



Invitation for Expression of Interest (EOI)

Design, Development, Engineering, Fabrication/ Manufacture, Assembly, Supply, Installation, Testing and Commissioning of CNG Home Refueling unit (Compression & Dispensing Unit operated on Low Pressure on PE Network) for slow filling of CNG into vehicles within customer premises.

Ref. No. GGL/EOI/2024-25/019

EOI Start Date : 10.01.2025

Discussion Meeting Date and Time: 18.01.2025 at 15:00

Revised Query Submission Date: 28.02.2025

Revised EOI Response Submission End Date: 31.03.2025

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A. INVITATION FOR EXPRESSION OF INTEREST (EOI)

Gujarat Gas Limited (GGL) intends to empanel interested & capable contractors for "Design, Development, Engineering, Fabrication/ Manufacture, Assembly, Supply, Installation, Testing and Commissioning of CNG Home Refueling unit (Compression & Dispensing Unit operated on Low Pressure on PE Network) for slow filling of CNG into vehicles within customer premises".

Experienced and capable contractors are requested to submit their expression of interest for empanelment with GGL for this requirement, within the stipulated timelines, in line with the requirements detailed in this document.

The Bidder Qualification Criteria (BQC) based upon which the bidders shall be evaluated are listed in Section C of this document. The Expression of Interest (EOI) should be accompanied by all the necessary documents as mentioned in Section C.

Bidders qualified under this process will be empanelled for a period of 1 (One) years from the effective date of empanelment.

Empanelled contractors will be considered for tendering/ RFQ/ Development process for future requirements of the respective work categories, based on business requirement, at the sole discretion of GGL.

GGL reserves the right not to issue the inquiry/ tender subsequent to the EOI evaluation and/or modify the process without assigning any reason whatsoever.

Bidder shall submit Annexure-1 to Annexure-5 along with BQC supporting document. During qualification process all Annexures (Annexure-1 to Annexure-5) will be checked by GGL.

This notice does not in any manner impose any legal obligations on GGL or confer any rights on any other party in respect of the contents herein. Any contractual obligations or rights shall always be subject to a final and binding written contract executed between GGL and the party claiming such contractual obligations or rights.

GGL has the sole discretion to accept or reject any of the submissions without assigning any reasons. Responses submitted through Agents / Intermediaries will not be considered.

This empanelment is for all GGL authorised area are detailed below:

- State of Gujarat and UT of Dadra Nagar Haveli
- Maharashtra - Palghar District and Thane Rural
- Punjab & Haryana: Amritsar, Bhatinda, Gurdaspur, Hoshiarpur, Ferozepur, Faridkot, Sri Muktsar Sahib, Fatehabad Mansa, Sirsa
- Madhya Pradesh: Jhabua, Indore, Dewas, Ujjain, Ratlam
- Rajasthan: Sirohi, Dungarpur, Banswara, Abu, Jalore

