

TRANSPORTATION OF CNG THROUGH LIGHT COMMERCIAL VEHICLE (LCV) AND HEAVY COMMERCIAL VEHICLE (HCV) FOR CGD PROJECT IN ROHTAK GA (HARYANA)

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P.013460 G 11031 R049

S.No.	Description		Document / Drawing No.	Rev. No.	Pages	Page No.
I	VOLUME I OF II	VOLUME I OF II				
1	SECTION - I	INVITATION FOR BID (IFB)				
2	SECTION - II	INSTRUCTION TO BIDDERS (ITB)				
3	SECTION - III	GENERAL CONDITIONS OF CONTRACT (GCC)				
4	SECTION - IV	SPECIAL CONDITIONS OF CONTRACT (SCC)				
5	SECTION - V	FORMS AND FORMATS				
6	SECTION - VI	SCHEDULE OF RATES (SOR) - FOR ROHTAK GA (HARYANA)				
II	VOLUME II OF II		TECHNICAL			
1		INTRODUCTION	P.013460 G11031 R049	0	3	1
2	PTS	HIRING OF LCV & HCV	P.013460 G11077 M001	0	8	4



INTRODUCTION

P.013460 G 11031 R049

BHARAT PETROLEUM CORPORATION LIMITED (BPCL)

TRANSPORTATION OF CNG THROUGH LIGHT COMMERCIAL VEHICLE (LCV) AND HEAVY COMMERCIAL VEHICLE (HCV) FOR CGD PROJECT IN ROHTAK GA (HARYANA)

INTRODUCTION

0	12.11.2020	Issued for Approval	Zain Hasnain	Mohd Naheed	Gursharan Singh
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INTRODUCTION

P.013460 G 11031 R049

TABLE OF CONTENTS

1.0	INTRODUCTION	2



INTRODUCTION

P.013460 G 11031 R049

1.0 INTRODUCTION

M/s. Bharat Petroleum Corporation Limited (BPCL) is developing CNG & City Gas Distribution Infrastructure in the Geographical Areas (GA) of Rohtak in the State of Haryana based on PNGRB authorization.

M/s. Bharat Petroleum Corporation Limited (BPCL), (hereinafter referred as Owner), is developing City Gas Distribution Network in & around Rohtak City in the State of Haryana for serving consumers of various sectors namely Domestic, Commercial, Industrial & Automotive.

Tractebel Engineering Pvt. Ltd. (TE), a subsidiary of Tractebel Engineering S.A. has been appointed as Project Management Consultant (hereinafter referred as Consultant), by BPCL for providing Design, Engineering & PMC services for aforementioned project.

Tractebel Engineering Pvt. Ltd. (TE), is now inviting tenders on Competitive Bidding basis for "Transportation of CNG Through Light Commercial Vehicle (LCV) & Heavy Commercial Vehicle (HCV) for CGD Project in Rohtak GA (Haryana)" for this project.

The present document covers the technical specifications for this tender.

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Page 2





P.013460 G 11077 M001

BHARAT PETROLEUM CORPORATION LIMITED (BPCL)

CITY GAS DISTRIBUTION PROJECT

PTS – TRANSPORTATION OF CNG THROUGH LIGHT COMMERCIAL VEHICLE (LCV) AND HEAVY COMMERCIAL VEHICLE (HCV) FOR CGD PROJECT IN ROHTAK GA (HARYANA)

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P.013460 G 11077 M001

TABLE OF CONTENTS

L.O	SCOPE OF WORK	3
	SUPERVISION	
	TECHNICAL SPECIFICATIONS	
	MAKE OF VEHICLES	
	VEHICLES MANAGEMENT & MAINTENANCE	
	SPECIFICATION FOR PAINTING/STICKERING	
	VEHICLE TRACKING SYSTEM (VTS)	
	TRANSPORT SERVICES	



P.013460 G 11077 M001

1.0 SCOPE OF WORK

The scope of work broadly covers the supply of CNG Fuelled LCV (Light Commercial Vehicle) & CNG/ Diesel Fuelled HCV (Heavy Commercial Vehicle) on Rate Contract basis for transportation of CNG through Cascades from Mother Station located in Haryana/Delhi to Daughter Booster Stations located in Rohtak city for a period of Two (02) years, extendable for further One (01) year at discretion of BPCL. The first trip will be carried out in presence of Owner/ Owner representative so as to finalize RTKM (Round Trip Kilometre).

