



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

**TENDER FOR
HIRING OF AGENCY FOR PROVIDING OPERATION AND COMPREHENSIVE
ANNUAL MAINTENANCE SERVICE OF BOOSTER COMPRESSORS INSTALLED
AT AMBALA-KURUKSHETRA & KOLHAPUR GA**

TECHNICAL VOLUME
TENDER NO. HOGPL/2023-24/C&P/016
DATE: 19.03.2024

1. SCOPE OF WORK

Hiring Service Agency for Operation and Comprehensive Annual Maintenance Contract (AMC) Services for M/s. ICL, M/s. Ideate, M/s. Sopan make Booster Compressors.

1.1 Detail Scope of work:

Group 1: Operation & Comprehensive AMC of Booster Compressors at HPOIL Ambala-Kurukshetra GA:

Sr. no	Description	Capacity of Compressor	UOM	Quantity
	Part A: Comprehensive 24*7 Operation, Repair & Maintenance of Ideate make CNG compressors and its accessories (inclusive of consumables, spares, three shift Manpower, lubricants etc.) Comprehensive Maintenance will consist of carrying out regular, periodical and Breakdown maintenance as per Scope of work and OEM specification.		Machine Month	
1	M/s Fateh Filling Station	400 SCM/H		24.00
2	M/s Surinder Nath Sharvan Kumar Filling Station	400 SCM/H		24.00
3	M/s Gautam Filling Station	400 SCM/H		24.00
4	M/s G-Line Fuels Point	400 SCM/H		19.43
5	M/s HP Akshay Filling Station	400 SCM/H		10.32
6	M/s RJ Filling Station	400 SCM/H		6.94
7	M/s Sidhu Energy Station	400 SCM/H		3.65
8	M/s Rishi Markanda Filling Station	400 SCM/H		3.09
9	M/s Navbharat Filling Station	400 SCM/H		0.69
	Part B: Comprehensive 24*7 Operation, Repair & Maintenance of ICL make CNG compressors and its accessories (inclusive of consumables, spares, three shift Manpower, lubricants etc.) Comprehensive Maintenance will consist of carrying out regular, periodical and Breakdown maintenance as per Scope of work and OEM specification.		Machine Month	
1	M/s HPCL Dhillon Filling Station	250 SCM/H		24.00
2	M/s Abhay Highways	400 SCM/H		24.00
3	M/s CM HP Centre	400 SCM/H		24.00
	Part C: Comprehensive 24*7 Operation, Repair & Maintenance of Sopan make CNG compressors and its accessories (inclusive of consumables, spares, three shift Manpower, lubricants etc.) Comprehensive Maintenance will consist of carrying out regular, periodical and Breakdown maintenance as per Scope of work and OEM specification.		Machine Month	
1	M/s Balaji Filling Station	450 SCM/H		18.64

Group 2: Operation & Comprehensive AMC of Booster Compressors at HPOIL Kolhapur GA:

