.
- Checking and cleaning of commutator, carbon brush, brush holder etc.
- Checking of bearing greasing, greasing if required.

UFSBI

- Visual inspection of different types of cards.
- Checking of output voltage of power supply cards.
- The BPAC system must have a separate Earthing, which should be maintained at regular interval and the Earth resistance must be kept below 2 ohms.
- The communication link db loss and SNR should be periodically checked. In case of copper conductor, cable insulation resistance and loop resistance must also be periodically measured and recorded.
- In case any one of the CPU is showing an error code and the system is working in 2/3 mode, the fault must be attended immediately as directed in the error code list as Preventive Maintenance action.

SSDAC

TX & RX Coil Axle Detectors

- Measure TX coil (21 KHz & 23 KHz) signal levels and Rx coil (21 KHz & 23 KHz) signal levels. These should be within the specified limits.
- Check and tighten M12 Bolts & Nuts of web mounted TX & RX coil Axle detectors if found loose.
- Check and tighten the deflector plates if found loose.

SSDAC Unit

Measure & Record:

- 2.2V DC signal levels of card 1&2 of the SSDAC Counting Units
- DC-DC converter output voltages.
- The modem card output.
- Relay driver output.
- Check & tighten the screws of modules and MS circular connectors if found loose.

Color Light signal

- The lenses of light signals should be kept cleaned.
- The voltage and current of RG, HHG, HG, Co, Route, DG and Shunt signal should be tested and recorded.
- The LED should be seated properly.
- The cable terminal should be tight.
- Earth resistance should be tested and recorded periodically.

Electric Point Machine

- All the point machines are to be kept free from dust and rust.
- Slide chairs should be lubricated with black oil.

- There should be no pitting on the contacts of the point machine.
- Operating detectors, lock slide and drive slide should be lubricated properly to reduce friction in their movement.
- Obstruction test has to be carried out with 1.75 mm and 5 mm test gauge.
- Functioning of overload current and disengagement of clutch should be checked.
- Normal working current, voltage and obstruction Current and voltage should be measured and recorded.
- All greasing points should be greased as per instruction given in the manual.

Location box

1. The doors of location boxes should be functioning smoothly.
2. All the terminals should be tight.
3. Track circuit equipment like track charger, track feed resistance, Choke should be in their proper place and secured.

DC Track Circuits

1. Proper connectivity of Track Charger, Choke and Resistance should be checked and terminal to be tightened.
2. Specific gravity and Voltages of secondary cell should be checked and recorded.
3. Voltage and current at Feed end and Relay end should be checked and recorded.
4. Track Relay voltage should not exceed 250% of rated voltage in dry season and 125% in wet season.
5. All lead connections should be tightened and clear from dust and rust.
6. Continuity bond should be checked regularly.

B)The Detail Scope of Work for RRI Signaling Panel Operation of 05 Stations

BOQ SL No 06 to 10:

- Engagement of One Cabin Operator for RRI Signaling Panel Operation at ITPS.
- Engagement of One Cabin Operator for RRI Signaling Panel Operation at Chharlla Station.
- Engagement of One Cabin Operator for RRI Signaling Panel Operation at Ghidghara Station.
- Engagement of One Cabin Operator for RRI Signaling Panel Operation at Kechobahal Station.
- Engagement of One Cabin Operator for RRI Signaling Panel Operation at Manoharpur Station.

BOQ SL No 11 to 15:

- Engagement of One Asst.Cabin Operator for RRI Signaling Panel Operation at ITPS.
- Engagement of One Asst.Cabin Operator for RRI Signaling Panel Operation at Chharlla Station.
- Engagement of One Asst.Cabin Operator for RRI Signaling Panel Operation at Ghidghara Station.
- Engagement of One Asst.Cabin Operator for RRI Signaling Panel Operation at Kechobahal Station.
- Engagement of One Asst.Cabin Operator for RRI Signaling Panel Operation at Manoharpur Station.

Operation of RRI Control cum Indication Panel

The agency has to deploy experienced railway staff or Panel Operator having 1-5 years' experience in PI/RRI Panel Operation who will carry out the related works of station signaling system operation as per the instruction of Engineer-In-Charge (EIC) of OPGC MGR department.

