



HPOIL GAS PRIVATE LIMITED
(A Joint Venture of HPCL & OIL)

**TENDER FOR PROVIDING FORECOURT SERVICES FOR CITY GATE STATION
AND CNG STATIONS AT AMBALA-KURUKSHETRA & KOLHAPUR GA**

TECHNICAL VOLUME

TENDER NO. HOGPL/2024-25/C&P/003
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1. INTRODUCTION

HOGPL is an involved in Piped Natural Gas Distribution to industrial, commercial, transportation, residential segments of major cities / towns in Kolhapur and Ambala & Kurukshetra GA. HOGPL is rapidly into a developing a multidimensional operational network that fulfils the India's energy needs by exploring, developing, and harnessing newer energy services. It is leading through action towards a hydrocarbon economy in India with sustainable environmental activities, with the vision of becoming a "Complete Energy Company".

Natural Gas (NG) is today increasingly gaining popularity over as alternate auto fuel primarily because it is environment friendly, economical, and more efficient as compared to other conventional auto and kitchen fuels. Emission of harmful oxide and other polluting particulates is minimal in case of CNG. HOGPL had commissioned 21 CNG Stations and 1 CGS in Ambala-Kurukshetra and 23 CNG Stations and 1 CGS i& 01 mother station in Kolhapur GA.

HOGPL intends to appoint bidder for the Maintenance activities for Mechanical and Electrical equipments installed at City Gate Station & CNG Installations to provide uninterrupted supply with due compliance of all the prevailing statutory and HSE norms keeping in view of the customer satisfaction.

The said maintenance contract for mechanical and electrical installation in CGS , mother station & CNG station shall be not limited to: -

- Routine/Periodic and Preventive Maintenance of Mechanical installations like CNG Cascades both Static & Mobile, SS Tubing's and fittings, LCV/HCV filling & Unloading post per OEM guideline, Minor maintenance of CNG Compressor and Dispensers, Air Compressors, and Maintenance Checklist approved by HOGPL.
- Routine/Periodic and Preventive Maintenance of Electrical installations like HT installations, Power Transformer, LT panel, Power distribution boards, HT/LT Power and Control Cables, UPS with battery, Servo Stabilizer, earthing system etc. per OEM guideline and Maintenance Checklist approved by HOGPL.
- Breakdown maintenance of Mechanical and Electrical installations at existing CGS & upcoming & CNG stations-COCO, Franchisee, Daughter Booster and Daughter CNG Stations.
- Breakdown maintenance carried out for all laid SS tubing's and fittings at CGS & all CNG stations, LCV/HCV cascades, LCV/HCV filling & unloading post, air and gas compressor, dispenser tubing and fittings in trench.
- Routine checking & maintenance of Ethyl Mercaptan/spotleak 1007 odorant dosing records.
- Fleet Movement to the respective ROs for the CNG catering at commissioned ROs.
- Providing well-equipped Emergency vehicle cluster wise to attend maintenance calls as and when required.
- Deployment of trained manpower as per specified in SOR cluster wise.
- Coordination with HOGPL team and other service providers as and when required to ensure smooth operation.
- Support providing for removal/replacement of cascades of LCV/HCV as and when require.
- Assist in Testing and Calibration of instruments.
- Power Factor analysis, its Control, and recommendations.

- Display and updating of P&ID, Single line diagram, Earthing diagram, As-built drawings of CGS & CNG Stations.
- Arrangement of spares which are not available with M/s HOGPL
- Modification of existing Installations if asked by HOGPL.
- Dispensing of CNG to vehicles and to collect cash, refund the balance and issue cash receipt to the customers. In case the customer makes the payment through credit/ debit card & e-wallet (like Phone pay /PayTM, Mobikwiketc), the Contractor /HOGPL shall receive the same.
- Handing over cash to the Station Manager/HOGPL account dept. after every sale/ shift. Handing over the payment receipt slips/ summary slip of POS machine to Station Manager after end of the shift. Maintain record of the payment received through Phone pay/ PayTM and other e-wallet services.

Scope in Overall station premises:

- Overall Supervision/management of all activities being handled by Agency/ Contractor.
- Preparation of bills/invoices for retail sales to customers.
- Preparation of report for gas sale and collecting cash for all retail sales.

2. STANDARD TO BE FOLLOWED

- BIDDER shall carry out maintenance of CGS & CNG Stations based on following Codes /Standards, but not limited to.
- Laws, Codes, Rules, and Standards as mandatory under the legislation of respective states and India and PNGRB regulations.
- ISO Standards and Euro Norms.
- Standard Operating Procedures established by HOGPL.
- NZS-5425 Code of practice for CNG Compressor and Refueling Station
- Gas Cylinder Rules- 2016
- OISD 179, NZS-5422
- The National Fire Protection Association (NFPA) norms
- SMPV rule.
- Operation manuals of various equipment manufacturers.
- Indian Electricity Rules and Electricity Act
- Factory act 1948 & it's revisions.
- EPF act 1952 & ESIC act 1948.

3. INSTALLATION DETAILS

Brief Description of CGS & CNG System

Natural Gas is available at a pressure of 14-49 bar (g), atmospheric temperature and having dew point of 35°C at 25 bar (g). This gas is conditioned with removal of moisture and other condensate, filtered to remove foreign particles, odorized for easy detection before compression in the suction train. Conditioned gas is compressed to high pressure up to 250 bar (g) and is stored in cylinder or is being dispensed through dispenser into vehicle mounted storage cylinder or mobile cascade.

Priority panel installed near compressors is configured in sequence to be followed for dispensing of gas.

The CGS & CNG Station dispenses CNG into Vehicle (Cars, Auto Rickshaws, Buses, etc.) Cylinders, Mobile Storage Cascades. The natural gas available at low pressure by the pipeline is compressed to high pressure by means of reciprocating compressor and dispensed in Storage vehicle cylinder / Mobile cascade in a measured quantity.

A City Gate Station is a gas measurement and pressure regulating and reducing package which is installed outside the limits of a city on a gas pipeline. It supplies gas to the city users at required consumption pressure. City gate stations serve an important role in the natural gas distribution network. Consisting of metering and pressure regulating facilities, they are located at the custody transfer points where natural gas is delivered from transmission pipelines into the high-pressure lines of the local distribution company. Mobile Cascade vehicles are fueled from CGS cum Online Station to cater the daughter/daughter booster stations.

The list of equipment's installed at CGS & CNG Stations are summarized below in the table: -

Sr. No	Installation Description	Capacity	Applicability		
			COCO-Mother / Online/CGS	OMC-RO Online / D. Booster	OMC-RO Daughter
1	CGS & CNG Compressors along with Suction Skid, CO2 Flooding Systems	1200/650/600/450/400/250 SCMH	Yes	Yes	No
2	Dispensers for buses, cars, three wheelers (Auto Rickshaw)	10-25/75 Kg/Min	Yes	Yes	Yes
3	Loading/Unloading facility. for mobile cascades	-	Yes	Yes	Yes
4	Stationary & Mobile Cascades with onsite support	Upto 8800 WL	Yes	Yes	Yes
5	Fire Fighting Equipment	C02 - 4.5Kgs. DCP - 75Kgs. DCP - 10Kgs. ABC - 10Kgs.	Yes	Yes	Yes
6	SS Tubes and Fittings interconnecting with CGS& CNG Equipment	Set	Yes	Yes	Yes
7	Gas /Diesel Generating Sets	Upto 300 KVA	Yes	Yes (OPT)	No
8	Air Compressors	up to 7.5 kW	Yes	Yes	Yes (OPT)
9	Servo Stabilizer	Up to 500 KVA	Yes	Yes (OPT)	Yes (OPT)
10	HT/LT Power Cables	Up to 300 Sq.mm	Yes	Yes	Yes
11	Flameproof Installations/ pole light etc.		Yes	Yes	Yes

12	Power Distribution Boards with APFC Panel	Up to 1000A	Yes	Yes	Yes (W/O APFC)
13	Power Transformer (Optional)	Up to 1 MVA	Yes (OPT)	No	No
14	Outdoor/Indoor Lighting including High-mast towers	-	Yes	Yes	Yes
15	Earthing System	Set	Yes	Yes	Yes
16	UPS and battery bank,	Up to 10 kVA	Yes	Yes	Yes
17	Complete FML Skid including above ground piping's and accessories.	-	Yes	No	No
18	Odorization Unit	-	Yes	No	No
19	Gas detector at CGS		Yes	Yes	Yes

4. BIDDER SCOPE OF WORKS

The purpose of maintenance activities for the CGS & CNG station is to ensure smooth operations in terms of station productivity with due adherence of HSE / Statutory aspects with utmost customer satisfaction.

The scope of work for Handling & Maintenance of Mother Station/CGS/ CNG Station in general consists of but not limited to the following scope of services.

1. The Contractor should provide manpower and perform the jobs at the said locations as per Schedule I and meet the requirement and need in the manner directed by the Engineer in Charge and Company from time to time.
2. The Contractor should deploy a Station Manager & In charge who would be responsible for overall handling of all jobs which is mentioned in Job Description Section of shift in charge including taking instructions from the Engineer in Charge, disseminating the same to the other staff, deploying them as per requirement and reporting back to the Engineer in Charge on daily basis.
3. Contractors should also provide technicians with required tools and tackles and he has to carry out the mechanical maintenance and repair at mother station.
4. The Contractor should deploy a Data Entry Operator with sufficient knowledge of working on computer e.g. MS Office, Internet.
5. Contractor should provide the computer desktop set with printer+xerox machine at Mother Station for data entry operator & shift incharge/Station Manager
6. Fillers to be provided for filling of CNG in to the vehicles and should abide to the job responsibilities mentioned in Job Description Section.
7. The Contractor should provide Bio-metric Punching machine at every site for tracking the punctuality and attendance of the deployed man power. The attendance muster should be maintained at every site and the same will be verified with the data received from Bio metric punching machine during the certification will be provided by the client. Power supply for the machine will be provided by client.
8. Stationary required in the day-to-day operations e.g. Papers A4/A3, envelops, calculator, Register, Pen etc. is in the scope of contractor.
9. To effect physical delivery of the CNG and other Petroleum products for sale dispensed through the said Mother Station at the rates fixed by the Company from time to time. This also includes physical delivery of the CNG to mobile cascades.
10. The CNG price will be fixed by client for Retail customers and for Mobile cascades to DBS, the same should be followed by the contractor very strictly. The change of price will be done by client and the same will also be communicated to the contractor for his information.

11. To maintain proper and correct accounts of the transactions carried out each day including ISO Formats, Gas Sale log sheets, Flow meter reading Register, Station Log book, sales record, DSA, Gas Balance Data, DPR, Gas consumed for operating generator provided at the outlet.
12. Printing of logbooks, formats, sale record formats, LCV logbook etc, will be in scope of Scope contractors. Contractor should bear all cost of format printing. As directed by the Engineer in Charge and Company from time to time.
13. To check the dispensers to ensure delivery of correct quantity of CNG on daily basis before start of sale and, in addition, if a complaint is received at any time of the day. In case of variation in delivery of product, the sales from such dispensers should be stopped immediately and inform the Engineer in charge and HPOIL Office or Control room. The Contractor should provide qualified & trained manpower and perform the jobs at the said locations & time as per the instruction of Engineer In Charge and Company from time to time.
14. The Contractor will dispense for sale, products of the Company only and no other products will be allowed to be received/ delivered/sold through the Mother Station except with the prior written permission of the Company.
15. The Contractor shall not carry out any business at/from the Premises of the Mother Station other than that of sale of the Petroleum products supplied by the Company save and except allied products/services like distilled water, polish cloth, lubricants etc. to the customers as may be directed by the Engineer In Charge from time to time.
16. The Contractor will maintain all records of sales, on daily basis & also will prepare the Daily stock reconciliation statement and ensure that the same should tally with the sales. Any variation will be reconciled and the Contractor will make shortage, if any, good.
17. The Contractor will safeguard the Company's property and any damage will have to be reimbursed to the Company. Property details handed over to contractor are listed in schedule – I.
18. For any kind of discrepancy or malpractice between Gas sales & Cash collected, contractor will be responsible for the same & will be penalized.
19. Safety Equipment (PPEs like shoes, helmet, caps, raincoats etc.) will be in Contractor's scope. For any type of non-adherence penalty will be imposed as per penalty clause. Quality of safety equipment should be good enough as per the safety standards to serve the purpose keeping the durability in view.
20. The contractor should provide gas accountancy on daily & monthly basis to HPOIL Kolhapur.
21. For purposes of carrying out the above activities at the Mother Station, the Contractor shall provide Station Manager, Shift In-charge, CNG Fillers, LCV Fillers, data entry operator, Safety Supervisor, Electrical Technician & Housekeeper.
22. The Contractors personnel shall not divulge or disclose to any person, any details of office, operational process, technical know-how, security arrangements and administrative/ organizational matters as all are of confidential nature that can attract legal action.
23. The requirements indicated above are only directional and shall be reviewed on a monthly basis by the Company and communicated to the Contractor for increase / decrease of the same.
24. The Contractor shall religiously observe and comply with all laws, rules, regulations and requisitions of the Central/State Government and of all authorities appointed by them or either of them including in particular, the Chief Controller of Expositive, Govt. of India and/or Municipal And/or any other local authority with regard to the storage and sales of petroleum product.
25. The expenses of utilities in connection with the operation of the Mother Station like electricity, water, telephone etc. will be borne by the Company. Utilization of company provide above facility is to be strictly used for official use of HPOIL Kolhapur.
26. The Contractor with a view to improve the effectiveness and efficiency of operation shall implement faithfully all the directions given by the Engineer in Charge of the Company from time to time.
27. The Contractor shall have the right only to enter the premises for the purpose of performing the jobs stated in clause 1 at the said premises and shall have no right, title or interest in the said premises or outfit and it is agreed by the Contractor and declared in particular that the Contractor shall not be deemed to be in exclusive possession of the said premises. The Contractor will have no claim on dealership for the Mother Station on the sole basis of this Agreement.
28. The Contractor shall not assign or transfer the jobs to any one nor shall appoint a sub- Contractor for the said purpose. The contractor should provide an overall in charge at his own cost to streamline