Sr. no	Description	Capacity of Compressor	UOM	Quantity
	Part A: Comprehensive 24*7 Operation, Repair & Maintenance of Ideate make CNG compressors and its accessories (inclusive of consumables, spares, three shift Manpower, lubricants etc.) Comprehensive Maintenance will consist of carrying out regular, periodical and Breakdown maintenance as per Scope of work and OEM specification.			
1	Konduskar Auto Center (Sr. No. 210125), Rajarampuri	400 SCMh	Machine Month	24.00
2	Mangave Aitomotobiles, Shirol (Sr. No. 210337),	400 SCMh		24.00
3	Deokar Automobiles, Deokar (Sr. No. 210338), Rankala	400 SCMh		24.00
4	HPCL Londhe & Company RO (Sr. No. 210857)	400 SCMh		24.00
5	Laxmi Auto, Shahuwadi Malkapur (Sr. no. 211284)	400 SCMh		8.30
6	HP Petrol Pump Sushant Transport, Ajara (Sr.no. 211285)	400 SCMh		9.63
7	Beherji Petroleum, Murgud kagal (Sr. No.211286)	400 SCMh		11.00
8	Umiya Petroleum, Udyam nagar kolhapur (Sr. No.2205136)	400 SCMh		1.97
9	Hajare Petroleum, Vashi kolhapur (Sr. No.2205135)	400 SCMh		7.97
10	Tare Petroleum, Shirol (Sr. No.2205142)	400 SCMh		3.33
	Part B: Comprehensive 24*7 Operation, Repair & Maintenance of ICL make CNG compressors and its accessories (inclusive of consumables, spares, three shift Manpower, lubricants etc.) Comprehensive Maintenance will consist of carrying out regular, periodical and Breakdown maintenance as per Scope of work and OEM specification.			
1	Dev Giri Autolines, Vadgaon (Sr. No. 020426)	250 SCMh	Machine Month	24.00
2	Vakratund CNG Station, Sarvade (Sr. No. 019325)	400 SCMh		24.00
3	Sudarshan Petroleum, Kolhapur (Maharashtra) (Sr. No. 020468)	250 SCMh		24.00
4	Deepraj Petroleum, Panhala (Kolhapur) (Sr. No. 020478)	250 SCMh		24.00
5	Warna Petroleum, Warna (Maharashtra) (Sr. No. 020394)	400 SCMh		24.00
	Part C: Comprehensive 24*7 Operation, Repair & Maintenance of Sopan make CNG compressors and its accessories (inclusive of consumables, spares, three shift Manpower, lubricants etc.) Comprehensive Maintenance will consist of carrying out regular, periodical and Breakdown maintenance as per Scope of work and OEM specification.			
1	Kesarkar Petroleum, Uttur (Sr. No.)	450 SCMh	Machine Month	18.43

1.2 General Scope of Work:

The Contractor must follow the Operation & Maintenance requirement as stated below but not limited to and ensure to provide trouble free services to the satisfaction of the HPOIL Gas.

Accommodation/Transportation/Medical:

The contractor shall make his own arrangement for the accommodation of his personnel at respective locations and subsequent transportation arrangement for them from their place of residence to work place or any other place as required and HOGPL shall have no obligation in this respect. The company shall not be responsible for providing any medical assistance to the contractor personnel.

Discipline:

The Contractor shall be responsible for the discipline and good behavior of all his personnel deployed in the services contracted out and should any complaint be received against any of his employee; he shall arrange to replace such persons within 24 hours of notice issued by the Engineer-in-Charge. The decision of the Engineer-in-Charge in this matter shall be final and binding on the contractor.

Permit for maintenance /Gate pass / Identity card

The contract shall arrange to supply / renew identity card to his workforce at his own cost. Those contractor's personnel shall be required to carry their respective identity cards while on duty and produce on demand.

Contractor before any work / MPM / schedule maintenance / Breakdown must take work permit from HOGPL Kolhapur & Ambala Office, as the case may be, and close it as per the SOP.

Right to get services carried out through their agencies.

Nothing contained herein shall restrict HOGPL from accepting similar services from other agencies, at its discretion and at the risk and cost of the contractor, if the contractor fails to provide the said services at any time.

Compliance of Laws:

The CONTRACTOR deploying workmen as contract labour shall have to obtain license from appropriate licensing authority, if required. The CONTRACTOR (which shall include the Contracting firm / company) shall be solely liable to obtain and to abide by all necessary licenses from the concerned authorities as provided under the various labour laws legislation's including labour license from the competent authority under the Contract Labour ("Regulation & Abolition") Act 1970 and Acts made thereafter.

The CONTRACTOR shall be responsible for necessary contributions towards PF, Family Pension, ESIC or any other statutory payments to Government Agencies as applicable under the laws in respect of the contract and personnel deployed by the supplier for rendering services to PURCHASER and shall deposit the required amount with the concerned statutory authorities on or before due dates. The CONTRACTOR shall obtain a separate PF number from the concerned Regional Provident Fund Commissioner and submit necessary proof of having deposited the employees as well as the employer's contribution to the Provident Fund.

Engineer in charge shall have power to

Issue the Contractor from time to time during the running of the contract such further instructions as shall be necessary for the purpose of proper and adequate execution of the contract and the Contractor shall carry out and bound by the same.