- 1.1 Successful Bidder shall provide suitable LCV & HCV of minimum Payload of 6 Ton and 9 Ton respectively. Cascades owned by BPCL shall be given to successful Bidder for mounting the same on the LCV & HCV provided by the Bidder. After mounting of Cascades, Bidder has to endorse the Cascade with LCV & HCV at RTO and obtain all the necessary statutory permits that may be required for operation of LCV & HCV for transportation of CNG. Payment of fees and taxes are in the scope of Bidder.
- 1.2 LCV's & HCV's Model shall be 2019 or latest, / Ex. Show Room and in perfect running condition. Bidder shall ensure that the fleet of LCV's & HCV's which are to be deployed at BPCL site shall be in the name of the Bidder/Company. The Bidder can arrange only maximum 50 % LCV & HCV through long term hire contract basis and balanced has to be procured. For any claim, losses, damages, etc. for the LCV & HCV, the liability will solely rest with the Bidder. The original documents of the vehicles have to be submitted to BPCL for verification as and when these are asked for. Non submission of satisfactory documents related to deployment plan shall lead to termination of contract at Bidder's risk & cost. All the operational & maintenance cost of the vehicles for transportation of CNG is in the scope of Bidder, which includes but not limited to the following:
 - a) License of Dangerous & Hazardous Goods carrying certificate and badge number, permits, road tax, insurance of LCV & HCV, Transit insurance (insurance of product/ item being transported) including 3rd party insurance incidental expenses and any other statutory levies. However, toll charges shall be paid extra at actual against submission of documentary evidence (toll receipt).
 - b) Salary and other emoluments for the drivers, helpers & supervisor as per applicable minimum wages act including PF, ESIC, their insurance etc.
 - c) Providing Personal Protective Equipment (PPE) and First Aid kit to the crew and providing all the safety appliances in the vehicle as per safety and statutory requirement for safe operation of LCV & HCV for transportation of CNG.
 - d) Maintenance and repair cost of the vehicles, including all consumables, cost of tyres, parking charges, cost of fuels, brake oil and lubricating oil etc. required for operation of the vehicles.
 - e) All related expenses for road worthiness, licenses and other requirements for operation & maintenance of vehicle in proper condition.
- 1.3 The Bidder shall have to ensure deployment of LCV & HCV within a period of 30 days from the date of issue of Letter of Intimation or PO or communication/intimation (in case of additional LCV's & HCV's).
- 1.4 LCVs & HCV's offered by the Bidder should be fit for mounting of Cascade of BPCL. All three sides of the load carrying sections of the LCV & HCV are to be removable for easy accessibility of the Cascades. The bigger size of LCV & HCV will be difficult to turn and park in CNG stations. Hence overall dimensions of the LCV & HCV shall be just fit for the specified Cascade. The Bidder shall have to get the vehicle approved by BPCL for the purpose, before actual deployment of LCV's & HCV's at BPCL site.
- 1.5 Bidder shall securely mount the CNG Cascade and make all necessary mounting arrangement including hiring of crane for lifting & handling of CNG Cascade and installation of necessary supporting stiffener at requisite positions.

 The complete job of mounting CNG Cascade up to the satisfaction of Owners' competent technical representative



P.013460 G 11077 M001

shall be completed within one day of issue of the Cascade. Dismantling / Dis-mounting of each CNG storage Cascades from LCV & HCV and deposition to BPCL designated Location / Stores and Painting / Stickering including supply of material per LCV & HCV are also covered in Bidders' scope.