the operation and for maintaining the same and should always be available at the premises to supervise the jobs being undertaken by your for the Company.

29. The contractor shall provide the manpower as per HPOIL's requirement. If for any reason manpower is absent, it is the duty of Contractor to immediately provide the replacement manpower. If contractor fails to do so, Penalty will be imposed as per the penalty clause.
30. The Contractor shall, at his own expense, comply with the Model rules of labor welfare framed by the Govt. /Statutory Authorities under the Mother Station labor laws from time to time for the protection of their health, etc. In case Contractor fails to make arrangements as aforesaid, the Company shall be entitled to do so and recover the cost thereof from Contractor.
31. The Contractor shall provide PPES at his own expenses for the safety provisions as required by the Company in respect of all his labor directly or indirectly employed for performance of his obligations under this Agreement and shall provide all facilities in connection therewith. In case Contractor fails to make arrangements and provide necessary facilities as aforesaid, the Company shall be entitled to do so and cost considering original invoice value plus 15% overhead charges will be recovered from Contractor.
32. The insurance for the following will be covered and paid by for Contractor and he shall indemnify the Company and hold the Company harmless in respect of all and any expense arising from any injury and or damage in respect of. i) Workmen's compensation and risk of accidents of Contractor's own employees.
33. Risk of accident to third parties through acts of Contractor's own employees, representatives, subcontractors and agents and the risk of damage to the property of third parties arising out of the acts of Contractor's employees, representatives, subcontractors and agents, and Risk of damage to the property of the Company through the acts of Contractor's employees, representatives, sub-contractors and agents.
34. The Company shall always have the right to carry out inspection by their officials for determining the quality of jobs being carried out for efficient operation of the Mother Station , CGS & CNG station
35. The Contractor shall indemnify and keep indemnified the Company against any damage and/or injury caused to the premises, or to the properties or to the members of the staff of the Company through the neglect or default or otherwise of the Contractor.
36. Contractor shall provide uniform (Both T-Shirt/Shirt + Trouser are mandatory) & PPEs (Good quality safety shoes, helmets, Raincoat, Gloves etc.) to All the Workers as approved by HPOIL & All manpower / attendants shall wear uniform and PPEs. At the time of duty. Workers without proper uniform & PPE penalty will be imposed
37. Contractor shall provide the police verification of all the employees provided by him to carry out the operation & maintenance at Mother Station of HPOIL, prior to the service. Police verification shall be submitted within 45 days after issue of LOA. Failing of which penalty would be applicable.
38. Contractor shall carry out all schedule maintenance of all the equipment's like Stationary / Mobile cascades, Tubing and Pipeline trench maintenance, Air compressor / Air fill point etc. (If required Compressors and Dispensers) and provide the copy of schedule maintenance record to Engineer in Charge.
39. Contractor shall plan schedule maintenance in consultation and prior permission of Engineer-in-charge.
40. The contractor shall ensure that no person in the premises of Mother Station would smoke or no fire or other ingredients of ignition should be permitted in the vicinity of the Mother Station , CGS

41. Contractor shall not recover or deduct as an advance from the salary of the persons deployed at HPOIL on account of providing them Uniform, shoes, Safety Helmets etc. and other such items.

4.1. PREVENTIVE / ROUTINE MAINTENANCE

- 4.1.1. The BIDDER shall prepare and submit the Annual Maintenance Plan, which shall be in line with OEM manual and set frequency by HOGPL within 15 days of LOI/PO.
- 4.1.2. BIDDER shall execute the Routine / Preventive Maintenance of equipment's as per approved schedule and checklists as detailed herewith in ANNEXURE II & III.
- 4.1.3. The spares required for carrying out preventive maintenance shall be collected from stores specified by HOGPL and shall submit a brief report of spares used & spares returned.
- 4.1.4. All preventive / routine maintenance shall be performed in consultation with HOGPL EIC and to ensure that, forecourt does not suffer.
- 4.1.5. The BIDDER shall himself familiarize for the work having obtained all necessary permit / approval / clearance/ authorization to carry work from the HOGPL before starting work at site.
- 4.1.6. Without limiting the generality thereon, BIDDER shall do all necessary work at each of the job which is complete in all respect.
- 4.1.7. BIDDER shall ensure that all required consumables such as cotton waste, cleaningsolvent, insulation tapes, thinner, soap solution, Teflon tape, insulation tape, screws, roll plug, thimble, & all require tools soldering gun, torque wrench, power extension board, drill machine with all type of drill bit, ladder (9 meter, shall be valid for replacing FLP lights), etc. including are available on-site during attending activities.
- 4.1.8. BIDDER shall note down the Equipment performance before and after carrying out the maintenance activities in service report.
- 4.1.9. The spares required during preventive maintenance shall be arranged by BIDDER from HOGPL. However, BIDDER shall give priority to using spares which are kept in HOGPL stock. A change in schedule, if any due to non-availability of spares shall be mutually agreed and the same needs to be recorded vide email or letter.
- 4.1.10. Carrying out maintenance of all stationary and mobile Cascade, all laid SS Tubing & fittings, and LCV unloading & loading Post at owned DS/DBS/online/mother station.
- 4.1.11. Check all the equipment's as per the M/S HOGPL issued checklist at predefined frequency (Daily, weekly, fortnightly, monthly etc.) for proper functioning & carrying out Maintenance of Cascade of LCV/HCV and stationary cascade, all SS Tubing & fittings LCV/HCV loading and unloading Filling post at Daughter/daughter booster / online / mother station.
- 4.1.12. BIDDER shall ensure that the foundation on which the cascade is installed is free of any damages.
- 4.1.13. BIDDER shall also do periodic checking of cascade to verify that the frames of the cascade are sturdy to bear the entire load of the cylinder and it is fitted with lifting lugs and canopy for its protection from the sun and rain.

- 4.1.14. BIDDER shall carry out the schedule/routine/preventive maintenance of the electrical panel, Power Transformer, LT panel, Power distribution boards, HT/LT Power and Control Cables, UPS with battery, Servo Stabilizer, earthing system.
- 4.1.15. BIDDER shall be responsible for checking / ensuring that there is no accumulation of flammable or combustible liquids under the cascade by grading, pads, or diversion curbs.
- 4.1.16. BIDDER shall be responsible for checking and upkeeping odorant level up to farthest point in the network at the CGS. The maintenance of other facilities like above ground pipeline, valves, Electrical & Mechanical maintenance of CGS is also in the scope of BIDDER (without spares).
- 4.1.17. BIDDER shall be responsible for Maintenance of DG/GG set, UPS and batteries installed at CGS / Mother Station and all CNG stations. Maintaining records and Reconciliation of diesel used for DG sets on daily basis. Ensuring unit power factor at CGS / Mother Station by replacing capacitors as and when required.
- 4.1.18. BIDDER shall be responsible for Observing flow meters and panels at CGS / Mother Station and informing Shift I/C in case of abnormality. Recording of various parameters like Pressure, Temp, Flow Rate etc. and any malfunctioning report of the valves, instruments / equipment's to be given in HOGPL O&M whenever occurs.
- 4.1.19. BIDDER shall be responsible for the safe, trouble free & uninterrupted operation of City Gate Station, which includes monitoring of parameters (pressure, temperature, gas flow, Odorant level etc.), leak detection, customer meter reading, data logging, visual inspection, odor / gas smell, etc. on following major equipment's / installations.
- The skid at CGS comprises of knock-out drum/filter with accessories like safety relief valve for release of pressure in case of over pressure.
 - The Shift Engineer shall maintain all relevant records and activities (testing, inspection, calibration, operation & monitoring) carried out on the CGS.
- 4.1.20. BIDDER shall be responsible for following work activities / events / incidents are noted in the logbook at the City Gate Station:
- Reports of unsafe fittings, conditions & appliances. Data pertaining to the parameters as per AOMP / MIS.
 - Flow meter readings, composition of gas as per source available & updating with the help of flow computer and gas chromatograph.
 - Inspections performed.
 - Checks and surveys performed.
 - Failures & defects found & rectification actions taken by the concerned.
 - Incidents involving the failure of any fittings and control valves of CGS installation.
 - Any incident relating to fire or breakdown of the equipment and their maintenance / correction procedures in details.
- 4.1.21. Providing support services for maintenance of electrical sub-station, panels, and feeders. Upkeep and maintenance of indoor / outdoor lighting system. Monitoring of earthing system and its maintenance. Monitoring of power availability / quality Liaisoning with lineman of local electrical distribution body for proper supply, restoration of power and assisting in overall electrical operation and maintenance of the station.

- 4.1.22. BIDDER shall be responsible for Monitoring and logging all essential parameters of the electrical equipment and report/record if any discrepancy in operational parameters accompanied with updating logbooks/records/registers for electrical readings, data capturing, maintenance activities, DG set records etc.
- 4.1.23. BIDDER shall be overall responsible for the rotation of Mobile Cascade Vehicles from CGS cum Mother Station to all the daughter/ Daughter Booster Stations.
- 4.1.24. BIDDER must coordinate with Owner to ensure the safe, reliable & uninterrupted gas supply, installation and operation of all the equipment's, pipelines, fittings, valves, etc. while venting the pipelines, the BIDDER shall strictly adhere to the HSE norms specified in the contract.

4.2 BREAKDOWN MAINTANANCE

- 4.2.1 On receiving information from the representative of HOGPL, BIDDER shall ensure that, the service/maintenance team shall reach the concerned / affected station within **30 minutes**. If issue is normal type, shall be resolved within 4 hours from the intimation and major issues shall be resolved by required maintenance / repair of the equipment within 12 Hours.
- 4.2.2 Upon reaching the CGS & CNG stations, the BIDDER'S personnel shall immediately contact EIC of HOGPL to information of his attendance on site and confirm the breakdown report.
- 4.2.3 Such services shall be extended by them on 24 x 7 basis subject to force majeure.
- 4.2.4 Before execution on breakdown work, BIDDER personnel shall collect necessary spares from the stores based on assessment of breakdown detail.
- 4.2.5 The BIDDER shall coordinate with the HOGPL representative for instructions on undertaking the repair work.
- 4.2.6 After attending & resolving the complaint, the BIDDER shall inform HOGPL on the work executed and used spares, unused spares should be returned to HOGPL accordingly.
- 4.2.7 BIDDER shall be fully responsible for emergency management with full attention and effective measures / remedies to restore equipment operation.
- 4.2.8 BIDDER shall be responsible to arrange spares / items / consumables required for carrying emergency maintenance works which not available with HOGPL. Actual reimbursements shall be made upon submission of required original proof.
- 4.2.9 BIDDER shall attend the leakages or any breakdown related SS tubing's & fittings, BIDDER shall come into alert mode and carry out the following activities.
- 4.2.10 Identify the Leakage, dismantling tubing's, Rectification/Replacing, Laying, testing and commissioning of SS tubes along with all fittings i.e. Ball Valves (2 way/3 way/new design), QRC (Socket + Nipple), Unions, Reducers, Elbows, Tees, Front Ferrule, Back Ferrule, NRV if required complete with all supports for CGS & CNG Station and Burst Disc, Manifold etc. required in Mobile & Stationary Cascade whereas the tubes & fittings, PVC heavy duty clamps, Burst Discs shall be free issued by HOGPL.
- 4.2.11 BIDDER shall provide all tools, tackles, instruments, manpower and other related accessories for carrying out the testing of SS tubing. If observe leakages while leak test, vendor shall rectify the leakage immediately. Testing procedure shall be provided by the vendor to EIC for approval.