During the currency of this contract, HOGPL may increase and/or decrease the number of services / technicians to meet contractual requirements.

Order the Contractor to remove or replace any workman whom the HOGPL considers incompetent or unsuitable and opinion of the HOGPL representative as to the competence of any workman engaged by the Contractor shall be final and binding on the contractor.

2. PENALTY FOR NON-FULFILMENT OF OBLIGATION UNDER ANNUAL MAINTENANCE CONTRACT (AMC)

If the Contractor fails to provide the required services,

2.1 Break-down penalty would be applicable as follows:

A. For each Booster Compressor:

- Breakdown time up to 6 hours in a month - No Penalty.
- Break-down beyond 8 hours till 12 hours in a month -Rs 5,000/-
- Break-down beyond 12 hrs till 24 hours in a month Rs 10,000/-
- Break-down beyond 24 hrs in a month Rs 10,000/- per day
- For carrying out the periodic / Preventive/ scheduled / breakdown maintenance of compressor package the service provider shall be allowed a maximum of 18 hours once in a month.

2.2 Non-availability of manpower in any shift/any workplace will not be tolerable. The Contractor will be penalized for each such act as follows.

For non-availability of compressor operator, PPE, Uniform.

The said penalty is applicable on per instance basis as per the industry standards.

- **For 1st instant: 500/-**
- **For 2nd instant: 1000/- onwards If the contractor fails to provide Operator, PPE and Uniform to his manpower after stipulated time.**

HOGPL will provide the PPE and Uniform at his risk and cost considering original invoice value plus 10% overhead charges which will be recovered from Contractor.

2.3 HOGPL will not tolerate any kind of Indiscipline act at the premises from the contractor employee's during the service time. If any such incident happens, the contractor will be penalized 2% of the Max. Inv. Value / Incident & Max. amount will be penalized up to 5% of single package invoice value.

2.4 For any IR (Industrial Relation) issue (like strike by operators for wages, union issues etc.) CNG station operation stopped, Contractor will be penalized Rs.25,000/- Incident. Max. Capping is up to Rs.1,00,000/-Month.

Maximum penalty would be applicable 60% on monthly net invoicing amount of each Booster Compressor.

2.5 Penalty Due to power consumption.

The volumetric efficiency and rated output of the compressor shall be consistently within the limit. Power consumption per Kg gas compressed should be within the benchmark set by HOGPL. At present benchmark for specific power consumption is 0.08 Kwh/kg (Between CNG supply suction pressure of approx. 200 Kg/cm² and mobile cascade disconnection at 30 Kg/cm²). Penalty calculation will as follow:

$$\text{Sp. Power in Kwh/kg} = \frac{\text{Total power units consumed by the compressor/ 3 months}}{\text{Total gas sold in same period i.e. In 3 months}}$$

The extra electricity bill amount due to inefficient operation shall be recovered from the lessor at the tariff prevailing at the time of operation. The extra electricity due to higher specific power consumption will be calculated as follows.

The extra expenses to be recovered from the lessor in Rs = (Specific power consumption over and above the benchmark) x (prevailing power tariff inclusive of taxes, duties & levies) x (Total sale of gas during the billing period.)