- The Bidder has to take delivery of CNG storage Cascades from BPCL store/ other designated Location of Rohtak GA as directed by BPCL. The Bidder shall have to securely mount the Cascades on LCV & HCV chassis with nut and bolts as per the specifications given by Owner/ Owner Consultant at Bidders own cost. Bidders shall ensure that mounting nuts and bolts does not become loose during normal operations. After taking over custody of Cascades, upkeeping and safety of Cascades is the responsibility of the Bidder. Any leakage/ loose bolting/ loose clamp in the Cascade shall have to be immediately reported to BPCL and further transportation of Cascade shall have to be carried out only after rectifying the same. Any loss or damage to the items such as valve/ knob/ fittings/ valve handle/ pressure gauge, cylinder/ tube or any other component of Cascade shall be rectified/ repaired at the risk & cost of Bidder. However, scheduled maintenance of Cascade shall be in the scope of BPCL as per the guideline. For that the vehicle may be required to be deployed at local (within State) Hydro testing / Repair Centre as per the direction of EIC (Engineer In-Charge) and no consequential payment (other than the actual vehicle run (km)) shall be made to the Bidder. On expiry or termination of the contract, Bidder shall unload and return Cascades in good condition, to the satisfaction of BPCL, at designated CNG Mother Station or BPCL Stores of Rohtak GA within 90 days from the completion of Contract Period or Intimation from BPCL or Termination of Contract.
- 1.7 The mobilized fleet shall be fitted with two earthing connections and spark/ flame arrestor of a design approved by Chief Controller of Explosives and provided with wheel jack, tool kit, and spare wheel in good condition. BPCL may depute their representative for inspection of condition of LCV & HCV and Bidder has to maintain vehicles to the satisfaction of BPCL.
- 1.8 Each vehicle should have a Master cut-off switch which disconnects the entire power supply from the Battery. This particular Master Cut-off switch shall be used at the time of Loading (filling)/ Unloading (decanting) the LCV & HCV. The battery of the LCV & HCV should be in enclosed condition and should not be exposed to the environment.
- 1.9 The mobilized fleet shall be painted as per colour code and description provided by BPCL in addition to the statutory display requirement to carry CNG filled Cascade has to be done by the Bidder at his own cost before deploying the vehicles and repainting the same as and when required.
- 1.10 The Bidder shall display a mark "ON BPCL DUTY" on all vehicles at his cost for making the vehicle conspicuously distinguishable from a distance. The Bidder shall not display the advertisement of his or other agency on the vehicle(s).
- 1.11 The Bidder shall be responsible for providing suitable signboards/ display beards during LCV & HCV movement on load or in parked condition. Bidder shall also ensure refilling of the same as per norms. Each LCV & HCV to paint rear & side panels for display of company name and logo, in, combination to fulfil the requirements of display under Rules 130 to 137 of Central Motor Vehicles Rules, 1989 and any other statutory regulation.
- 1.12 The Bidder shall operate their vehicles at their own risk entirely and Owner shall in no case be held responsible for any damage to the vehicles while on Owner's work. The Bidder shall maintain the vehicles in sound mechanical condition at all the times. The Bidder will rectify any defect noticed by him or notified by Owner immediately.
- 1.13 The LCVs & HCVs shall have WLL telephone in the driver's cabin for mobile communication. In case the Bidder fails to provide this facility, Owner shall make alternate arrangement and make the system operational and necessary payments in this regard shall be made directly to the service provider after deducting such amount from the bills of the Bidder.
- 1.14 Bidder shall supply and mount fire extinguishers of ABC type (09 kg) on the LCVs & HCVs as per the directions of Engineer-in-charge. The cost of supply and fabrication of steel material for mounting the extinguishers shall be borne by the Bidder. The Bidder will be responsible for safe custody of the fire extinguishers and in case of loss or damage

Rev 0



P.013460 G 11077 M001

of the extinguishers; the cost will be recovered from the Bidder. Periodic inspection, testing and hydro test of Fire extinguishers provided with vehicle shall be in Bidder's scope. In addition to above Bidder shall supply a 500 Grams ABC type Fire Extinguisher in the front cabin of the vehicle. Fire extinguisher shall be maintained in good and in fit to use conditions at all the times during the operation.