(a)For safe operation of the MGR system, retired railway staffs or person having experience of 1 to 5 years in related field are required to be deployed. The staff required to be deployed is called "Assistant Station Master" (ASM)

- (b) Round the clock manning and operation of Panel operated cabin (05 Nos) of OPGC for inward and outward traffic including Sundays & holidays.
- (c) Maintenance of records as being applicable for OPGC for operation of train movement following IR pattern.
- (d) Minimum 04 nos of ASM (Panel Operator) may be deployed for round the clock manning in shifts. Deployment of 04 nos skilled workers(Asst.Panel Operator) for round the clock manning in shifts for multi various jobs in connection with movement of traffic like pilot in/out memos, caution order, clearing of obstruction in the points etc.
- (e)Applicable rules and regulations as per Indian railway operation and safety manual, General and subsidiary Rules, Station Working Rules may be observed.

(C)The Detail Scope of Work for Electrical Maintenance of HT/LT System of 05 Stations

BOQ SL No 16 to 20:

- Electrical Maintenance at ITPS Station Yard for HT/LT System.
- Electrical Maintenance at Chharlla Station Yard for HT/LT System.
- Electrical Maintenance at Ghidghara Station Yard for HT/LT System.
- Electrical Maintenance at Kechobahal Station Yard for HT/LT System.
- Electrical Maintenance at Manoharpur Station Yard for HT/LT System.

Maintenance of Electrical installation at ITPS, Chharlla, Ghidghara, Kechobahal & Manoharpur Yard

Maintenance of the following electrical systems throughout the period of contract, which will include Preventive/Predictive/Breakdown/Routine Maintenance also and the frequency of operation and maintenance will be decided by the Engineer-In-Charge.

- (i) Maintenance of Electrical/ Lighting system (Indoor & outdoor)
1. ITPS,Chharlla,Ghidghara, Kechobahal & Manoharpur Station building.
 - 2.Signal Goomties
- (ii) Attend to all types of Routine/Preventive Maintenance work such as checking /cleaning, tightening of all electrical accessories and switch gears, DBs, HT/LT breakers, HT/LT panels, feeder pillar, Distribution panel, Distribution boards, switch boards at Station Building and cleaning the same at regular intervals.
- iii) Maintenance of High Masts (09 nos) at Manoharpur loading yard & one no each at Ghidghara & Kechobahal station.
- (iv) Liaison with TPWODL regarding various matters pertaining to energy-meters, continuous power supply at 04 Stations 11KV/0.433 Substation.
- (v) All tools and machinery required for Routine/Preventive maintenance work such as pliers, cutters, screw drivers, spanner sets, blowers, drill machines, meggers, clip on meter, multi meter, earth tester etc. shall be provided by the Contractor. No extra payment will be made for the same.
- (vi) The agency has to report daily the status of equipment and electrical maintenance activities and Keep records of all items.
- (vii) The Contractor has to deploy Electrical technicians on all working days during normal working hours having minimum qualification of Diploma or higher in Electrical with a min. 5-year experience of supervision and Maintenance of various Electrical Works. He should be able to supervise all the jobs and coordinate with EIC for all day-to-day jobs

(viii)The Contractor has to also deploy the skilled manpower (Electrical Assistant) on regular basis and as per requirement from time to time.

(D)The Detail Scope of Work for Weighbridge Operation at ITPS & Manoharpur Station

BOQ SL No 21 to 23:

- Round the clock Operation of Weighbridge at ITPS.
- Round the clock Operation of Weighbridge no 1 at Manoharpur Station.
- Round the clock Operation of Weighbridge no 2 at Manoharpur Station.

Round the clock Operation of Weigh Bridges

The agency has to provide the services 24 X7 that is round the clock by deputing experienced man power at “In motion Weigh Bridges”.

1. The bidder has to engage minimum Diploma holder to execute the work. Knowledge of computer is essential.
2. Operation of weigh bridge system include Stabilizer / Online- UPS, Printer, Computer and all its associated peripherals.
3. Data entry in Weigh bridge software, print all rake detail with tare and gross weight.
4. Shift wise regular reporting to EIC or its authorized representative
5. Manpower deployed by agency must have railway In motion weigh bridge experience.
6. Housekeeping and File Management at Weigh Bridge is the responsibility of agency.
7. The agency will depute work men of required skill level for execution of the job. The supervision of the job shall be done by the agency.
8. All statutory compliances required for the execution of job, shall be met by the agency. The agency shall completely indemnify Odisha Power Generation Corporations Ltd. (OPGC) against any eventuality by presenting indemnity bond.
9. The agency shall ensure 100% compliance of all Statutory norms along with the EHS norms of OPGC.