4.2.12 BIDDER shall attend the electrical breakdown maintenance immediate basis.

4.3 MISC ACTIVITIES

4.3.1 BIDDER shall assist in Testing, Re-setting & Calibration of various Instruments as per instruction of O&M HEAD.

4.3.2 BIDDER shall assist in obtaining approvals from Electrical Inspector during annual inspection or Up-gradation including submission of required documents.

4.3.3 BIDDER shall assist in obtaining NOC from Dy. Chief Elect. Inspector (Energy Audit required if any) including submission of Energy Audit report, preparation of Follow-ups Report, Coordination with Govt. Approved Energy Auditor, Site visits as when required.

4.3.4 BIDDER shall prepare/update As-built drawings (indicating all details like cable layout, outdoor lighting, SS Tubing's etc.), Earthing Diagram, P&ID in soft & hard color copy based on actual installations at site. HOGPL will make the payment as per the approved rates against SOR.

4.4 SPARES / INVENTORY MANAGEMENT

4.4.1 BIDDER shall reconcile the spares issued by the HOGPL as per MIS or as instructed.

4.4.2 HOGPL shall recover the cost against any damage, theft, shortage, Loss of material if any during reconciliation from the BIDDER.

4.4.3 Unused / Replaced spares should be returned to HOGPL accordingly.

4.4.4 Bidder shall provide consumable materials and/or labor of every description and all tools, tackles, measuring instruments, storage, and transport necessary for execution and completion of the work to the satisfaction of HOGPL.

4.5 WELL-EQUIPPED EMERGENCY VEHICLES WITH DRIVER

4.5.1 BIDDER shall be ready with a **Maintenance Vehicle**, 4-Wheeler with crew cabin.

4.5.2 Maintenance Van shall be equipped with communication equipment, required tools & tackles (including any special tools) and important spares location wise. Calibrated Measuring instruments like Multi-meter, Clamp meter, Earth Tester, Megger/Insulation tester, Temperature gun etc. shall be with vehicle. Tools-tackles like pleyer, screw drivers, FLP hammer, Cutter, Spanners, Pipe wrench, rope, excavation tools, SS tube bender & SS tube cutter for 1", ¾", ½", ¼", etc. also shall be with emergency vehicles.

4.5.3 The emergency vehicle shall upkeep by BIDDER in a good conditions & optimized all the time. Driver to be deployed on this vehicle must be well trained / experienced, non- alcoholic or drug addict & dressed. Necessary manpower, machine / equipment's, spares/ materials & consumables shall be arranged by BIDDER for any emergency.

4.5.4 Bidder shall maintain VTS system installed by Owner, if any damage of instruments, charges shall be recovered from bills as actual.

4.5.5 BIDDER shall maintain the day-to-day records as per MIS & submit it along with monthly reports.

- 4.5.6 Vehicle should be maintained in proper working conditions throughout the tenure of the contract by carrying out preventive, periodic & breakdown maintenance as per Manufacturer's recommendations. All the inspection & maintenance should be carried out by authorized dealers only.
- 4.5.7 BIDDER shall make an alternate arrangement in case of Routine, Periodic maintenance to be carried out for vehicles required from time to time at his own cost & risk. Bidder shall ensure that in such case the O&M is not affected.
- 4.5.8 Bidder shall pay the Taxes like Toll, RTO endorsement, Renewal / Passing, Vehicle insurance premium, etc.
- 4.5.9 BIDDER shall ensure the validity of driving license for the driver deployed on vehicle at his own cost.
- 4.5.10 BIDDER shall be solely responsible for any accident of vehicle & caused damages to vehicle or the property of third party or the human (injury or death). Such cost shall be recovered from BIDDER & any complaints in police or competent authorities in this regard shall be taken up at his cost & risk including insurance claim, repairing of vehicle, damage to third party, etc.

4.6 DEPLOYMENT OF MANPOWER

- 4.6.1 To provide uninterrupted CNG supply at existing/upcoming CGS & CNG stations, BIDDER shall make necessary personnel available in Cluster/GA/Location to maintain the facility as per specified scope and SOR in working shifts as per instruction of HOGPL. The scope also includes conveyance, food, lodging, transportation, and Incidental expenses for the jobs.
- 4.6.2 BIDDER shall depute trained expert(s) who are familiar with related maintenance work. The BIDDER shall arrange skilled labor/technicians for servicing/replacing/handling of spares equipment's/instruments carefully.
- 4.6.3 BIDDER deputed personnel should not be without training of activities to be handled. The training records also be kept updated with Identity Card.
- 4.6.4 BIDDER shall deploy the adequate numbers of skilled / unskilled personnel, to carry out the entire work, under the scope. BIDDER will submit the CV of personnel to OWNER for approval of recruitment on his role till the end of the tenure.
- 4.6.5 **Indicative Qualification & Experience of the manpower deployed at the CGS & CNG station are as follows for Kolhapur GA: -**

CITY GATE STATION & CNG STATION MINIMUM SERVICES

Sr. No.	Manpower	Qualification	Experience	Shift Gen	Shift I	Shift II	Shift III	Total
1	In-charge	Diploma/B. Tech	Min 01/02Years		01	01	01	03
2	Technician	ITI (Mech.)	Min 01 Year	-	01	01	01	03
3	Technician	ITI (Inst.)	Min 01 Year	-	01	-	-	01

4	Technician	ITI (Elect.)	Min 03 Years	-	01	01	01	03
5	(Housekeeping/Helper/ Office boy/MCV (Mobile Cascade Vehicle) Filler Boy)	Literate	Min 01 Year	-	01	01	01	03
6	DrivewaySalesman	Literate	0-2 Year	-	01	01	01	03
7	Miscellaneous services at the time of emergency	Literate	Min. 01 Year	-	-	-	-	
8	Operational assistant	Graduate	Min. 01 year	-	01	01	01	03
Total Manpower for Kolhapur GA								19

4.6.6 Indicative Qualification & Experience of the manpower deployed at the CGS & CNG station for AMBALA KURUKSHETRA GA are as follows: -

CITY GATE STATION & CNG STATION MINIMUM SERVICES

Sr. No.	Manpower	Qualification	Experience	Shift Gen	Shift I	Shift II	Shift III	Total
1	In-charge	Diploma/B. Tech	1/2 Years		01	01	01	3
2	Technician	ITI (Mech.)	1 Year	-	01	01	01	3
3	Technician	ITI (Inst.)	1 Year	-	01	-	-	1
4	Technician	ITI (Elect.)	1 Year	-	01	01	01	3
5	Helper/(Housekeeping/ /MCV filler boy)	Literate	1 Year	01	02	01	01	5
6	DrivewaySalesman	Literate	1 Year	-	01	01	-	2
Total Manpower for Ambala – Kurukshetra GA								17

Booster/Compressor Operator should have an ITI (Mech./Elect. /Inst.) with a minimum of 1 year experience in the same.

Sr. No.	Booster/Compressor Make	Shift -Gen	Shift-I	Shift- II	Shift- III	Total
1	ICL	-	1	1	1	3
2	ICL	-	1	1	1	3
3	ICL	-	1	1	1	3
4	Sopan	-	-	1	1	2
TOTAL						11

Note:

- The location of deployed manpower in Ambala-Kurukshetra and Kolhapur GA may be changed as per our requirement. The Manpower shown above is only directional and actual requirement

- of Manpower (Increase / Decrease) would be communicated by OWNER from time to time.
- Vehicle shall be deployed 24*7 with trained driver having valid driving license.
- BIDDER to ensure for leave relief / Weekly Offs and Holidays as per Labor Laws.
- Bidder to ensure the **reliver** for the deployed manpower during weekly off / leave relief and no extra payment shall made against the same.
- No overtime shall be paid by the OWNER.
- Planning & Roster shall be shared with HOGPL team.
- Necessary interviews shall be taken by the OWNER prior to deploying at station.
- BIDDER to submit monthly shift schedule well in advance and get it approved by OWNER's representative.
- Public Holidays shall be entertained and approved by OWNER from time-to-time. However, BIDDER shall ensure that operations are not affected.

Job Responsibility of Manpower:

BIDDER shall deploy the above stated manpower, with relevant educational qualifications & professional experience to perform their duties, as described below (but not limited to);

Duties of Shift In-charge:

Responsible for Overall Supervision of all activities being handled by contractor as per tender document.

- Loading & Unloading of CNG gas dispatch to DBS.
- LCV logbook filling.
- Monitoring the record of Noting time & LCV cascade pressure at the time of dispatch and receipt of LCV by the technician/LCV filler.
- Efficiently managing LCV fleet movement.
- Excise invoice preparation for LCV movement, KMT, cash sale etc.
- Preparing excise invoice for retail sales.
- Making bills for retail sales.
- Take electrical meter readings
- Oversee both the activities of dispenser sales and cascade filling
- Overall responsible for complete housekeeping and cleanliness of the premises as well as equipment's.
- Coordinate with DBS for their daily closing & opening readings of dispenser. And keeping a permanent record.
- Daily attendance of Fillers, Technician, security etc.
- Shift wise updating of log sheets.
- Nominated Format updating shift wise.
- Update the station logbook shift wise.
- Allocation of manpower shift wise according to the shift schedule.
- Attending and resolving customer issues at Forecourt.
- Responsible for safe dispensing and filling operations & ensure that all the manpower deployed are trained in Fire Fighting and has STC.
- Complaint Reporting of any equipment problem and any problem or any information at MS/DBS to HPOIL Control room.

- Overall control over the manpower of other contractual staff working in the shift.
- Ensure Manpower availability at dispensers all the time in the shift and manage accordingly.
- Maintain the discipline of the manpower in the shift.
- Keen Monitoring of the filling activities of fillers specially to avoid filling of vehicles without valid documents, any kind of malpractice with equipment.
- Filling the vehicles in queue by coordinating with the security guard.
- Ensure the wearing of PPEs in the shift and reporting the non-compliance to station in-charge

Technician (Mech./Instru. / Electrical)

- Technician should have relevant experience in the required field and adequately qualified and experienced of Maintenance of all CGS & CNG Equipment's and Electrical installations. He shall be responsible for trouble free operation / minimize affected hours of CGS & CNG Stations and day-to-day reporting to the In-charge.
- Technician-Mech./Inst. shall carry out preventive maintenance for Dispensers, Storage/Mobile Cascades, LCV/HCV points, SS Tubing's, CO2 Flooding System, Air Compressors, utilities associated with City Gas Distribution system etc. as per check-list and OEM guidelines. The breakdown of CGS & CNG equipment's to be attended within a stipulated time frame, inventory management, reporting as per MIS etc.
- Technician-Electrical shall carry out preventive maintenance for LT Panel, APFC Panel, Power Distribution boards, Electrifications, Earthing System, Indoor/Outdoor Lighting, Power Cables, UPS System with batteries, HT Installations if any like Power transformer, Two-pole structure, HT Switch boards etc. as per check-list, work instruction, safepractices and OEM guidelines. The breakdown of CGS & CNG equipment's to be attended within a stipulated time frame, inventory management, reporting as per MIS etc.
- Technician should be obedient, hardworking and with learning aptitude. He shall hand over status of job to shift technicians during relieving his duties. He shall follow HSE practice, all safety precaution, hazard control measures as shown in work permit and instructed and use the PPEs as per job.
- Ensuring smooth and efficient O& M of all installations/equipment at CGS, MOTHER stations, DRS, DCU, CNG Stations.
- Troubleshoot Natural Gas Engines and Compressors and Dispenser.
- Hands on experience on Operation, preventive & scheduled Maintenance etc. of equipment installed at CNG stations, Mother station, CGS & PNG network i.e Gas compressors, dispensers, gas genets, odorizing units, DRS, MRS, SR etc.
- Physical checking of equipment installed at CNG stations, pipeline network, CS & valves, DRS, MRS and maintaining the logbooks / Check list as per SOPs. • Assistance to Station in charge CNG/PNG control Room in all maintenance. activities carried out at CNG stations by OEM / third party.
- Monitoring repair works at CNG stations & PNG network.
- Maintaining the records/registers/formats prescribed by HPOIL.
- Reporting of abnormalities/routine activities to concern Officers.
- Working knowledge of MS office i.e MS Word /Excels etc.
- Calibration of instruments of CNG compressor Dispenser /Meters/EVCs etc. and basic knowledge of gas metering.