- 1.15 All drivers before commencing duties shall go for an induction program carried out by Site Engineer / Fire and Safety Supervisor by Entity. The drivers shall be issued STC Card (Safety & Technical Competency Card) after the completion of induction training. Drivers shall always carry the STC card when they are on duty.
- Drivers should be able to read and write the local language and minimum 8th class pass. If driver is having a Driving License of "Heavy Goods Vehicle" then he shall be considered as 8th class pass.
- 1.17 Driver should not consume any intoxicant or alcohol and smoking while on duty and has to follow traffic guidelines.
- 1.18 Bidder shall indemnify company for any action under Motor Vehicle Act.
- 1.19 If the vehicle is moving out of the continuous operations for any kind of major repair or overhauling i.e. not attributable to Owner, in such cases odometer opening and closing reading will be recorded at mother station / daughter booster station. Ideally such type of activity will be performed at Mother station or Owner store, however these are non-routine activity and KM tracking will be done accordingly for billing purpose. (closing and opening KM shall be noted during the activity by Owner).
- 1.20 The Bidder shall be required to take Comprehensive Insurance Policy coverage for each vehicle taken from a reputed Insurance Company and shall keep in force during the tenure of the contract.
- 1.21 The Bidder shall conduct periodic training programme to get the drivers fully acquainted with Owner Safety requirements. The Bidder will make the drivers available to Owner for training on defensive driving, first aid, firefighting, emergency preparedness and any other training which Owner considers necessary. New drivers prior to commencing their duties shall undergo an induction program carried out by supervisor/Fire & Safety Supervisor by Owner. In case complaint of driving quality and involved in accident, the driver should be replaced.

1.22 **Driver's discipline:**

- a) Lunch break of a maximum of 1/2 hour.
- b) Follow the posted speed limits not cross 50 km/hr.
- c) Don't operate / attend mobile phone call while driving.
- d) Don't drive if feeling unwell or tired due to fatigued condition.
- e) Don't drive under medication (consult doctor if so).
- f) Don't drive under intoxicated state (alcohol/ drug consumption).
- g) While re-fuelling, switch off engine, cell phone and do not smoke.
- h) Get full knowledgeable of roads & areas of travelling route.

2.0 SUPERVISION

- 2.1 The Bidder shall ensure that his/ its representative ascertains proper feeding of CNG in Cascade & the same is maintained properly in the LCV & HCV and its nuts & bolts are duly fixed & tightened failing which any loss/ mishap shall be at his cost & risk. The Bidder shall indemnify the losses to BPCL.
- 2.2 Bidder shall provide One (1) Driver and One (1) Helper per LCV & HCV at all times.



P.013460 G 11077 M001

- 2.3 For effective supervision and better co-ordination. Bidder shall provide communication handsets to the supervisors for communicating with the drivers & movement control. The safety and security of the handsets will be the responsibility of the Bidder. In case of loss and damage, the Bidder shall be liable for repairing / replacing the sets immediately at his own cost. Bidder to provide contact details along with police verification of driver and helper.
- 2.4 In each shift Bidder shall depute adequate number of supervisors for smooth operation of transport services to the satisfaction of Engineer-in charge. Supervisors shall be provided with the conveyance and mobile phone.
- As availability of CNG at CNG stations is Public Utility services, Hiring & Operating charges of Vehicle shall include services of Drivers, helper and Supervisors for round the clock basis (24*7) for complete duration of the contract including Sunday and Holiday for all the vehicles. However, no personnel shall be allowed to work for more than 8 hours in a day, for which adequate number of personnel shall be deployed by the Bidder. Duty hours of employees should be well in line with the Central Motor Vehicles Act 1988 & Motor Transport Workers Act 1961. Bidder should take care of all legal statutory compliances as per the tender norms and conditions.