(E)The Detail Scope of Work for Housekeeping & Cleaning of Panel Building of 05 Stations.

BOQ SL No 24 to 28:

- Housekeeping and Cleaning of ITPS Panel Building.
- Housekeeping and Cleaning of Chharlla Station Panel Building.
- Housekeeping and Cleaning of Ghidhghara Station Panel Building.
- Housekeeping and Cleaning of Kechobahal Station Panel Building.
- Housekeeping and Cleaning of Manoharpur Station Panel Building.

The agency has to provide man power at 05 Station building for cleaning of Station Building & Signal goomties.

(F)The Detail Scope of Work for Operation of Manual Point & Crossing at two location (81& 82) at ITPS.

BOQ SL No 29:

- Round the Clock operation of Manual Point & Crossing at two location (81& 82) at ITPS.

The agency has to provide the services 24 X7 that is round the clock by deputing experienced man power at “Manual point and crossing” Point no (81 & 82).

- The bidder has to engage minimum ITI holder to execute the work.
- The “Manual point and crossing of Point no. 81 & 82” are to be operate safely. Both the points are inside the OPGC Plant at ITPS.
- Shift wise regular reporting to EIC or its authorized representative.
- The agency will depute work men of required skill level for execution of the job. The supervision of the job shall be done by the agency.
- All statutory compliances required for the execution of job, shall be met by the agency. The agency shall completely indemnify Odisha Power Generation Corporations Ltd. (OPGC) against any eventuality by presenting indemnity bond.
- The agency shall ensure 100% compliance of all Statutory norms along with the EHS norms of OPGC.

(G)The Detail Scope of Work for of Deployment of Manpower at Signal Goomty at Ghidhghara, Kechobahal & Manoharpur Station

BOQ SL No 30:

- Deployment of Manpower at Signal Goomty at Ghidhghara, Kechobahal & Manoharpur Station.
- The agency has to provide the services 24 X7 that is round the clock by deputing man power at Signal goomties of 03 Stations (Ghidhghara, Kechobahal & Manoharpur Station)

(H)The Detail Scope of Work for of Deployment of Manpower for LC Operation

BOQ SL No 31:

- Engagement of Skilled manpower for LC gate Operation.

The agency has to engage skilled manpower for level crossing gate operation i.e Round the clock operation of Manual level crossing with each shift of 8 hrs.

- The bidder has to engage minimum 12 th qualified with railway experience to execute the work.
- 3 no of Shift wise Regular reporting to EIC/ or its authorized representative
- Work men of required skill level for execution of the job shall be arranged by the agency. The supervision of the job shall be done by the agency.
- The agency shall ensure 100% compliance of all EHS norms of OPGC, Statutory norms.
- All statutory compliances shall be met by the agency required for execution of the job. The agency shall completely indemnify OPGC-ITPS against any eventuality by presenting indemnity bond

I) Tools & Tackles requirement:

The agency has to arrange the following tools and tackles for each location for regular maintenance of each Station and as per instruction of EIC.

Tools & Tackles

Minor Tools and Tackles of all types including various measuring instruments for maintenance to be provided by the Contractor which are mentioned below

1. Multimeter
2. Megger (100/500 V)
3. Hydro Meter
4. Earth Tester
5. Clamp meter
6. Blower
7. Screw driver Set
8. Soldering Iron
9. Test lamp
10. Plier (Flat and Round)
11. Spanner of different size
12. Adjustable Spanner
13. Hammer
14. Test gauge for Point Machine
15. Cutter
16. Drill Machine
17. OTDR
18. Splicing Machine

Besides above any other special tools and equipment required for maintenance of S&T system to be provided by the Contractor.

Supply of Spares: All materials for Work & Spares for maintenance of Signaling, Telecom and Electrical shall be supplied by OPGC free of Cost.