3. GENERAL TERMS OF O&M CONTRACT

3.1 The operation & maintenance services shall be provided on round the clock basis 24*7.

- a. The Contractor shall deploy three shift operators and adequate number of technicians as well as tools & equipment for smooth and proper operation & maintenance of the compressors supplied in terms of the contract. In case required to meet operational requirements, the Contractor shall augment the same as per direction of Engineer-in-Charge.
- b. The Contractor is required to carry out all services as mentioned in the Scope of Services and Schedule of Rates on all the 365 days including Sunday and all holiday and around the clock
- c. The Contractor shall allow weekly rest and daily working hours to his workmen as per the relevant Act / Law / and Rule made there under. However, no work shall be left incomplete / unattended on any holiday / weekly rest. Technician and operator provided shall have minimum qualification of ITI. Contract in person or his authorized representative shall provide the services on daily basis to interact with Engineer-in-Charge and deployed workmen.
- d. The workforce/Technical team deployed by the Contractor for O&M services at CNG installation shall be of sound relevant technical professional expertise, which is otherwise also essential from the safety point of view of the personnel of the Contractor as well as for the installation.
- e. Contractor has to ensure the safety of man and machine all the times. Damages of equipment due to negligence will recover as per the decision of Engineer-in-Charge, which will be final.
- f. Regarding work completion, the decision of the Engineer-in-Charge will be final and binding.
- g. The Contractor shall make his own arrangements to provide all facilities like boarding and transport etc. to his workmen.
- h. All personnel of the Contractor entering on work premises shall be properly and neatly dressed and shall wear uniform, badges while working on premises of the company including work sites.
- i. Contractor shall maintain proper record of his working employee's attendance and payment made to them.
- j. The Contractor's representative shall report daily to the EIC at HOGPL office through telephone from R.O. for day to day working.
- k. All the safety rules and regulations prevailing and applicable from time to time at the installations as directed by HOGPL will be strictly adhered to by the contractor.
- l. The rates quoted by the Contractor must be inclusive of all taxes & duties except GST. GST to be quoted separately as specified in the SOR.
- m. It will be the responsibility of the Contractor to pay as per the central minimum wages applicable under the Minimum Wage Act 1948.
- n. The operation & maintenance services shall be provided on round the clock basis. The Contractor is responsible to provide effective and efficient services round the clock and assure that there is no disruption in the services for want of any resources.
- o. The Contractor shall deploy adequate number of technicians / three shift operators at various site offices in consultation with Engineer-In-Charge to provide trouble free operation & maintenance of the compressors. Site in charge shall always be available 24 hours on Mobile Phone.
- p. All arrangements for communication from control room to the contract person working on job under the services shall be the responsibility of the contractor.
- q. All the jobs mentioned under scope of services shall be carried out as per sound engineering practices, work procedure documentation, recommendation of the manufacturer and as per the guidelines / direction of engineer-in-charge or authorized representative.
- r. All maintenance / inspection job carried out by the contractor shall be recorded in a service report and the report of the same shall be jointly signed by HOGPL representative and submitted immediately after carrying out the maintenance same day. Service report format shall be approved by HOGPL.

3.2 Operation & Maintenance of compressor packages during contract period

- a. All OEM spares, required for carrying out the operation and maintenance of the complete compressor packages during the contract period, including periodic, breakdown maintenance for continuous and uninterrupted operation of the compressor packages shall be supplied by the contractor at free of cost to the owner. Contractor has to submit the list of spares & consumables.
- b. The Contractor shall have to keep / supply all the consumables each and every O- ring and spares), lubricants, coolant etc. required for carrying out periodic, breakdown, emergency maintenance etc. of the package so as to minimize the down time of the compressor.
- c. All tools, tackles and fixtures required for carrying out the above maintenance of the compressor shall be in scope of the Contractor. The scope will also include handling equipment like crane, forklift, chain pulley block etc. required during the any maintenance activity.
- d. Any expert services required from principal company or the Contractor or his agent at his own cost shall arrange OEM. All arrangements like phone, email, computer, internet etc. required for correspondences with above personnel shall be arranged by the Contractor.
- e. The periodic maintenance required to be done as per OEM recommendation shall be taken up promptly. The Contractor shall provide the detailed preventive maintenance schedule along with
 - i) Estimated down time required for each type of maintenance schedule.
 - ii) List of spares and their quantities required for each type of maintenance schedule per compressor/dispenser.
 - iii) Type and number of man days required for each type of maintenance schedule per Compressor/dispenser.
- f. The Contractor shall use only OEM's certified spares during maintenance. In case, the schedule maintenance of the OEM manual recommends checking and replacing parts like valves, regulators, hoses, piston rings etc. after certain time interval, same shall be replaced or used further only on approval from the HOGPL representative. However, any unto ward consequences for non-replacement of such parts shall be the responsibility of the Contractor.
- g. All routine and periodic checks / inspections required to be done as per OEM recommendation shall be done by the Contractor. Instruments required for above inspection like shall be in scope of the Contractor and these instruments shall be calibrated every year.
- h. The Contractor shall submit a copy of the daily / weekly / fortnightly / monthly / bio- monthly / quarterly and yearly performance report to the EIC in both soft and hard form. All stationery including the printed material shall be in scope of the Contractor.
- i. All the maintenance / inspection job carried out by the Contractor shall be recorded and the report of the same shall be jointly signed by HOGPL representative.
- j. The EIC will be final authority to take decision with regards to maintenance or replacement of spares or any disagreement between the Contractor and HOGPL, during the execution of the contract.
- k. The Contractor must carry out calibration of gas detectors and flame detectors every six months or earlier as per requirement or instruction of EIC of HOGPL. Also, yearly calibration of all the instruments such as pressure gauges, transmitters, switches, mass flow meters etc shall be in the scope of the Contractor and after the calibration of all the equipment's certificates shall be furnished to HOGPL. In addition to the above all safety relief valves shall also be tested and calibrated every year. Contractor has to maintain the copy of calibration certificates available with the working location and originals to be submit at HOGPL Kolhapur & Ambala Office, as the case may be.
- l. Calibration shall be done from government-approved laboratories and shall be carried out at least 15 days prior to the calibration due date.