B. INSTRUCTIONS TO BIDDERS (ITB)

1. The onus of providing all necessary company/ experience related information, in appropriate manner and medium, as prescribed in this document, and so as to demonstrate the competency of the Bidder and to allow proper evaluation, will rest entirely on the Bidder. The Bidder shall ensure submission of complete & comprehensive information/documentation ***in the first instance itself***. There is no obligation on part of GGL to seek any additional/missing details not submitted in the first instance.
2. If the Qualification documents are submitted in company's name, a '**Power of Attorney**', in favour of the person who is authorized to sign the qualification documents on behalf of the company, must accompany the qualification documents.
3. All information has to be typed or hand written legibly. All pages of the qualification documents have to be signed by the Bidder's authorized personnel (**as given in point 2 above**). All corrections, erasures or overwriting, therein, have to be signed by the Bidder's authorized personnel.
4. The description of scope of work mentioned in the title is indicative only and the detailed scope of work will be provided in the respective tender documents, if & when issued to qualified bidders only.
5. The decision of GGL for selection or rejection of the bidders shall be final and binding to all without assigning any reason whatsoever.
6. Bidder is required to furnish the complete and correct information and/or documents required for evaluation, as specified in EOI. Bidder to go through the OWNER's prevailing Policy for ACTIONS TO BE TAKEN AGAINST VENDORS/ CONTRACTORS FOR DEFAULTS IN TENDER/CONTRACT TERMS, DISCHARGE OF CONTRACTUAL OBLIGATIONS, CORRUPT/FRAUDULENT / COLLUSIVE /COERCIVE PRACTICES available on GGL Website.
7. Even though meeting the qualification criteria, any Bidder may be disqualified if the Bidder:
 - a) Has made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - b) Has past record of poor performance at GGL/ other clients, such as abandoning the works, not properly completing the contract, statutory non-compliances, inordinate delays in completion, litigation history, or financial failures etc.; and/or
 - c) Has indulged in inducement of any GGL official and/or their consulting engineer and other advisors in any manner whatsoever.
8. As part of the qualification process, GGL, at its sole discretion, may also visit Bidder's works/project sites and/or any Bidder's premises to assess level of Quality, Safety, and bidder's ability to plan, mobilize and deploy resources.
9. The Bidder is expected to examine carefully all instructions & formats in the documentation. Failure to comply with the documentation requirements of EOI document shall be at the Bidder's own risk and may result in disqualification of the Bidder.
10. The EOI documentation and all correspondence, incidental to and concerning the same, shall be in English language. For supporting documents and printed literature submitted in any other language, an equivalent English translation shall also be submitted. Responsibility for correctness in translation shall lie with the Bidder. In case of any conflict, for the purpose of interpretation of the bid, the English translation shall govern.

In case of any queries or details/clarity required, write to us on

Mr. Vinit Goel and Email ID# vinit.goel@gujaratgas.com (Phone: +917926737562)

Mr. Vaibhav Bansal and Email ID# vaibhav.bansal@gujaratgas.com (Phone: +917926737531)

Note: The expression of interest along with all required supporting documents as listed above should be sent to below **mentioned address captioned with EOI Reference no. within stipulated EOI submission date:**

Vice President- Technical and CNG Projects

(C/o Mr. Vinit Goel/ Mr. Vaibhav Bansal)

Gujarat Gas Limited,

Office No. 4 & 5, Ground Floor,

IT Tower -2, Infocity

Gandhinagar – 382009; Gujarat

C. BIDDER QUALIFICATION- CNG HOME REFUELING APPLIANCE

Sr. No	Criteria	Supporting Document
1	Zero deviation letter on technical specification	Bidder shall submit Undertaking on their letter head for zero deviation on technical specification. Format is attached as Annexure-1
2	a. Bidder shall have supplied one unit of Gas Compressor. Or b. If bidder is a dealer, Authorized from OEM for Dealership for Supply of compressors. OEM shall have supplied one unit of Gas Compressor.	a. Order copy from client company representative Or b. Authorization letter from OEM to bidder along with Order copy

Notes:

1. Bidder shall submit all qualification documents in physical format at the address provided in the EOI document. Additional documents may also be asked from bidders, if required.
2. All the documents submitted by Bidder shall be clearly legible and shall be in English Language.
3. Documents shall be submitted in line with BQC requirement only
4. GGL/ GGL authorized third party can verify documents submitted by the bidder. Bidder shall provide below details for verification purpose:
 - Name of issuing authority
 - Contacting Person Name
 - Contacting Person Mobile No.
 - Contacting Person Email ID

D. ONLINE DISCUSSION MEETING AND QUERY FORMAT

ONLINE DISCUSSION MEETING shall be organized on-line as per date and time mentioned below:

Date: 18th January, 2025

Time: 15:00 Hours to 16:00 Hours

Venue - Through Online-Cisco Webex

Meeting Link:

<https://gujaratgas.webex.com/gujaratgas/j.php?MTID=m60fef425197a8619b98b003a3a7dfa45>

Meeting number: 2515 508 8409

Password: ubCxeq9cp63

Guideline/ User manual for attending online meeting is attached at **Annexure**.