SPECIAL CONDITIONS OF CONTRACT

- The work men shall have thorough knowledge for S&T maintenance and the technical competency to be checked by EIC before putting the workman in the job.
- The Contractor shall have to deploy a Site- In-Charge (SIC) who should always be available in this Power Station during the period of Contract to ensure the quality of maintenance work. The Site- In-Charge must possess inline knowledge, workmen safety standard and skill to provide maintenance of S&T System installed at 05 Stations.
- The Contractor shall deploy requisite numbers of workmen and supervisor for undertake this maintenance work. The Contractor shall deploy the workmen, who have adequate knowledge regarding the maintenance of S&T System. Similarly, the Contractor has to engage a person having sufficient knowledge in S&T system (Route Relay Interlocking arrangement) i.e SSE /JE/Signal & Retired Railway Electrical Signal Maintainer (ESM) has to be deployed to ensure maintenance work in S&T system.
- Bio-data of JE (01 no), ESM (05 nos), and Supervisor (03 nos) shall be submitted in the bid. If any of

the Contractor's workmen is found unqualified / inexperienced for a work, he will not be allowed to do the jobs / works.

- The Workmen and other Personnel engaged by the Contractor for this work shall at no point of time have any liability on OPGC concerning to their employment under the Contract agreement.
- The schedule of maintenance shall be as per Railway or as decided by our EIC. The Contractor shall have to deploy sufficient number of skilled manpower for upkeep and maintenance of signal system as per instruction of EIC.
- Penalty of maximum 5 % for non-performance of signal work as per the direction of EIC and shall be considered for deduction from RA bill due to substandard maintenance or non-performance.
- The Contractor shall use proper sign, signal, flags and obstacles during maintenance work for safe movement of rake.
- The AMC shall be awarded for 02(Two) Years. The performances shall be evaluated in every quarter.
- OPGC can terminate the Contract within two months short notice in the 24 months Contract period if found poor performance.
- The Contractor has to engage person having sufficient knowledge in S&T system (Route Relay Interlocking) i.e One Retired Railway (Junior Engineer/S&T) & Five nos ESM (availability of at least 15days per month per person) to ensure maintenance work in S&T system. Otherwise @1500.00 per person per day will be deducted from the RA bill.

GENERAL TERMS & CONDITIONS

1. **Contract Period:** The period of contract is 02 (Two) years, excluding mobilization period of 07 days from the date of issue of LOI / Work Order.
2. The contractor is required to mobilize his men, materials, plant & equipment at his work site within 07 days of intimation to start the work, failing which the Engineer-In-Charge will annul the contract agreement at his discretion. The onus of proving that the delay in mobilization was beyond the control lies with the contractor. The Engineer-in-Charge after satisfying himself with the reason for the delay if any may allow extension of time to avoid the annulment of the contract.
3. **Price:** It is a work contract. The rates shall be quoted as per the prescribed price bid format enclosed. The rates quoted shall remain firm during the entire contract period of 02 years. There shall be no escalation irrespective of any changes in minimum wages or material rates during the contract period, any price implication shall be borne by the contractor.
4. **Taxes, Duties & Statutory deductions:** All applicable taxes, duties, levy & statutory dues etc. shall be deducted from your bills at the rate ruling at the time of payment of the bills.
5. **Security Deposit and Release of Security Deposit:** You shall deposit 7.5 % (i.e.2.5% + 5%) of annual basic contract value as 'Security Money' in the following manner:
 - a) The agency shall submit initially security amount equivalent to 2.5% of the annual basic value of 1st year contract in shape of Demand Draft/Bank Guarantee in favour of OPGC Ltd. drawn on SBI/ CBI / UBI, Banharpali within 15 days of receipt of LOI / WO. Similarly 2.5% of the annual basic value of the contract for 2nd year to be submitted prior to execution of 2nd year. OPGC shall return the DD/BG of 1st year, after receipt & verification of DD/BG of 2nd year. The DD/BG for 2nd year shall be returned after completion of defect dilution period of 2nd year, i.e. 03 months after completion of 2nd year. No interest shall be payable by OPGC on the security deposit amount.
Note: BG submitted shall be valid for 12 months from the date of issue for 1st year & for 2nd year BG shall be valid for 15 months from the date of issue.
 - b) Balance 5% of the annual basic value of the contract shall be deducted against each monthly RA bills & retained by OPGC. This security deposit money shall be released to the party after completion of defect dilution period of 03 months for each year. No interest shall be payable by OPGC on the security deposit amount.