3.0 TECHNICAL SPECIFICATIONS

3.1 Light Commercial Vehicle (LCV) of Minimum 6 Tons Payload

Cascade Water litre capacity: 3000 WL

Length x Width x Height of Cascade: 3.6 m x 2.0 m x 1.8 m

Cascade weight with CNG: 6 tons

3.2 Heavy Commercial Vehicle (HCV) of Minimum 9 Tons Payload

Cascade Water litre capacity: 4500 WL

Length x Width x Height of Cascade: 5.1 m x 2.1 m x 2.2 m

Cascade weight with CNG: 9 tons

4.0 MAKE OF VEHICLES

The vehicle required to be supplied by the Bidder under this contract shall be procured only from reputed and regular vehicle manufacturers. Bidder shall furnish the details of makes, model etc. and shall obtain prior approval of Owner before placing LCV & HCV under deployment.

5.0 VEHICLES MANAGEMENT & MAINTENANCE

The exact specification for hiring the vehicles shall be commensurate with the risks involved and should be maintained in accordance with manufacturer's recommendations. All vehicles must comply with relevant National Standards/RTA rules. Vehicle shall be fitted with Rear view Mirrors (One on each side)/ Wipers/ Signal Lights/ Breaks/ Hand Breaks. Odometer, reverse horn, Hand torch and emergency kits / accessories shall also be provided. Iron wheel chokes to be kept in each vehicle and drivers have to use them when the vehicle is in rest position

- All drivers should check the vehicle condition on a daily basis as per manufacturer's the checklist. Maintenance of the vehicles should be carried out through a manufacturer approved garage and the schedule of preventive maintenance should be in accordance with the manufacturer's recommendation. The vehicles need to be tracked for the no. of Kms. so that they have plied, and the service planned well in advance, also Bidder shall provide immediate alternate vehicles prior to maintenance at all times.
- 5.2 Maintenance and repairs to vehicles on BPCL business shall be carried out at OEM (Original Equipment Manufacturer) or approved facilities.

Rev 0



P.013460 G 11077 M001

- Vehicles may need replacement on a case to case basis in the event of accident to the vehicle or damages / recurring issues with the maintenance of the vehicles.
- 5.4 LCV & HCV Bidder shall provide wheel jack, tool kit and spare wheel(s) in good condition for each LCV & HCV. Tyres of the vehicles need to be replaced on the following conditions:
 - a) Completion of 50,000 Kms/ As per OEM specifications.
 - b) Frequent issues with the tube leading to deflations.
 - c) Showing heavy wear and loss of Tread.

6.0 SPECIFICATION FOR PAINTING/STICKERING

- 6.1 The mobilized fleet shall be painted as per colour code and description and as logo of as provided by BHARAT PETROLEUM CORPORATION LIMITED in addition to the statutory display requirements to carry CNG.
- 6.2 The Bidder shall be responsible for providing suitable signboards / display boards during LCV & HCV movement on road or in parked condition.
- 6.3 Every LCV & HCV should be re-painted as and when required as directed by BPCL EIC. Failing which the same shall be got done at Bidder's risk and cost with 10 % over head.
- Painting of the colour codes and all other statutory displays has to be done by the Bidder at his own cost before deploying the vehicles for carrying CNG Cascades. Also, necessary logo, marking, painting, coding for transportation of flammable substance to be marked as per the norms.
- 6.5 Each LCV & HCV to paint rear & side panels for display of company name and logo in combination to fulfil the requirements of display under the provisions of the motor vehicle Act, 1988 and Rule 129 to 137 (both Inclusive) of central motor vehicle Rules, 1989.
- Painting and stickering and all other statutory displays have to be done by the Bidder at his own cost before deploying the vehicle for carrying CNG cascade.
- 6.7 LCV & HCV should be paint as per given design by BPCL. Colour of LCV & HCV shall be intimated. Sample shade shall be provided to the Bidder after award of contract.
- 6.8 Soft copy of design should be provided by E-mail.
- 6.9 Board & snickering also in the scope of Bidder.
- 6.10 Design of Painting, boards & stickering will be finalized after awarding the work order.

7.0 VEHICLE TRACKING SYSTEM (VTS)

- 7.1 GPS Automatic Vehicle Locating & Tracking system is required for monitoring the vehicles at real time round the clock. For this purpose, the Bidder shall install Vehicle Tracking System in all the deployed LCVs & HCVs. The vehicle tracking system shall have latest features such as Real-time / Live Location on map, Speed Monitoring, Distance covered in km, Route or path taken by vehicle, Stoppage Report, History detail of 30 days, Ignition on/off, Inbuilt battery, Inbuilt memory, Stop your vehicle by SMS, SOS Button, SMS alerts, fleet management reports, Graphical reports for better and quicker understanding.
- 7.2 The safety and Security of the Vehicle Tracking System will be the responsibility of the Bidder.