- Gas loss controlling activities in CNG & PNG segments.
- Attending the emergencies at CNG stations and Pipeline network
 - Attending complaints & Preparation of gas consumption data through Gail, online compressor, DBS stations, DRS, MRS, SR, Industrial costumer
- Maintaining & attending activities at CGS/ Loading facility at petrolinks for gas consumption, maintenance of allied accessories, up keeping of CGS , leakage testing, Valve operation ,
- Maintaining operation & Maintenance of odorizing unit under CGS. • Attending works related to projects sites as an when required under GA.
- Any other activity as directed by Engineer in Charge from time to time.
 - Ensuring smooth and efficient O& M of all installations/equipment at CGS, MOTHER stations, DRS, DCU, CNG Stations.
- Odorizing unit report to be checked and maintained.
- Power factor at all stations need to be monitored and kept within limit,
- Supervision of Newly under construction RO/Stations.
- All calibration and record keeping to be done properly
- Liaison with competent authorities for smooth execution of business plan
- Training of ground workers for safety and technological advancement
- Load test and leak test of all installations at RO
- Timely and accurate JMR at CGS with GAIL authorities
- GAS loss analysis and corrective measure.
- DRS parameter monitoring and record up-keeping.
- Attending the emergencies at CNG stations and Pipeline network.
- Troubleshoot Natural Gas Engines and Compressors and Dispenser.
- Attending complaints & Preparation of gas consumption data through Gail, online compressor, DBS stations, DRS, MRS, SR, Industrial costumer
- Maintaining & attending activities at CGS/ Loading facility at petrolinks for gas consumption, maintenance of allied accessories, up keeping of CGS , leakage testing, Valve operation ,
- Maintaining operation & Maintenance of odorizing unit under CGS. • Attending works related to projects sites as an when required under GA.
- Employee should report 15 minutes prior to the commencement of his shift.
- Directly reporting to the Shift in charge at Mother Station , CGS .
- Execute plans of electrical wiring for well-functioning lighting, intercom and other electrical systems under GA as per AIC instructions.
- Install, maintain and repair electrical control, wiring, and lighting systems

House keeping

Helper shall be literate. Helper is responsible for House Keeping of equipment's, assist in maintenance activities to technicians. He will up keep the working area in neat and clean condition after and before maintenance. He shall be responsible for excavation of trenches, removal of MS

covers, pits, cutting of excessive grass / housekeeping in vicinity of CGS, ROs, Vehicle, etc. During job he should give tools tackles to his superiors as demanded and return the same in the van after completion of the job.

Duties of LCV Filler:

- Employee should report 15 minutes prior to the commencement of his shift.
- Directly reporting to the Shift in charge at Mother Station CGS & Petrolink.
- Daily checkup of all Cascades, Electrical Panels, DG Set, piping/tubing's etc.
- To fill CNG into mobile cascades as per the standard procedure.
- Noting initial and final pressure of each mobile cascades and reporting the same to the Shift in charge.
- Regular auditing & maintenance of Mobile and stationery Cascades.
- Any other activity as directed by Engineer in Charge from time to time.
- Attend Preventive & breakdown maintenance with OEM technicians.
- Rectify the complaints related to equipment breakdowns.
- Maintenance of valves in MDPE, steel line, DRS, MRS, SR under GA
- Visit at site as per instruction of AIC or as an when required.
- Replacement of studs Gasket Bolts, boxup of flanges joints,

Duties of Fillers:

- Employee should report 15 minutes prior to the commencement of his shift.
- Overall responsible for all activities related to sales from the CNG Dispensers.
- Filling of vehicles with valid documents only.
- Would be directly reporting to Shift in-charge.
- To dispense CNG to vehicles
- Attending and resolving customer issues at Forecourt
- To note opening and closing readings of dispensers after every shift and reporting the same to the Shift in-charge.
- Responsible for safe dispensing and filling operations
- Attending to minor maintenance jobs such as minor gas leaks from tubing / fittings promptly.
- Ensuring all after sales service to vehicles driving into the station such as cleaning, oil and water topping etc.
- Any other activity as directed by Engineer in Charge from time to time.

Duties of Housekeeper.

- Perform a variety of cleaning activities such as sweeping, mopping, dusting and polishing at Mother station and City Gate Station
- Ensure all office rooms are cared for and inspected according to standards
- Notify superiors on any damages, deficits and disturbances.
- Collect and dispose of trash in area of Mother station and City Gate Station.
- Keep facilities, Toilets and common areas clean and maintained.
- Any other activity as directed by Engineer in Charge from time to time
- Helping the receptionist, secretaries, or other administrative assistants in performing their duties.
- Proper filling the various documents of respective departments.
- Assists in menial office tasks required by the office staff; like photocopying documents, delivering files and documents to other staff members, dispatching documents, etc.
- Assists in menial office tasks required by the office staff; like photocopying documents, delivering files and documents to other staff members, dispatching documents, etc.

Duties of Operational Assistant:

- Customer complaint logging of department such as PNG domestic industrial, commercial, CNG dealers, NHAI road expansion under Kolhapur GA. Same will be transferred to concern department, engineers for resolution purpose.
- Daily Progress Report: DPR logging for all sectors CNG/PNG/I & C, This data will be helpful for analysis & reconciliation of GAS offtake & gas Sale.
- Patrolling: Reporting of all patrollers who are join & close the duties & respective route details , any abnormalities observed on charged network immediately inform to control room & same will be *raised with concern HOGPL officer.
- LCC office reporting: Both LCC office reporting to control room & there todays activities logged into log book
- Security services: Reporting of all security services of CGS & Mother Station to control room including security supervisor, store data logging such as inward & outward material issued to any contractor. Ensure authorize entry in the CGS & Mother Station premises.
- Forecourt Services: Reporting of shift In Charge's to control room such as duties joining & handing over.
- CNG O & M : Reporting of duties & handing over of duties & assigning work, maintenance activities of assets as per schedule.
- Permit to work: Issuing Permit to concern contractor for assigned work, Break down with authorised signatory of AIC.
- LCV Operation: Monitoring, Reporting & logging of LCV data such route, assigned stations as per requirement of CNG for DBS.
- Security & surveillance: Monitoring of CGS, MS, DRS through CCTV connected at control room & inform abnormality to AIC.
- HSE: PTW issued before any work. Reporting to concern officers In case of emergency, line damage, fire incident attending the site to coordination with O & M team. Preparing monthly Data Sheet for complaints, Updating Complaint data in ERP.

4.7 OTHER TERMS

- 4.7.1 BIDDER shall, at its own cost, provide 2 pairs of uniforms, Safety Shoes, Safety Goggles, ear Buds with identity card to its employees deployed at the CGS & CNG stations and shall ensure that his employees are wearing it.
- 4.7.2 BIDDER must maintain timely attendance, performance of duty, dress codes and personal protective equipment to all workers.
- 4.7.3 BIDDER shall provide organization chart with role and responsibility to OWNER. In case of any change in manpower allocation, BIDDER shall seek prior approval from OWNER.
- 4.7.4 Bidder shall deploy Manpower shift-wise as per instruction by HOGPL. If any change in requirement of manpower, HOGPL may inform to bidder in advance.
- 4.7.5 The services shall be provided 24 hrs. and 7 days a week at HOGPL owned station as well as co-located CGS & CNG station falls under cluster/GA's/Locations.
- 4.7.6 All personnel of BIDDER entering work premises shall be properly and neatly dressed and shall wear uniform, badges and personnel protection equipment's like helmets, safety shoes, safety gloves etc. while working in premises of the company including work sites.

- 4.7.7 Payment against over time of the employees deployed by the Bidder shall be verified by respective EIC and shall be paid on pro-rata basis.
- 4.7.8 BIDDER to submit monthly shift schedule well in advance and get it approved by OWNER'S representative.
- 4.7.9 BIDDER'S personnel shall be educated, trained, and experienced in CGS & CNG Station maintenance and aware of the prevailing codes / standards applicable to CGS & CNG maintenance and handling such as PESO, OISD-179, NFPA, ANSI, ASTM, NZS 5425, NGV, CENELEC, Indian Electricity Rules, Indian Explosive Act, Weight and Measuring Rules, Statutory Taxes and Levies, etc...
- 4.7.10 Supervisor with minimum qualification of Diploma / B. Tech in Mechanical / Electrical engineering with 2/5 years of relevant experience is required as Single point coordinator for all guiding the manpower and taking care of maintenance activities. The supervisor shall be available on phone 24 hrs. X 365 days.
- 4.7.11 The supervisor should have PC/laptop along with Data card and mobile phone for communication.
- 4.7.12 Technician (Mechanical/Electrician) provided at site shall have minimum qualification of ITI from a reputed institute with 0-3 years of relevant experience.
- 4.7.13 Technicians should be trained to handle all schedule/preventive/breakdown maintenance of SS tubing & fittings related jobs in trenching and on Cascades.
- 4.7.14 BIDDER shall provide the resume of all the manpower used for maintenance with the copy of certificates, photographs, and address details to HOGPL.
- 4.7.15 For any change / replacement of manpower for maintenance shall be informed to M/S HOGPL at respective GA. New candidate shall be interviewed and confirmed by M/S HOGPL only.
- 4.7.16 BIDDER shall arrange skilled welder and fitter along with welding machine, tools and welding rods or any other material or tools required for site work as and when required. Same manpower and their transportation cost bear by BIDDER for moving welding set from one place to another place will be in the scope of BIDDER'S.
- 4.7.17 HOGPL shall be having right to use the existing manpower for the machines under contract for any kind of modification work for CGS & CNG Station.
- 4.7.18 BIDDERS shall ensure the good workmanship all the time. Any loss arises due to unskilled manpower negligence and poor workmanship of manpower shall be recovered from the monthly bill.

4.8 RECORDS / REPORTS / DOCUMENTS

- 4.8.1 BIDDER shall be responsible for reporting as per OWNER'S "Management Information System" (MIS). OWNER shall provide the copy of MIS to the BIDDER after award of contract, BIDDER shall submit the same accordingly.
- 4.8.2 BIDDER shall update history card for each equipment's and maintain as chronologically

mentioning all incidence/Routine/Preventive/Breakdown Maintenance including the charges incurred & spares replaced.

- 4.8.3 BIDDER shall generate & produce the following reports, but not limited to the followings:
- Breakdown maintenance and Testing Report accompanied with the Preventive Maintenance Reports of individual equipment.
 - Planned Maintenance (AMP) Vs. Actual Maintenance.
 - History card for each of the equipment's.
 - Spares consumption for preventive Maintenance & breakdown repair.
 - Power Consumption, Power Factor analysis quarterly for each office.
 - Setting parameter of protective instruments.
- 4.8.4 All the copies of manuals and other documents issued by HOGPL shall always have to be maintained under safe custody at site by BIDDER for reference. The access of the same will be restricted to authorized personnel only.
- 4.8.5 BIDDER shall maintain register for the Attendance of manpower, Vehicle movement, Complaint analysis report, firefighting equipment and submit the report for the same.