The security deposit money shall be returned to the contractor without interest as stated above, subject to satisfactory performance, obtaining clearance from all concerned departments and submission of yearly completion certificate issued by the Engineer-in-charge. You shall rectify the defects pointed out during this period free of cost. All penalties, statutory payment etc. shall be recovered from this security amount, if required. No interest shall be payable by OPGC on the security deposit amount.

6. **Defect dilution period:**
The defect dilution period for the maintenance jobs in general shall be three (03) months from the actual date of completion of job duly certified by EIC against any poor workmanship and materials (if any) used. Any defective work noticed within the defect liability period shall be rectified by the contractor immediately on receipt of information. If the contractor fails to do so within 07 days of getting the information from the EIC, then the work will be rectified by engaging another agency and the cost will be deducted from the security deposit of the contractor.

During the contract period, contractor should ensure smooth execution of the job and shall

execute the job as per the instruction of EIC.

7. Submission of bill: Bills in triplicate along with GST No for the measured work shall be submitted to Engineer-in-charge for verification after completion of work. The bills shall be prepared & raised as per GST Rules showing-
 - a) Name, address & registration number of such service provider
 - b) Name, address of the person receiving taxable service
 - c) Description, classification & value of taxable service provided
 - d) GST payable thereon.
8. Payment of bill: Payment after statutory deductions and other deductions like applicable taxes, duties, levies, penalties, security deposits etc. shall be released within 30 days from the date of acceptance of the monthly RA bill with prescribed measurement, material statement and statutory documents duly certified by Engineer-In-Charge. The contractor shall claim bills only for the items which have been completed during the billing period. The payment shall be made through e-mode facilities of RTGS / NEFT / Internet Banking. To facilitate the E-payment you shall return the enclosed Bank Mandate Form duly filled, along with the duplicate copy of the Work Order.
9. Measurement of work: The work shall be inspected / measured as directed by Engineer-in-charge and entered in the measurement book with signatures of both contractor and Engineer-in-charge or their representatives as a token of mutual acceptance.
10. Penalty:
 - a) In case of failure to make payment to the workmen within 07(seven) days after wage period i.e. any month, penalty @01% of gross value of bill for corresponding period for which wage is due per day of default shall be imposed & deducted from the interim running bill maximum to the extent of 05% of the gross value of bill for the said period. Repetition of such default for more than three times shall lead for termination of the contract with 07(seven) days advance notice to you.
 - b) In case of non-performance / continuous poor performance, the contract shall be terminated with 07(seven) days' notice and the work shall be done by any other means at your cost and risk till engagement of other agency. If the price of contract for the balance work shall be higher, the additional amount shall be recovered from the security or any dues of the contract or any other contract taken by you in OPGC.
 - c) In case of labor strikes, you shall arrange fresh workmen and perform the contract without any discontinuation. If there is a discontinuation of work for consecutive 03(three) days, the "Termination of Contract" clause shall apply. This will debar you to participate in any future bid in OPGC for next 05 years.
 - d) In case of failure to remove the scraps/debris within the stipulated period, the same shall be executed by other agencies at the cost and risk of the vendor and a liquidated damage @1(one) % of the contract value shall be imposed.
 - e) In case of any OPGC material is lost or damaged during execution of work due to your negligence or wrong workmanship, the cost of the same as per prevailing market rate plus departmental expenses shall be recovered from your bills.
11. Termination of contract:
 - a) In case of failure to start the work within due date, OPGC reserves the right to terminate the contract without reference to you.
 - b) If the quality of the work is found to be unsatisfactory, the contract shall be terminated with immediate notice.
 - c) OPGC has the right to terminate the Contract at any point of time.
12. Offloading of job: In case it is observed during the tenure of the contract that you are not capable or in a position to complete the job, OPGC reserves the right to offload the same and get it done

through other agencies at your cost and risk.

13. Subletting: The work shall not in any manner or degree be sublet. The work shall be executed under the direct supervision of the supervisors of your firm.

14. Indemnity: You shall keep OPGC indemnified from all liabilities resulting out of this contract and act of your workmen.