- m. The periodic maintenance required to be done as per OEM recommendation shall be taken up promptly. The Contractor shall plan such maintenances during non-peak hours and in consultancy with the EIC of HOGPL. Any maintenance that needs to be taken up shall be well planned in advance with due approval of the EIC. The scope shall include preparation of maintenance schedule for carrying out the maintenance during the contract period.

3.3 Contractor team (Technician / Operator) – Rolls and Responsibility:

The functions and responsibilities are listed below:

- a. To function as an integral member of the HOGPL O&M coordination team.
- b. Interface with Contractor / HOGPL on all equipment and system issues mobilize any Contractor / HOGPL resources required for scheduled or unscheduled maintenance.
- c. Assist HOGPL personnel with development and implementation of sound operating and maintenance strategy and procedures, including corrective action guidance.
- d. Assessments of consumables, operational and maintenance spares, OEM services etc. Maintain spares inventory well in stock to avoid any uninterrupted operations on round the clock basis.
- e. Provide reports as per HOGPL O&M practices.
- f. Conduct training programs for upgrading O&M resources, participate in all Contractor and safety trainings.
- g. Collect and provide data as deemed necessary by HOGPL to analyse equipment performance.
- h. Responsible for performing all routine, breakdown & scheduled maintenance activities during O&M.
- i. Monitor the performance of equipment's.
- j. Monitor all essential parameters of the running equipment and report any discrepancy in operational parameters.
- k. Responsible for log-book data capturing, minor maintenance activities, safety of equipment's for safe operations.
- l. The contractor shall submit a copy of the daily / weekly / fortnightly / monthly / bimonthly / quarterly and yearly performance report to the EIC in both soft and hard form. All stationery including the printed material such as compressor parameter log book, complaint log book, service report, break down summary report etc. shall be in scope of the Contractor.

Operation & Maintenance team shall be made available for work on 24 Hrs. basis.

4. SCOPE OF WORK – OPERATION & MAINTENANCE

4.1 Spares & Consumables

All Spares and Consumables like Frame oil, Air Compressor lube oil, Coolant, DM water, Grease etc. will be in Contractor scope during the Comprehensive AMC period. HOGPL shall approve the installation of OEM equivalent spares; however, contractor should submit all the technical details of equivalent spares to the concerned EIC prior to installation for approval.

4.2 Tools & Tackles

The contractor shall provide one set of conventional Mechanical & Electrical general tools for maintenance job at each site and advance tools tackles set to technical team.

4.3 Special Services

- Contractor shall arrange calibration of all the instruments which are installed in e package annually after necessary approval from HOGPL
- Contractor shall arrange filling of Co2 cylinders quarterly as per NFPA/OISD standards, however the flooding system function check with discharging the Co2 shall be carried periodically and recorded and contractor shall have to arrange the hydro testing of the Co2 Cylinders of flooding system as per NFPA/ OISD standards.
- Contractor shall arrange visit of vendor representative for package routine maintenance depending on site requirement. Services like inspection, breakdown, top / major overhauls shall

be taken care by contractor.