All interested BIDDERS shall ensure submission of queries prior to the discussion meeting. However, Bidder can submit their written queries till 15.02.2025 at below listed mail addresses:

Email 1 : Mr. Vinit Goel: vinit.goel@gujaratgas.com

Email 2 : Mr. Vaibhav Bansal: Vaibhav.bansal@gujaratgas.com

REPLY / CLARIFICATION TO BIDDERS QUERIES RAISED DURING DISCUSSION MEETING

EOI Ref. No.:		GGL/EOI/2024-25/019			
EOI Subject		Design, Development, Engineering, Fabrication/ Manufacture, Assembly, Supply, Installation, Testing and Commissioning of CNG Home Refueling unit (Compression & Dispensing Unit operated on Low Pressure on PE Network) for slow filling of CNG into vehicles within customer premises			
Sr. No.	Page No. / Clause No.	Title of Clause	Description of clause	Bidder's Query	GGL Reply
1					
2					
3					
4					
5					
6					

ANNEXURE-1

To,
GUJARAT GAS LIMITED,
Office No. 4 & 5, Ground Floor,
IT Tower -2, Infocity
Gandhinagar – 382009; Gujarat

EOI DESCRIPTION: _____

EOI ID: GGL/EOI/2024-25/019

Dear Sir,

We understand that any deviation/ exception in any form may result in rejection of bid. We, therefore, certify that we have not sought any deviation(s)/ exception(s) and accept the tender documents in entirety.

We agree that if any deviation/ exception is mentioned or noticed, our bid may be rejected.

(SEAL AND SIGNATURE OF BIDDER)

ANNEXURE-2
BIDDER INFORMATION FORM

To
GUJARAT GAS LIMITED,
Office No. 4 & 5, Ground Floor,
IT Tower -2, Infocity
Gandhinagar – 382009; Gujarat

1. Name of Firm/Company (As per PAN) _____
2. Type of Firm/Company PROPRIETORSHIP FIRM PARTNERSHIP FIRM
(Tick One) INDIAN COMPANY FOREIGN COMPANY
3. GST Registered Address _____
(Intended Place of Supply of Material/Service to GGL)
4. GST Registration No. (GSTIN) : _____ - Corresponding to the Address
mentioned in Sr. No. 3 above (Copy of GST Registration Certificate to be attached)
5. GST Registration Type : Registered / Registered-Composition
Note: GST Registration is mandatory for supplying any Material and/or Service to GGL.
6. Address of Registered Office _____
(As per Certificate of Incorporation, Partnership Deed etc.)
7. PAN No. _____ **(Copy of PAN Card to be attached)**
8. Name of Contact Person with designation _____
9. Telephone Number _____
(Country Code) (Area Code) (Telephone Number)
10. Mobile Number _____
11. E-mail address _____
12. Website _____

Note: Electronic Fund Transfer Mandate Form should be submitted as per attached format along with original cancelled cheque.

(SEAL AND SIGNATURE OF BIDDER)

ANNEXURE-3
DECLARATION OF OTHER CRITERIA
(To be submitted signed/sealed copy on BIDDER Company Letter head)

To,
GUJARAT GAS LIMITED,
Office No. 4 & 5, Ground Floor,
IT Tower -2, Infocity
Gandhinagar – 382009; Gujarat

REF. NO. GGL/EOI/2024-25/019

Dear Sir/Madam,

With reference to Gujarat Gas Limited Expression of Interest (EOI) document referred above, we hereby declare/undertake/confirm the following:

1. I/We understand that a Bidder who submits or participates in more than one bid, directly or indirectly, will result in disqualification of all the proposals, in which the Bidder has participated. Hence, I/We hereby undertake & declare that we have submitted single bid against the above referred e-Tender. Further, I/we declare that none of our proprietor /partner(s) is/are same proprietor/ common Partner(s) in/with any of the bidders participating in the tender.
2. I/We are NOT debarred or blacklisted or put on holiday by (a) Gujarat Gas Limited, or (b) any of the GSPC Group Companies, as on the bid submission date.
3. I/We hereby confirm that ***(Bidder shall tick/select any one of the options below - as applicable)***

There is/are no on-going and/or Past Litigation(s)/Arbitration(s) process with, either (a) Gujarat Gas Limited, or, (b) any of the GSPC Group Companies.

There is/are on-going and/or Past Litigation/Arbitration process with, either (a) Gujarat Gas Limited, or, (b) any of the GSPC Group Companies, details of which are attached herein *(Bidder to attach/upload list of such Past as well as on-going Litigation/Arbitration Proceedings, which includes the case no., date & year of filing litigation, the litigating parties, the subject matter of litigation, order(s) passed in litigation, present status of litigation, and the value of claim, if any*

GGL may evaluate the details of such litigation / arbitration proceedings and may at its sole discretions disqualify such bidder who is indulging in frivolous litigation/arbitration OR having history of initiating litigations/arbitrations, against GGL or GSPC Group Companies; and proceed with the bidding process. Further, the bidder shall provide any additional details/clarifications as may be require by GGL in this regard in time bound manner.