15. Works Programme/Quality Assurance Plan/Safety Plan:

Before starting the work, you shall submit detailed works programme, milestone of different activities, safety and quality assurance plan of the work to the Engineer-in-charge for his approval after which work shall be started as per the approved programme. Any other documents required by the Engineer-in-charge for the above work shall be submitted.

16. Permit to Work: Before the start of each work, you shall ensure that a valid and duly signed Permit to Work has been issued. Also, you shall ensure the issue of valid and duly signed Confined Space permit and Hot Work Permit if the same is required as per OPGC rule. All the permits shall be returned to the concerned Engineer after completion of the job.

17. Tools and Tackles: You should have adequate Tools and tackles for execution of the job and such Tools and tackles are to be made available during the entire tenure of contract and shall be submitted to the satisfaction of Engineer-in-charge. All Lifting Tools and Tackles brought by you shall have valid test certificate issued by the competent person approved by Director of Factories & Boilers, Odisha.

18. Labour and Statutory Regulations:

- a) You shall submit a copy of valid Labour License (if applicable) from competent authority to the Engineer-in-charge before commencement of work.
- b) You shall submit a copy of Provident Fund and Employee State Insurance Registration Certificate number to the Engineer-in-charge before commencement of work.
- c) You shall abide by all norms of Contract Labour (R&A) Act - 1970 and provisions of other applicable labour laws and rules made there under from time to time.
- d) You shall comply with all provisions of Factories Act - 1948 and rules made there under from time to time.
- e) Before commencement of work, you shall submit a copy of 'Group Insurance Policy'/'Employee State Insurance' (as applicable) covering employment accidental/ in respect of your workmen to meet your liabilities against benefit in respect of your personnel against Employees Compensation Act (Workmen Page 129 of 184 Compensation Act-1923) /Employees State Insurance Act, 1948 and furnish a copy of the same to the EIC. The work shall commence only after submission of the Group Insurance Policy/ Employee State Insurance (as applicable) to the EIC

19. Employees Provident Fund (EPF) and Employee State Insurance (ESI):

Provident Fund (PF) and Employee State Insurance (ESI) dues of all your workmen shall be deposited against the PF and ESI number allotted to you by competent authority. You shall declare that Provident Fund and ESI amount for the people engaged by you has been deposited as per rule.

20. Security Management Procedure:

- a) Entry Permit/Gate Access Card shall be issued to the contractor employee free of cost and to be displayed in person whenever they are inside ITPS premises.
- b) At any time if the worker of any contractor leaves the job, it is the responsibility of the contractor or his representative to withdraw his Entry Permit/Gate Access Card and deposit at Security Pass Section.
- c) In the event of expiry of the Contract, the contractor has to deposit the Entry Permits/Gate Access Cards to Security at Pass Section and collect required No Objection Certificate

(NOC) for the purpose of Bill Clearance by Finance Department.

- d) Against non-deposit of Entry Permits/Gate Access Cards after expiry of the Contract by the Contractor, penalty @Rs. 300.00 (Rupees Three Hundred Only) per each Entry Permit/Gate Access Card shall be recovered from the Bill of the contractor by Finance Department.
- e) No Final Bill of the contractor shall be released by Finance Department unless No Objection Certificate (NOC) is obtained by the contractor from Security Department against issue/deposit of Entry Permits/Gate Access Cards.

21. Safety, Health and Environment:

- a) Your service personnel shall abide by Safety, Health & Environment (SHE) Rules & Regulations for Contractors as per enclosure and obtain safety induction training from OPGC Safety Officer before starting the work. Any violation in the safety rules shall be viewed seriously and you shall be penalized as per OPGC Safety Rules.
- b) You shall ensure the medical fitness of your service personnel before the start of work.
- c) You shall submit Safety Plan of the work to the Engineer-in-charge before start of the work.
- d) While driving two wheelers inside the plant boundary Crash Helmet to be used positively. Violation of this rule will attract penalty

22. Dispute settlement: Any dispute or difference arising out of this contract shall be mutually settled and the decision of Managing Director, OPGC or his authorized representative shall be final & binding.

23. Jurisdiction: Appropriate Court of Bhubaneswar under the Odisha High Court shall have exclusive jurisdiction over all matters related to this contract.