5. HEALTH, SAFETY & ENVIRONMENT

- 5.1. BIDDER shall develop a health, safety and environment (HSE) plan that addresses the HSE risks specific to the work and the management of controls to eliminate, reduce or mitigate risks.
- 5.2. BIDDER shall ensure its personnel are:
- Medically, physically, and mentally fit to carry out the duties to which they are assigned in respect of the work.
 - Technically competent and experienced in the tasks assigned to them.
 - Aged eighteen years or above.
 - Specifically trained for hazardous material transportations.
- 5.3. BIDDER shall arrange related PPE (i.e. Hard hat, Safety Shoes, Uniform, Hand Gloves, Gumboots, Ladders, Safety Belts, safety gloves etc.) to his manpower and ensure to wear it during the maintenance job.
- 5.4. BIDDER personnel shall not smoke or resort to misuse of drugs, medicines, or alcohol while on duty. BIDDER shall also ensure that in no case the ability of his employees to carry out their assigned duty is impaired using the substances mentioned herein.
- 5.5. BIDDER shall ensure the safety of Man and Machine all the times. The BIDDER shall always remain liable to OWNER for any loss or damage caused to building plant and machinery, due to carelessness, negligence, inexperienced act of default of the BIDDER, his agents, representative or employees.
- 5.6. BIDDER shall provide relevant training (Technical / Fire and Safety, etc.) to his personnel from time to time for better functioning of the station at his cost and risk, without affecting Operations. OWNER may provide special training, to be required; hence, BIDDER shall direct his personnel for such trainings.

6. STATUTORY COMPLIANCE

- 6.1.** BIDDER shall ensure that the BIDDER as well as the CGS & CNG station complies with the Statutory requirements / Rules / Laws like Labor Laws, Minimum Wages Act, Payment of Wages Act, Workmen Compensation Act, Personal Injury (Compensation Insurance) Act, Industrial Dispute Act, Shop and Establishment Act, Employee Provident Fund Act, or any other act related to the Employee's welfare. Any assistance / compliance required from the OWNER should be informed in time and followed up for compliance.
- 6.2.** BIDDER shall be responsible for Insurance Coverage of the complete manpower engaged under the workmen's compensation Act / Group personal accident policy for the number of persons engaged by him at any point of time. He shall produce necessary documentation for the same to OWNER. He shall not engage any person less than 18 years of age and shall not pay less than what is prescribed under minimum wages act.
- 6.3.** BIDDER shall indemnify and keep indemnified the OWNER and its officers / servants and agents from and against all third party claims whatsoever including but not limited to property loss and damage, personnel accident injury or death etc.
- 6.4.** BIDDER shall at his own expenses comply with all labour laws and keep the OWNER indemnified in respect thereof. The OWNER shall be entitled to deduct directly from the bills to be paid to the BIDDER any sum, fines / penalty payable by the BIDDER and which sum / sums the company is required to pay as the principal employer on account of the BIDDER'S default in respect of all liabilities referred to in above clause.
- 6.5.** Public Holidays shall be entertained and approved by OWNER from time-to-time. However, BIDDER shall ensure that operations are not affected.
- 6.6.** BIDDER shall be responsible for the payment of all salaries / wages, allowances emoluments, gratuity and other payments etc. as may be required to be paid to employee by the BIDDER under any law or statutory rules applicable to the employee, and the BIDDER shall discharge all such liabilities promptly and keep OWNER indemnified and from same at all time.
- 6.7.** BIDDER shall be responsible for the payment of contribution under Employee State Insurance Act, Provident fund and other statutory payment to be made under any law or statutory rules and regulations for the time being applicable to the staff engaged by the BIDDER for the work at the OWNER'S premises and the BIDDER shall discharge all such liabilities promptly and indemnify and keep the OWNER indemnified from same at all time.
- 6.8.** BIDDER shall not allot subcontract any or part of the above job without prior approval of the OWNER.
- 6.9.** All persons engaged by the BIDDER shall be the BIDDER's own employees and they will claim no privileges from HOGPL. The BIDDER will be directly responsible for the administration of his employee as regard general discipline and courteous behavior.
- 6.10.** Proof of payments made against all statutory payments like PF, ESI etc., are to be submitted along with bills (in subsequent month i.e. payments for April'19 with bills of May'19 submitted in 1st week of June'19. Payments made against statutory requirements will be audited for genuineness.
- 6.11.** Bidder's monthly Invoice will only be cleared, if Salary & Attendance of Bidder's employee &

Proof of payments made against all statutory payments like PF & ESI are cleared as per the below given Acts.

- 6.12.** In view of death, injury or accident to employee, BIDDER should take Workman's Compensation Policy / Group Personal Accident Policy for the person being engaged with BIDDER at a time.
- 6.13.** BIDDER shall be responsible to comply with all the liabilities and accordingly, BIDDER shall maintain all record and registers and produce before the competent Authorities under the Act or the OWNER as and when demanded.
- 6.14.** By way of illustration of various Acts as stated in the contract, the BIDDER thereof shall comply with the following Acts prevailing from time-to-time or any amendments therein;
- The Employee's Provident Fund Act, 1952 The Employee's State Insurance Act, 1948
 - The Contract Labour (regulation and abolition) act, 1970 The Minimum Wages Act, 1948
 - The Payment of Wages Act, 1936
 - The Workmen's Compensation Act, 1923 The Payment of Bonus Act, 1965
 - The contractor will be responsible for making the salary directly to the bank account of the employees by 5th of each month from his own sources and subsequently raise bill for reimbursement which will be verified on the basis of actual amount disbursed and attendance etc. and the concerned bank statement should be readily available with the contractor and can be asked for verification by client any time.
 - The Company shall also have the power to deduct any sum required/ estimated to be deducted from the amount due to the Contractor for the following:-
 - i) Making good the loss suffered by his employees due to non-fulfillment of Contract Labour (R&A) Act, 1970.
 - ii) Nonpayment of wages/minimum wages under the applicable statutes.
 - iii) Deductions from the wages of his employees which cannot be justified under the Contract Labour (R&A) Act 1970.
 - iv) Non observance of any of the provisions of the Contract Labor (R&A) Act, 1970.

Wages structure as per the Central wages Act									
Sr. No	Category	Unskilled CNG(Dispenser+L CV) Filler	Unskilled Miscellaneous services at the time of emergency	Unskilled Housekeeper	Skilled Mechanical Techni cian	Skilled Electrical Technician	Skilled instrumentati on Technician	Skilled Operational assistant	Skilled Shift In-charge
	Wages	Per Month	Per Month	Per Month	Per Month	Per Month	Per Month	Per Month	Per Month
A	Basic								
B	DA (w.e.f. 01.10.2021)								
1	Sub Total (1) =(A+B)								
C	HRA 5 % on (A)								
2	Sub Total (2) =(1+C)								
	PF @ 13.15% on Sub Total (1)								
	ESI @ 4.75% on Sub Total (2)								
	Leave Encashment 1.5% on sub Total (1)								
	Bonus @ 8.33% on Sub total (1)								
	Labour Welfare Fund (LWF)								
	Special Allowance								
D	Grand Total wages per month (D)								

The Factories Act, 1948

- 6.15. Any other statutory requirements of Local / State Government / Government of India shall be fully complied by the BIDDER and the same shall be included in his scope of work.
- 6.16. All the statutory approvals and Liasioning required for CGS & CNG operation (stamping - legal metrology from weight and measure department of government) will be in the scope of the OWNER. However, BIDDER shall assist to obtain approvals.
- 6.17. BIDDER shall follow the safety procedures, from time to time, specified by OWNER in operating the outlet while handling of CGS & CNG. Specifically, the firm shall comply with and observe the Safety Code of Practice, notified by OWNER to the BIDDER for ensuring safe refueling of vehicles with CGS & CNG. In addition, the bidder shall also ensure full and strict compliance with the guidelines, norms, rules, stipulations etc. as may be prescribed by chief controller of Explosives (CCOE, PESO) Nagpur, Chief Fire Officer (CFO), Dy. Chief Inspector of Factories and any other statutory authorities in respect to safe handling, storage and sale of CGS & CNG at the site.
- 6.18. Central Wages shall be applicable, Bidders quoting State wages or wages below the minimum wages will be summarily rejected and such bids will be considered as non-responsive.

Note: The contractor shall not make the company liable to reimburse the contractor for the statutory increase in the wage rates of the labor/employee appointed by the contractor. Such statutory increase in the wage rates of labor/employee shall be borne by the contractor. The bidder needs to quote considering the possible escalation in the wage rate during the tenure of the contract. It is being clarified that no change in the rates quoted will be accepted after the award of the work order.

7. SCOPE OF WORK-HOGPL

- 7.1. HOGPL shall issue work permit or site clearance for the CGS & CNG station maintenance. However, the Bidder shall coordinate the entire work pertaining to above from time to time. Supervisor to ensure that everybody working at CGS & CNG station shall have Permit to work.
- 7.2. HOGPL shall provide adequate office space with sitting arrangement. In case, same arrangement shall not available with HOGPL then BIDDER shall provide proper space, seating arrangement for their manpower, communication system, etc
- 7.3. HOGPL shall maintain and issue available spares required for maintenance. HOGPL shall approve the rates of job/spares which are not included in tender. However, BIDDER shall extend such services on chargeable basis as agreed mutually.
- 7.4. HOGPL shall monitor movement of vehicle running for maintenance words, bidder shall maintain odometer readings in logbook with relevant details for further verification of Owner.
- 7.5. HOGPL shall make necessary vigilance on all the activities at any time during the tenure and reserves all right to take disciplinary action in case of any misbehavior, damages, fault at Bidder's part, theft / manipulation, malpractice, etc.
- 7.6. HOGPL has all the rights reserved to carry out the job pertaining to the station from any other vendor, if found dissatisfactory or half / partial completion in terms of workmanship, duration, etc. In such case, necessary deduction from Bidder shall be made.

8. PENALTY AGAINST NON-COMPLIANCE IN MAINTENANCE

- 8.1. The following critical parameter describes the system performance and service level expectations and requirements during the Implementation phase of Contract. The service level includes target performance measures, unacceptable measures, and the related penalties for

not meeting required service levels.

Sr.	Parameter	Service Level Agreement	Penalty
1.	Preventive maintenance	As per approved schedule /Annual Maintenance Plan	500/- per delayed day per site after 7 days from the scheduled date of maintenance.
2.	Breakdown maintenance	Within 30 min on receipt of written / telephonic intimation	500/- per delayed hour per site after 4 hours from the written / telephonic intimation
3.	PPE's OR Uniform	Fully compliance for all Manpower	500/- per instance
4.	HSE Compliance	Fully compliance to HOGPL HSE requirements	1500/per instance* during the execution of job.
5.	Use of Equipment /Instruments	Deployment of equipment /Instruments with calibration	1000/- equipment/ Instruments observed without calibration.
6.	Maintenance / Service of Van	Healthy condition all time, regular service from auth service center	25,00/- per instance
7.	Upkeeping Measuring instruments, tools-tackles and equipment's in Maintenance Van	Fully compliance	1000/- per instance
8.	Child labour	Non employment of child labour less than 18 years	5,000/- per instance
9.	Non -Availability of Manpower	Deployment of skilled manpower	1500/- against non-availability of manpower per instance
10.	Any incident leading damage to Owner asset	No damage during entire contract period	10000/- or repair cost whichever is high
11.	Up-keeping First Aid kit complete	Complete as per Owner requirement	500/- per instance
12.	Compliance to any statutory & legal requirement	Fully compliance to HOGPL requirements	1500/- per instance
13.	PF Management	To maintain PF value ≥ 0.95 , No penalty shall be imposed against poor PF	As Actual Penalty
14.	Non providing Printer computer	Complete as per Owner requirement	1000 /- per day

15.	Non Providing Stationary	Complete as per Owner requirement	500/- per day
16.	Non disbursement of salary on time as per tender clause	Fully compliance to HOGPL requirements	2000/- Per day

The cumulative penalties arising out of Service Level Agreements shall be limited to 10% of the Total Contract Value. (The Complete Technical Document Service Level Agreement).


- 8.2.** If the Cumulative Penalties exceed limit of 10% of contract value, then Owner reserves the right to invoke the termination clause accordingly.
- 8.3.** Any noncompliance to applicable statutory and legal requirements may lead to termination of services or contract subject to discretion of HOGPL.
- 8.4.** No penalty shall be applicable in case of: -
- Force majeure.
 - When HOGPL has instructed not to carry out the work, for which only written evidence shall be considered / granted.
 - Reasons not attributable to BIDDER.