P.013460 G 11077 M001

- 7.3 Bidder shall also install necessary software on BPCL's designated PC for day to day monitoring. BPCL is not intended to purchase software but use only during contract period including extended period if any. One-time licence fees if any shall be included in the vehicle tracking system and the same shall be borne by the Bidder.
- 7.4 Operation and maintenance of the GPS Automatic Vehicle Locating & Tracking system throughout contract period including extended period if any shall be done by Bidder free of cost.
- 7.5 In case it is established that the VMU (Vehicle Mounting Unit) has been damaged by the Bidder's crew thus obstructing the monitoring of VTS in a particular LCV & HCV or in other cases of any defects, rectification of the same shall be at Bidders own cost. During such period Bidder has to provide the alternate arrangements for the same.

8.0 TRANSPORT SERVICES

- 8.1 Transport services shall be provided round the clock on designated routes and as per the schedule given by Engineer-In-Charge on all days. Transport services shall be governed as follows:
 - a. Disconnect the quick connect coupling of the Cascade after proper de- pressurization of the hose, as soon as storage pressure falls to a level decided by the Engineer-In-Charge/ Site Engineer and transport the Cascade to Mother/ filling stations.
 - b. Connect the Cascade with the filling hose by connecting quick connect coupling available at mother station for refilling after ensuring proper grounding.
 - c. Transport the filled mobile Cascades from mother/ filling stations to daughter booster stations and connect to station tubing through quick connect coupling.
 - d. Each LCV & HCV shall be provided with a logbook mentioning pressure level in the mobile Cascade in each bank, LCV & HCV initial & final pressures at mother station/ daughter Booster stations, Opening and closing reading of the mass flow meter have to be noted in the log book, in/out time to Mother station/ Daughter station, station name and any other details considered necessary for operation by BPCL for each vehicle etc. to be filled at commencement of each trip.
 - e. Driver shall also record and immediately report for any leakage, burst disc failure during the trip. The logbook has to be signed by station manager/ technician for each trip.
 - f. It is to ensure that while hoses are connected/disconnected with the mobile Cascade/ LCV & HCV, nobody shall be inside the LCV & HCV and master switch is switched-off. Any kind of loss occurred due to negligence/ mistake of driver /helper during LCV & HCV operation shall be borne by the Bidder.
 - g. Daily filling & dispatch statement of previous day has to be prepared by the Bidder and the same has to be submitted at the respective control rooms of BPCL by 10 AM very next day.
- 8.2 Drivers and helpers without proper uniform & shoes will not be allowed to carry on duties.
- 8.3 TREM CARD shall always be available with the vehicle.
- 8.4 Bidder shall carry out all schedule maintenance of Vehicle and provide the copy of schedule maintenance record to Engineer-in-charge on monthly basis.
- 8.5 Bidder shall plan schedule maintenance in consultation and prior permission of Engineer-in-charge.
- 8.6 No LCV & HCV can be taken out of service on account or repair and maintenance or otherwise without providing the replacement. However, the same can be planned with the EIC and can be done without any Operational Loss to BPCL such as during night hours/ during Station Shutdown for some other reasons etc. However, if the same is not possible, Spare Cascade shall be provided by BPCL on request, the Bidder shall do loading and fixing of the Cascade on a separate LCV & HCV and their rates shall be inclusive of incidental charges on this account.



At the helm of the Energy Transition, Tractebel provides a full range of engineering and advisory services throughout the life cycle of its clients' projects, including design and project management. As one of the world's leading engineering and advisory companies and with more than 150 years of experience, it's our mission to actively shape the world of tomorrow. With about 5,000 experts and presence in more than 70 countries, we are able to offer our customers multidisciplinary solutions in energy, water and urban.

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