- Contractor shall arrange welder / plumber when required with material if required
- Contractor shall arrange Panel vendor / Software programmer visit when required with parts if required
- Contractor shall provide all necessary lifting equipment
- Contractor shall provide all necessary facilities of any additional repair, welding, testing, calibrations etc.
- OEM services if required for any Overhauls
- Maintenance of the instruments, transmitters, controls, switchgear with in the battery limit
- Contractor shall provide First Aid box at site
- Contractor shall provide painting of canopy and equipment's annually / as and when required
- Contractor shall supply electrical system / panel which are damaged in case of powerfailure

4.4 Additional Services

Contractor shall provide any additional service that may be required, using the expertise and technology of OEM services and should provide a detailed inspection report

4.5 Scope for AMC Activities

Contractor shall depute site personnel as enlisted above for carrying out the AMC of the Booster compressor packages.

Uninterrupted service shall be provided round the clock including Sundays and other holidays throughout the contract period. Contractor shall advise the schedule / predictive maintenance that need to be carried out and HOGPL will provide reasonable time period to carry out such work.

4.6 Technician's activities are as detailed below:

1. All annual O&M spare parts (regular / breakdown / overhauling) will be in the scope of Contractor.
2. At least three Dedicated Technicians Electrical, instrumentation and Mechanical expert needs to be deployed at Kolhapur & Ambala - Kurukshetra GA. Same workforce shall not be utilized for the other than Kolhapur and Ambala – Kurukshetra GA locations
3. Round the clock trouble free and safe operation and maintenance of the following equipment as per laid down operating procedures
 - a) Gas compressors, Electric motor, Cooling system, Overhead makeup coolant tank, Gas line with in the battery limit, Valves etc.
 - b) Instrumentation – PTs, TTs, PGs, FTs, Electronic panels, Control valves, PSVs, flame detectors, gas detectors, emergency shutdown system etc.
 - c) Electrical panel, Radiator system, Air compressor system and Co2 flooding system.
4. Upkeep of all operational and maintenance records and everyday logging of all the critical parameters of equipment, hours run and any specific maintenance, repairs carried out including material and spares consumed.
5. Continuous vigil on the condition of running equipment.
6. Preventive maintenance schedule of all the equipment to be followed religiously using genuine OEM / OES spares and to be recorded in logbook.
7. Faultfinding and troubleshooting of the equipment to be carried out and maintain the record of it.
8. Schedule maintenance shall normally be carried out by interacting with Engineer in charge during day time general shift, however routine checks and maintenance to be carried out on round the clock.
9. Upkeep of equipment shall be taken up immediately after completion of maintenance or a repair and area shall be kept neat and clean. The waste generated during maintenance shall be dumped in a designated area with in the CNG stations.
10. Provide the quality and adequate quantity of lubricating oils and cleaning agent as per OEM

recommendations.

11. Coordinate calibration of the instruments and maintain records
12. MIS duties – all Checklists, DPRs, Monthly reports miscellaneous correspondence regarding resource requirements and information required by management as and when required.
13. Providing resources such as tools, cotton waste etc. as required for operations
14. Providing all personnel with the necessary PPE like Safety shoes, Hand gloves, Cottonuniform etc. and ensure that the personnel shall all the time use PPE when they are at site.
15. Disposal of empty barrels / burnt oil barrels shall be disposed according to documented procedure and document shall be furnished to EIC HOGPL.
16. All wastes (hazardous, bio-degradable & non-biodegradable) are stored & disposed of as per documented procedure.

4.7 Employment Liability of Contractor

The contractor shall indemnify HOGPL and shall be solely and exclusively responsible for any liability arising due to any difference or dispute between him and his employer for the execution of this contract at any time during/after the contract period is over. All workmen engaged by the contractor shall be on his roll and be paid by him and HOGPL shall have no responsibility towards them.

The contractor shall ensure and will be solely responsible for payment of wages and other dues latest by 7th of the following month to the personnel deployed by him in the presence of the Company's representative.