ANNEXURE-II
PLANNED MAINTENANCE SCHEDULE
(AMP)

Sr.	Description	Frequency
1	Preventive Maintenance of Mechanical and Electrical Installations as per check lists.	Monthly
2	Carry out leak check of stationary cascades tubing and fittings connections, tightness, cleanliness, burst disc, grouting, and any other joint connected to cylinder.	Fortnightly
3	Carry out leak check at LCV filling & unloading post of SS tubing & fittings, housekeeping of post, QRC coupling with connector, cascade base connection with LCV/HCV, tightness of cascade frame.	Fortnightly
4	Carry out leak test at all LCV/MCV/HCV cascades cylinder of SS tubing's and fittings, rupture disc, dent, corrosion, damage if any	Fortnightly
5	Ensure that all types of Cascades of SRVs, pressure gauges / temperature gauges are tested / calibrated as per the requirement and reports submitted.	Monthly
6	Check tightness of all SS Fittings and Clamps	Fortnightly
7	Cleaning of the tubing Trench, Dispenser, Cascades, Electrical Installations and other applicable	Monthly
8	Carry out leak test for CGS & CNG stations equipment's-Cascades Dispensers, Air Compressor piping, LCV Points, SS tubing and fittings etc.	Weekly
9	BIDDER should ensure good housekeeping in SS tube trench, cable tray, cascade / compressor base and internals of dispenser / Electrical panels.	Monthly
10	Earthing Testing of all earth pit & record the earthing resistance value with & without grid.	Quarterly
11	Functional Check of Protective relays, Instruments & Switchgears. Assist in Testing and Resetting/Calibration activities running in CGS & CNG Stations, maintain/ record Calibration Certificates of it.	Quarterly
12	Testing of transformer insulating oil & Necessary Oil testing Certification be required for annual Asst. Electrical Inspection.	Quarterly
13	Assist in obtaining approvals from Electrical Inspector during Annual inspection.	Yearly
14	Assist in obtaining Plan Approvals / NOC from Electrical Inspector required during Up-gradation / modification works	As & When Req.
15	Check setting of Protective Relays as per site conditions and recommended.	Quarterly
16	Check Insulation Resistance of live part of Electrical Installations like power cables, Power Transformer, Servo Stabilizers, LT Panels	Quarterly
17	Painting to the Lighting Poles, Two Pole Structure, Earth Pit Covers	Half Yearly /As & When Req.
18	Identification of all feeders, Earth Pits, Lighting Poles, Equipment's	Quarterly /As & When Req.
19	Filtration of Transformer oil & basic testing of Transformer at Site i.e. Continuity, Winding Resistance Unbalance Voltage Test.	As & When Req.

20	Display and update Earthing diagram/SLD as per site situation and modification if any.	Monthly /As & When Req.
Note:	BIDDER shall carry out preventive maintenance as per Equipment Manufacture's Instruction Manual but not limit to above mentioned activities. Also, shall take Work Permit from Authorized issuer and approved by respective site manager/engineer with all respect.	

**ANNEXURE-III
MAINTENANCE CHECK LISTS**

	Preventive Maintenance Check-List for SS Tubing & Fittings, Storage Cascade, LCV/HCV Filling & Unloading Post	Format No.	
		Rev. No.	0
		Effective Date	
Report No.:	Date of Maintenance:		
GA:	Location:		
Name of the BIDDER:	Maint. Order No.:		
Performed By:	Witness By:		
Sr.	Inspection Item	Inspection Status	Remarks
SS Tubing & Fittings			
1	Carry out leak check of each joint of tubing using soap and water solution.		
2	Check leakages of SS tubing & fittings in dispenser		
3	Check leakages of SS tubing & fittings of Air Compressor		
4	Check leakages of SS tubing & fittings in Trench		
5	Check tightness of all SS Fittings		
6	Check tightness of all tubing clamps		
7	Cleaning of the tubing Trench		
Storage Cascade (Stationary, static & Mobile In LCV/HCV)			
8	BIDDER shall verify that the cascade cylinders are hydro tested as per the statutory requirement and submit report for same.		
9	BIDDER shall verify that equipment's are being calibrated as per the statutory requirement and submit report for same.		
10	The cylinders are cleaned, visually checked for corrosion / damage and submitted reports for necessary action.		
11	Check leakages of all fittings.		
12	Check the tightness of all fittings.		
13	Check tightness of all cylinder clamps.		
14	Check Rupture Disk on each cylinder.		
15	Check leakages and Operations of SRV.		
16	Check tightness of Cascade mounted on LCV.		
17	Check the grouting of the cascade frame.		
18	Check for proper bracket-to-vehicle mounting.		

19	Check proper connection of Fuel and vent Hose.		
20	Check whether, Rubber mounting pads are in place or not, if not specify same in the report.		
LCV Filling & Unloading Post			
22	Check for any CGS & CNG leaks from SS tube fittings using soap and water solution.		
23	Condition of QRC Coupling with connector (L/M/H). Replacing of QRC 'O' rings, if required		
24	Check Mass flow meter for its proper functioning at CGS & CNG Mother station		
25	Check Clamps and Supports in trench		
26	Replacing of spares required, if any.		
27	Check for Earthing cable with clip (Replace if required).		
28	Housekeeping of LCV fill Post area.		
29	Re-installation of LCV fill post in case of damaged by any accident / Incident		
30	Condition of Pressure gauge, 2 & 3 - Way ball valve, H P Filling Hose (L/M/H)		
31	Vent height of LCV filling point should be (03 Mtr. From GL), modify if not.		

Major Observation If any: -

Certification	Signature:	BIDDER		
	Name:	Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/Station Owner)	Authorized By (O&M In-charge)



**Preventive Maintenance Check-
List for Power Distribution
Boards/LT Panel**

Format No.
Rev. No. 0
Effective Date

Report No.: _____ Date of Maintenance: _____
 GA: _____ Location: _____
 Name of the BIDDER: _____ Maint. Order No.: _____
 Performed By: _____ Witness By: _____

Sr.	Inspection Item	Inspection Status	Remarks
1	Check all the MCCB's by operating & its connections. Check Condition of its Handle.		
2	Check Air circuit breaker connection, tripping commands, ON-OFF in test mode as well as No load condition.		
3	Check for incoming supply during load and no-load conditions.		Voltage: RY__V, YB__V, RB__V
4	Check for Overload, Under Voltage, Overvoltage, Earth Fault Relay operation. Note the setting parameter.		OLR: ____ UV: ____ OV: ____: EFR: ____
5	Check for proper 3-Ph load distribution (For balance current)		Current: R__ Amp, Y____ Amp, R__ Amp
6	Internal Bus bar connection, any damages in bus bar supports insulators etc.		
7	Check change over switch connection & its ON-OFF Operation.		
8	Check function of APFC relay, CT's connection, ON-OFF contactor		CTs connection should be on GEB Incomer.
9	Identification of all feeders as per connected equipment.		
10	Check for presence of foreign materials, Open entry etc.,		
11	Check Emergence stop Push Button		
12	Check connection. Tightness and Physical condition of outgoing Cable and lugs.		
13	Check healthiness of all fuses, size & rating by continuity tester and Check the rating with related scheme drawings. Change if not in order.		
14	Check insulation resistance of the all point's w.r.t chassis with 500 V megger. (yearly)		IR Value: ____ MΩ

15	Check condition of enclosing cabinets including hinges, latches, locks, door gaskets, Painting to body, if reqattend.		
16	Check proper space between bus bars and Bus bars to Body. Put an isolator/Hylam Sheets if required.		Min 25 mm
17	Check for overheating of cable, terminal blocks, fuse base and isolator ends. If found replace it.		
18	Check the APFC Relay operation in Auto and ManualMode. Record the Power Factor from display in load condition.		P.F.: _____
19	Take the Current Reading of each capacitor, if found current less 33% from Rated current, replace the same.		Nos. of Power Capacitors with less current:
20	Check earthing to Panel Body & each capacitor bank.		
21	Check APFC interlocking between DISCOM & DG set for avoiding reverse power to alternator.		
22	Check all connections of APFC module & tightening of termination at Contactor/Thyristor, fuse, bus link, and connector.		
23	Check condition of discharge resistors on capacitors OR Surge Suppressor on Contactors.		
24	Ensure the PF adjustment charges from electricity supplier. Check power factor readings & records for the same.		

Major Observation If any: -

Certification	Signature: Name:	BIDDER		
		Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/Station Owner)	Authorized By (O&M In-charge)



**Preventive Maintenance Check-List
for UPS System**

Format No.

Rev. No.

0

Effective Date

Report No.:

Date of Maintenance:

GA:

Location:

Name of the BIDDER:

Maint. Order No.:

Performed By:

Witness By :

Sr.	Inspection Item	Inspection Status	Remarks
1	Check output voltage setting of UPS System.		Voltage Setting: V _____
2	Check for alarms logged in display.		
3	Check terminations are tightened. And no open entry in UPS system.		
4.	Monitoring the load on UPS system.		Full Load Current: Amps. _____
5.	Check level of electrolyte, if low Top-up electrolyte as per mentioned in manual.		Top-up electrolyte after confirmation from O&M O&M HEAD.
6.	Clean the UPS by dry clothes & blower.		
7.	Check cooling fan of UPS module. Replaced immediately if found.		
8.	Check for fuse rating as per manuals.		
9.	Check connection of UPS system through isolation transformer and standby servo stabilizer.		

Major Observation If any: -

Certification	Signature: Name:	BIDDER		
		Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/Station Owner)	Authorized By (O&M In-charge)



**Preventive Maintenance Check-List for
Batteries - Installation & Its Operation**

Format No.

Rev. No. 0

Effective Date

Report No.:
GA:
Name of the BIDDER:
Performed By:

Date of Maintenance:
Location:
Maint. Order No.:
Witness By:

Sr.	Inspection Item	Inspection Status	Remarks
1	Make sure battery terminals and cable connections are clean and tight.		
2	Maintain electrolyte level as marked on it, neither high nor too low. (Never add acid to cells as electrolyte in any type of batteries.)		Refer OEM manual for proper method
3	Check for bulging effect of installed each battery, if found replace at earliest.		
4	Check for any crack/damage, acid Leakage/terminal damage.		
5	Check for the charger operation. Overcharging produces gases, rapid deterioration and corrosion which shorten battery life.		Float Charging is recommended.
6	Check for no excessive Charging Voltage.		13.6-13.8 V for SMF / AGM/Gel Batteries & @1.4V/Cell for Ni-Cd Batteries.
7	Check for Vent caps are Cleaned, Gases can be expelled during overcharging.		
8	Check installation at well-ventilated area and away from Heat Sources or direct sunlight.		
9	Check connected batteries are with same voltage & AH rating.		Preferably form the same lot.
10	Check voltage of each battery & make record in logbook.		
11	Check Specific gravity of electrolyte & make record in logbook.		It should be 1.19±0.01.
12	Replace the batteries if; <ul style="list-style-type: none"> • Bulging effect observed on body, • Any crack/damage/leakage observed, Completion of <u>three years</u> from installation for SMF/VRLA/AGM/Gel type batteries.		

Major Observation If any: -

Certification	Signature Name	BIDDER		
		Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/ Station Owner)	Authorized By (O&M In-charge)



HPOIL GAS PVT LTD KOLHAPUR
(A Joint venture of HPCL & OIL India)

ISSUE NO:-01
REVISION NO:-00
EFFECTIVE DATE:-
06/09/2021

MONTHLY CHECKLIST FOR DAUGHTER BOOSTER COMPRESSOR

FORMAT NO.: HPOIL/O&M/F/007

Date :- _____ Time:- _____
Name of CNG Station:- _____ Location :- _____

Sr.No	Description	Status		Rectification	Remarks
		OK	NOT OK		
Compressor					
1	Check for gas leakages Rectify if found any				
2	Check for oil leakages Rectify if found any				
3	Clean radiator from top side				
4	Check Oil level. (It should be 50% to 70%)				
5	Check water level.(It should be 60% to 90%)				
6	Check water leakage Rectify if found any				
7	Check air leakage Rectify if found any				
8	Check motor current				R ,Y ,B
9	Check Supply Voltage				RY ,YB ,BR
10	Tighten all electrical connections in panel				
11	Check for any Abnormal sound.				
12	Check Earthing connection in compressor				
13	Check functioning of ESD switches				
14	Drain the moisture and oil from oil separator				
15	Check all the working parameter in the LogBook				
16	Clean of entire compressor.				
Air Compressor					
17	Drain air/ water from air receiver tank				
18	Check normal operation of pressure switches				
19	Check oil level of air comp and top up if reqd.				
20	Check & arrest leakages if any				

Contractor Representative Name: _____ Signature: _____
HPOIL Representative Name: _____ Signature: _____



**Preventive Maintenance Check-List for
Power and Control Cable**

Format No.	
Rev. No.	0
Effective Date	

Report No.:	Date of Maintenance:
GA:	Location:
Name of the BIDDER:	Maint. Order No.:
Performed By:	Witness By:

Sr.	Inspection Item	Inspection Status	Remarks
1	Check the proper laying/fitting on cable tray, in duct or open trench.		
2	Check cable route for any water seepage, damage if any etc.		
3	Tighten all terminations, check safe distance between lags, provide separator if found misplaced, provide insulation Tap/PVC Insulator if found damaged.		
4	Check insulation resistance Ph. to Ph, Ph. to Ground by using 500V megger for LT cable & 1000V megger for HT cable allowable limit of IR value for LT cable >1MΩ and HT >5MΩ (once in a year)	Last Checked on..... Last checked value.....	Acceptable HT IR Value >5MΩ Acceptable LT IR Value >5MΩ
5	Cleaning of power Cable trench in electrical room, Cable entry & exit and cable trays.		
6	Check all power/control cables dressed are properly		
7	Check the tag of each end. If found missing, provide the same.		Tag Details shall be as per cable schedule
8	Check the route marker & its condition. If found missing, provide as per instruction of O&M HEAD.		
9	Check FRLS Cable and FLP Cable Gland in specified Gas Zone.		

Major Observation If any: -

Certification	Signature: Name:	BIDDER		
		Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/Station Owner)	Authorized By (O&M In-charge)



**Preventive Maintenance Check-
List for Earthing System**

Format No.

Rev. No.

00

Effective Date

Report No.:
GA:
Name of the BIDDER:
Performed By:

Date of Maintenance:
Location:
Maint. Order No.:
Witness By :

Sr	Inspection Item	Inspection Status	Remarks
1	Visually inspection of Earth pit, its size, cleanness, earth pit cover with Identification.		
2	Check proper connection of Earth Electrode with Earth strips. Apply grease or bitumen on outer surface of Bolts and nuts. Replace SS Nut-bolts if found corroded.		
3	Check Earthing resistance with grid and Without grid though calibrated earth tester & as per approved procedure.		Annexure-3 Acceptable ER Value: With Grid <5Ω Without Grid <10Ω
4	Check proper Installation of Earthing marker and update the value.		
5	Check double point earthing of all equipment having more than 250V power supply (Three Phase supply).		Both points shall be connected at grid directly.
6	Check Earthing continuity from earth pits to equipment.		
7	Make coating to earth strips joints by applying zinc-rich or black bitumen paints, if corroded after doing surface preparation.		
8	Check isolated earthing to the UPS Neutral, DG set neutral, Power transformer neutral and Lighting arrester.		
9	Display and update Earthing diagram as per site situation and modification if any.		Annexure-8
10	Do Maintenance of earthing pit whose resistance value is higher.		If found ER >10 Ω after Maint.
11	Check all earth connection to be checked for tightness. Loose connections or bolted joints lead to hot spot & sparking which can become a source of fire/explosion in the hazardous areas.		

Major Observation If any: -

Certification	Signature: Name:	BIDDER		
		Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/ Station Owner)	Authorized By (O&M In-charge)



**Preventive Maintenance Check-List for
Lighting System**

Format No.

Rev. No. 0

**Effective
Date**

Report No.:

Date of Maintenance:

GA:

Location:

Name of the BIDDER:

Maint. Order No.:

Performed By:


Witness By:

Sr.	Inspection Item	Inspection Status	Remarks
1	Check the all lights by operating.		Nos. of Lighting not working: _____
2	Check the internal /external earthing of lighting fixture.		
3	Check Capacitor, Choke, and Igniter capacity with lighting fixtures.		
4	Check termination of Cables in DB's, Switches, Lugs Identifications etc...		
5	Check Lighting Load distribution in all three Phases.		L.Load in Phase R: _____ Y: _____ B: _____
6	Check record of spares consumed / frequent failure of lighting material.		
7	Check FLP Junction Boxes, Cable Gland, FLP Plug, FLP Sleeve condition in Gas Zones. If found damage, replace it.		
8	Painting to the lighting Poles by isolating power supply as & when required.		
9	Check Gasket of FLP lighting fixtures/ Junction Box/Control Panel, if found cracked, replace the same.		
10	Drum, winch, Motor working to be check		
11	Apply grease on rope/gear of motor		
12	Check direction shifting if any of hi-mast lighting fixtures, set if required.		
13	Check proper fitting of junction boxes installed on poles/hi-mast		

Major Observation If any: -

Certification	Signature: Name:	BIDDER		
		Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/ Station Owner)	Authorized By (O&M In-charge)

MAINTENANCE CHECK LISTS
FOR
HT INSTALLATIONS
(IF APPLICABLE)

	Preventive Maintenance Check-List for HT Switch Board / Vacuum Circuit Breaker		Format No.	
			Rev. No.	0
			Effective Date	
Report No.:		Date of Maintenance:		
GA:		Location:		
Name of the BIDDER:		Maint. Order No.:		
Performed By:		Witness By:		
Sr	Inspection Item	Inspection Status	Remarks	
1	Clean outside of breaker with dry clothes.			
2	Check external screws, bolts, open entry to inside.			
3	Check for presence of foreign materials, birds' nests, etc. inside of VCB part.			
4	Check loose or overheating connections; ground connections. Tighten all bus. Bushing and ground connections.			
5	Check connection Tightness and Physical condition of outgoing Cable and lugs.			
6	Check the neutral link proper connection.			
7	Check condition of enclosing cabinets including hinges, latches, locks, door gaskets, and paint it if req.			
8	Check for proper alignment of fixed & moving contacts, inspected moving contacts for decolourisation, carbonization, pitting or any other abnormality & replace, if found bad.			
9	Check breaker operation for manual as well as remote.			
10	Check healthiness of all fuses, size & rating by continuity tester and Check the rating with related scheme drawings. Change if not in order.			
11	Check power pack function.		Output Voltage: _____	
12	Check relay setting as per site situations and installations.		Setting Value: _____	
13	Check earth continuity of busbar, breaker module, and cubicle.		Acceptable Value < 1Ω	
14	Check breaker operation for manual as well as remote.			
Major Observation If any: -				
Certification	Signature: Name:	BIDDER		
		Prepared by (AMC BIDDER)	Verified By (Engineer In-charge / Station Owner)	Authorized By (O&M In-charge)



**Preventive Maintenance Check-List for
Power Transformer**

Format No.	
Rev. No.	0
Effective Date	

Report No.:	Date of Maintenance:
GA :	Location:
Name of the BIDDER:	Maint. Order No.:
Performed By :	Witness By :

Sr	Inspection Item	Inspection Status	Remarks
1	Check for Electrically Loose Connection at Bushing Terminal.		
2	Check for oil leakage from bushing Terminal, gaskets or other body parts.		
3	Check the Oil Level in Conservator Tank MOG / Gauge.		
4	Check the Explosion Vent Diaphragm		
5	Check function check of Off-Load Tap Changer, Note Down Tap Position.		
6	Check output voltage setting in AVR and record it.		
7	Check OLTC Operation manually and automatically.		
8	Interlock Checking for HT Breaker Trip in Test Position.		
9	Check parameter of Oil Temperature and Winding Temperature & Its Alarms setting, if applicable		OTI: WTI:.....
10	Ensure all fasteners and gasket is in position.		
11	Check humming / reprehensible voice from transformer.		
12	Check dielectric strength (BDV) of oil (yearly)		Acceptable Value >30 KV, if found lower, filtration process to be carry out.
13	IR Value of Transformer Primary Winding (H.T side) with Megger. Also check the Winding Continuity (yearly).		Acceptable Value >50MΩ
14	IR Value of Transformer Secondary Winding (LT Side, 415V) from back side of Incomer of Respective Transformer on the LVs after Isolating from Transformer. (yearly)		Acceptable Value >50MΩ
15	Check condition of silica gel in breather		If found pink colour of silica gel, take drying method or replace.
16	Clean outside of transformer with dry clothes.		
17	Check & clean of marshalling box, indicator, and terminals.		

Major Observation If any: -

Certification	Signature	BIDDER		
	Name:	Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/ Station Owner)	Authorized By (O&M In-charge)



**Preventive Maintenance Checklist
for Two Pole (DP) Structure**

Format No.	
Rev. No.	0
Effective Date	

Report No.:	Date of Maintenance:
GA:	Location:
Name of the BIDDER:	Maint. Order No.:
Performed By:	Witness By:

Sr.	Inspection Item	Inspection Status	Remarks
1	Check Insulation Resistance of HT Accessories w.r.t Chassis with 1000V Megger.		Acceptable Value >5MΩ
2	Clean all accessories of Two Pole Structure.		
3	Check Drop out Fuse condition, it not to be loose / Broken. / Wired condition. If found, replace as required or with set.		
4	Check Lightening arrester condition, it not to be damaged. If found, replace as required or with set (mainly during pre-monsoon).		
5	Painting to the Pole by isolating HT power supply as and when required.		
6	Check isolated earthing to the lightening arrester. Replace insulator/spacer of Earth strips if required.		
7	Check Earthing continuity to the Pole at two points.		
8	Check Earthing continuity of GOD operating rode & handle.		
9	Check for Electrically loose connection & No spark at terminal. Tighten all electrical connections.		
10	Check ON-OFF operations of Air Breaker / Isolator, Male-Female contacts etc.		
11	Check availability of HT rated hand glows for operating HT isolator in case emergency.		
11	Check Electricity Supplier Energy Meter for any abnormal reading.		

Major Observation If any: -

Certification	Signature: Name:	BIDDER		
		Prepared by (AMC BIDDER)	Verified By (Engineer In-charge/ Station Owner)	Authorized By (O&M In-charge)

SCOPE OF WORK FOR EMERGENCY VEHICLE

The Scope of works includes providing vehicle along with driver as per specification of tender documents for meeting owner's day to day requirements of travelling on various types of roads viz. National highways, State highways, City roads, District roads, Village roads, kutch roads etc. both in cities and remote villages.

The contractor should ensure that vehicles shall have permit to RTOs to operate in state of Maharashtra & Haryana as well as adjacent state commercially registered for regular plying.

The scope of work also includes driver wages, fuel cost, insurance, RTO taxes and maintenance cost for the vehicle.

1.0 VEHICLE SPECIFICATION

a. FOR SOR Item PART C- 24X 7 EMERGENCY RESPONSE VEHICLE FOR O&M.

Type/Model/Make of Vehicle: Ecco or equivalent of respective, 5-seater, Yellow plate with RTO permit) models conforming to Euro IV/BS IV/BSVI

Type of fuel used: CNG.

Model: Jan 2023 or higher variants of respective models conforming to Euro IV/BS IV/BSVI

Model Year: 2023 or onwards.

Duty: 24 x 7 days

Minimum assured KM: 3000 Kms per month

Vehicle Registration: Under Emergency Services

2.0 DEPLOYMENT OF VEHICLE AND PENALTY CLAUSE

Contractor shall deploy the vehicle with driver within 15 Days from the date of written advise from HOGPL's Officer in Charge at HOGPL designated Office as per the advice from Engineer in Charge (EIC). 01 nos. of vehicles are to be based at each GA. Contractor has to deploy vehicle at Kolhapur only after taking in writing from HOGPL respective station/Engineer/officer in charge. If the vehicle is not placed within 15 days, HOGPL reserves the right to cancel the Work order & forfeit security deposit.

Vehicles may be required to report at different places from time to time with prior intimation for reporting as per travel requirements of HOGPL officer/HOGPL representatives. The contractor shall have an address for correspondence with mobile facility, contractor should be generally available over his mobile whenever required and should report on designated places as required or whenever called for. The reporting point for the vehicle shall be at Kolhapur (Maharashtra, Karnataka, etc.) and Ambala Kurukshetra Haryana as per the instructions of HOGPL Officer.

Vehicle(s) deployed should be duly registered with R.T.O. under valid Permit(s), all taxes paid, comprehensively insured covering the risk of all passengers traveling in the vehicles.

Vehicles should have valid Permit(s), required tools, spare wheels, portable fire extinguisher and spares for repairs to be carried out en-route.

Contractor should have valid "Permanent EPF Account" under RPFC and "ESIC" in its name. Wherever "ESIC" is not applicable, same shall be governed by "Workmanship Compensation Act". Documentary proof(s) of "Permanent EPF Account" and "ESIC" / "The Workmen Compensation Act" [prior to commencement of work, in case of award], must be submitted.

The Contractor shall ensure that the vehicle(s) are kept clean and upholstery with neat seat covers duly washed / dry-cleaned to be provided at an interval as specified by the Officer in-Charge.

Driver must have authorized valid commercial vehicle driving license and neat & clean on daily basis (properly in uniform and shoes) Contractor will be held responsible if driver is not in proper attire. A Fine of Rs.500/- will be imposed.

Contractor should personally visit at HPOIL office at least twice in month for inspection of vehicles and also monitor the driver's attire.

Binding (Hard) Logbook (at least 200 pages) will be provided by the Contractor which should be maintained by Drivers on a daily basis & Contractor/Supervisor should ensure it is maintained properly. During inspection if it is found that the Logbook is not maintained properly then a fine of Rs. 1,000/- will be imposed.

In case of non-availability of ERV/Driver, penalty of Rs. 1000.00 per hour shall be imposed and maximum penalty shall be limited to 100% of monthly hiring charges of said vehicle for said month.

If bidder fails to provide ERV or alternate vehicle for more than two days (48 Hours), EIC of HPOIL have right to cancel the Work Order and Blacklist the bidder to take part in any kind of future tenders in HPOIL. The final decision in this regard shall be of EIC of HPOIL.

ERV must be clean (inside -out) on regular basis, Contractor/Supervisor should ensure it on a daily basis. If any vehicle found dirty on duty, then fine of Rs. 1,000/- per vehicle per day will be imposed.

Toll & Parking charges will be paid by Contractor which he can claimed along with bills on monthly basis. But if paid by the User then double amount will be deducted from his monthly bill with fine charges of Rs. 1,000/- per occasion.

The Contactor has to provide the vehicle(s) with tank full of fuel and sufficient money with the driver to meet with any exigency for all the notified requirements for long distances/ outstation duties. In case of failure of the vehicle in route for want of fuel or otherwise and the accompanying Driver shows his inability and the Company's employee/ officer or any other authorized person utilizing the vehicle has to incur expenditure for making good the vehicle either by refueling or any other act which is recorded in log book by the utilizing person, recovery of such expenses shall be double the amount spent by the utilizing person along with a day's hire charges calculated on pro-rata basis and these amounts shall be recovered from the Contractor's bill.

Speedometer Kilometer Recorder and other instruments/meter(s) must be maintained at a high standard of accuracy. Any defect noticed by Officer-in- Charge or his authorized representatives shall be rectified forthwith by the Contractor. Until such rectification, the kilometer for such distance/places as verified and certified by the Officer/Staff traveling in the Vehicle shall be final and binding to the Contractor for the purpose of billing, etc.

3.0 EXTRA KILOMETERS

Calculation of extra kilometres i.e., SOR Item No. 2 will be done only at the end of each set of three Months of actual usage. Monthly bills will be processed at the accepted monthly rate of the contract. Payment for extra kilometres i.e., SOR Item No. 2 if any - will be made in the last monthly bill of each quarter.

Following example will illustrate the method of payment towards extra kilometres i.e., SOR Item No. 2. For the purpose of illustration, monthly rate of vehicle as Rs 10,000/- and rate for extra kilometres as Rs 3/- per Km.

Actual Running for Three Months of actual use = 9500 Km

Extra Kilometers for Three Months = 9500 Km - 9000 Km

= 500 Km

Hiring Charges for 3rd Month = Rs.10,000/-

Amount payable for 3rd Month = Rs.10,000 + (3x500)

= Rs. 1500/-

However, payment towards extra duty hours, outstation night halts and Diesel Prices Variation will be made on a monthly basis except for 24*7 ERV for O&M.

4.0 EXTRA DUTY HOURS & NIGHT HALTS

No extra Hours will be considered for 24*7 ERV.

5.0 VARIATION IN FUEL PRICE

The rates accepted by HOGPL in the contract will remain firm & fixed for the duration of the contract and by extension if any. However, following method will be adopted to compensate for periodic variations in the price of Fuel i.e., Diesel/ CNG

- i) No change in rates upto 99 paise variation in CNG price from the base price.
- ii) For an upward variation (i.e., increase in CNG price) of 1 Rupee or more from the base price, the amount payable will be:

This amount will be paid on a monthly basis on actual Km logged in that month post prices variation. In the case of a downward variation (i.e., decrease in prices of CNG) of 1 Rupee or more from the base price, an amount as calculated above will be deducted from the monthly bill.

Base price of CNG for this contract will be taken as price of CNG at Maharashtra quoted by bidder in priced bid on bid submission date and govern all escalation/ de-escalation calculations in case of variation in CNG prices.

Rates quoted are firm and will remain unchanged during the currency of the contract.

However, the Company will consider an increase/decrease in the Kilometer rates.

during the contractual period, in the event of increase/decrease in retail prices of fuel as per, the following formula: :

Increase or decrease in Hire charges during the month =

Actual KMs run by the vehicle * (Revised rate of fuel price per litre - Base rate per litre)

Average Mileage of the vehicle in Kmpl

(Note: - The Base Rate of fuel is the prevailing rate on the last date/closure date of Bidding. The Average Mileage is to be assumed after considering the vehicle make, type and model provided by contractor.

If there is a decrease in Fuel Price, formula will indicate negative figure which means the deduction shall be done from the bill.

The contractor shall submit supplementary bill for reimbursement towards increase in Fuel price on monthly basis without accumulation. This supplementary bill is to be supported with proof of fuel price prevailing on 1st of the month.

6.0 OPERATING CONDITIONS FOR EMERGENCY RESPONSE VEHICLE

The supplied Emergency Response vehicle shall be registered as TOURIST VEHICLE with the respective RTA.

The contractor should ensure that vehicles have permits to RTOs to operating in state of Maharashtra as well as adjacent state like Karnataka, Goa etc. commercially registered for regular plying.

ERV should be in good condition, regularly serviced and roadworthy at all times. All necessary accessories like wipers, horns, spare tyre, toolbox and critical spares like fan belt and fuses etc. should be available in the vehicle in serviceable condition. HOGPL officer has the right to inspect the vehicle each day and reject vehicles not meeting contract requirements. Party to provide replacement ERV in lieu of rejected vehicle in good condition acceptable to officer in-charge. The actual amount spent by HOGPL will be deducted per day for each default if replacement is not provided immediately in addition to pro-rata deduction in absence of vehicle.

HOGPL reserves the right to hire / engage any other vehicle of the same type from the market as & when the contractor does not provide the vehicle with driver.

Vehicles are required to ply on all kinds of roads including pipeline ROU, unmetalled and uneven kuccha roads in the states/villages in all kinds of terrains, and in all weather.

Servicing/maintenance of vehicle should be well planned and intimated at least three days in advance. When a vehicle is under servicing, maintenance or repair, a replacement vehicle of the same model has to be provided. If replacement vehicle is not of same model and is not substituted immediately, HOGPL may appoint a vehicle for unavailable service period and actual amount spent by HOGPL will be deducted from contractor's account/Bill as per usage in addition to pro-rata deduction in absence of vehicle.

HOGPL does not assure to provide any parking place for supplied vehicle and HOGPL shall not be responsible for safety or security in relation to the contractor's Vehicle / Staff / Equipment or any other property. If required, the contractor has to provide his own parking space /area without any extra cost to HOGPL.

Recording of reading in all cases shall start from the place where HOGPL officer receives vehicle & closing reading shall be from where HOGPL board off & closes vehicle logbook. In no case payment for vehicle usage will be paid for before reporting & after closing usages.

24 X 7 Emergency Response Vehicle Specification: -

First aid boxes shall be fitted inside each vehicle. List of items to be kept in first aid box shall be provided by HOGPL. The contractor shall fill & maintain the first aid box during the contract period.

Complete Structure will be processed with zinc primer. The complete vehicle will be painted with synthetic enamel paint of a reputed brand.

The following vinyl stickers are to be pasted on the vehicle after finishing & painting.

- Text "EMERGENCY VEHICLE" on top of front windshield.
- HPOIL Logo in specific colors on both the front doors & on bonnet.
- HPOIL Logo, full name, toll free numbers on both side rear portions.
- HPOIL or their representative will inspect / witness the vehicle body fabrication work at all stages and make the changes if required as deemed necessary for quality assurance & to meet their requirements.
- Vehicle Tracking system shall be provided by contractor at own cost to monitor vehicle movement.

The contractor is required to make arrangements for drivers of at least 2 nos. of ERV. 100% availability of drivers for each vehicle is mandatory and the driver shall not leave the vehicle till the time the other driver is not available.

As the vehicle shall be used for attending emergencies, availability of vehicle and driver shall be on round the clock basis (24x7) without fail. Contractor is required to follow all safety instructions and

statutory compliances of vehicles and their deployed manpower.

The contractor has to make arrangements for 24*7 ERV registration to respective RTO, Insurance & Pollution compliance, timely fitness from RTO, Labor laws along with all kind of applicable statutory compliances on each 24*7 Vehicle.

Maintenance:

- a) Regular Schedule Maintenance shall be the contractor's responsibility.
- b) Keeping all 24*7 Vehicle ready for every time shall be contractor's responsibility.
- c) 12 Hr. time in a month shall be given for maintenance after approval from EIC.
- d) At the time of schedule/Breakdown maintenance, bidder has to provide alternate normal vehicle at bidder's cost.
- e) Every year Painting and emergency nos. display with Radium Paint shall be bidder's responsibility.

FOR DRIVERS

Contractors should provide one driver for each vehicle. The contractor to provide two sets of dress (colour white) and one set of black leather shoe to deployed driver and instruct them to strictly wear dress all the time when on duty. No separate payment shall be made for the same to the contractor & the cost to be incurred should be included in the Quoted Rates.

Contractors should make arrangements to provide relief to the driver on their off days/holidays or leave, the cost of which will be included in the Quoted Rate.

Driver should possess valid vehicle driving license, should be healthy, punctual, well dressed and well behaved. They should - under no circumstances be under the influence of alcoholic drinks or drugs when on duty. The contractor should immediately replace any driver found violating these norms.

Driver shall always carry following documents:

- 1. Driving Licence (Min 2 years of Taxi Driving Experience)
- 2. Registration Book
- 3. Road Tax Challan
- 4. PUC Certificate
- 5. Package Insurance Policy
- 6. Other documents as applicable.

All above documents should be always in ORIGINAL and valid/current during the contract period.

It will be the driver's responsibility to maintain the logbook on a day-to-day basis and obtain signatures of the concerned HOGPL officers.

Drivers shall have their own arrangements for accommodation and food etc. both for normal duty as well as outstation visits and outstation halts. Contractors should ensure that drivers carry enough money for their stay, food, fuel, repairs etc.

The Contractor has to provide a Mobile Phone with roaming facility to the driver of the vehicle. No separate payment shall be made for the same & the cost to be incurred should be included in the quoted rates.

The firm/contractor will arrange to provide at its/his own cost and format a photo identity card (duly Serial numbered and laminated) to the driver of his vehicle deputed for providing requisitioned service in the Office. Such card should contain the name, date of birth, permanent, and temporary address and category of service for which deputed along with a recent

photograph.

The photo identity card should be countersigned by the authorized Officer.

The firm/Contractor shall carry out the Police verification of driver before placement. The Police verification report shall be submitted to the HOGPL, each time the driver is replaced, or removed & new driver is provided by contractor.

The vehicle is to be registered in the name of the contractor.

7.0 DELAY ON SUPPLY OF VEHICLE(S)

There will be a pro-rata deduction in the monthly bill for each day (or part thereof) of absence of vehicle. For this purpose, no. of days in a month will be taken as 30, irrespective of the month.

However, there will be no pro-rata reduction in the assured mileage (i.e., the assured mileage will have to be completed regardless of the deduction of amount as above.)

HOGPL shall have the right to hire any vehicle from the market/other agencies against non-supplied vehicles. The cost of hiring such vehicle will be recovered from contractor's monthly bill in addition to pro-rata deduction.