4. We will meet qualification criteria on its own. (e.g. qualification through Joint Venture/ Consortium/ MoU etc. are not allowed.)

Note: With respect to point nos. 1, 2 and 3, if the aforementioned undertaking or any part thereof is found false/incorrect/inaccurate OR occurrence of any of the above-mentioned disqualifying events

contemplated at point nos. 1, 2 and 3, during empanelment period/award period, shall make the concerned bidder liable for disqualification for tenders/contract award, at the sole discretion of GGL.

For the purpose of this Declaration, 'Litigation/Arbitration' shall mean any suit, litigation, arbitration, judicial or quasi-judicial proceeding initiated by/against the Bidder involving GGL and/or any of the GSPC Group Companies before any Court/ Forum/ Tribunal/ Authority/ Regulator/ Arbitrator as on the date of *submission* of bid.

ANNEXURE-4
POWER OF ATTORNEY

(To be stamped in accordance with Stamp Act)

Know all men by these present, We.....(name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorized Mr./ Ms (name)..... son/daughter/wife of And presently residing at....., who is presently employed with us/the Lead Partner of our Consortium and holding the positing of....., as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our application for submission of our bid for the Project proposed or being developed by the (the " Authority") including but not limited to signing and submission of all applications, bids and other documents, and writings, participate in PreApplication and other conference and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Concession Agreement and undertaking consequent to acceptance of our bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the said Project and /or upon award thereof to us and or till the entering into of the Concession Agreement with the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS..... DAY OF.....2....

For
(Signature, name designation and address)

Witness:

1.
(Notarized)

2.
Accepted
.....
(Signature)

(Name, Title and Address of the Attorney)

Notes:

- I. The mode of execution of the power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants) (s) and when it is so required, the same should be under common self-affixed in accordance with the required procedure.
- II. Wherever required, the Applicant should submit for verification the extract of the charter documents and documents such as a board of shareholder's resolution /power of attorney in favor of the person executing this power of Attorney for the delegation of power hereunder on behalf of the Applicant.

ANNEXURE-5
DECLARATION OF RELATIONSHIP WITH GGL EMPLOYEES

Hard Copy on Bidders' Letterhead against EOI)

To,

GUJARAT GAS LIMITED,
Office No. 4 & 5, Ground Floor,
IT Tower -2, Infocity
Gandhinagar – 382009; Gujarat

Dear Sir,

With reference to Gujarat Gas Ltd. EOI Reference No. - _____, I/We hereby confirm that ***(Bidder shall tick/select any one of the options below - as applicable)***

I/We (including all Partners/Directors/Proprietor) are NOT Relative(s) of or have any financial or business transactions with any Employee(s) of Gujarat Gas Limited. It is further declared that if in the future such a conflict of interest arises, we will immediately intimate the same to GGL.

I/We (any of Partner/Director/Proprietor) am/are Relative(s) of or have financial or business transactions with Employee(s) of Gujarat Gas Limited
(Bidder to attach/upload list of such relationship, if any)

We hereby declare and confirm that the above information and particulars are true and correct.

We undertake that, at its sole discretion GGL shall take appropriate action(s) in case of any contravention of this declaration.

Name & Sign of the Authorised Representative

Company Seal

Note: To encourage voluntary disclosures, any conflict of interest declared above would not mean automatic disqualification of the bidder(s) making such declarations. The declared conflict of interest would be evaluated and mitigation steps, if possible, would be taken by GGL. In case such mitigation is not possible, GGL may at its sole discretion exercise the right of disqualification of bidder(s).

E. TECHNICAL SPECIFICATION FOR CNG HOME REFUELING UNIT



TECHNICAL SPECIFICATION

CNG HOME REFUELING UNIT

Document No: GGL/TS/CNG/SUPPLY/HOME REFUELING UNIT/SPEC

01	5.1, 6, 8.8	Clarification of Discussion Meeting is added	18.03.2025
00	-	Original Document	09.01.2025
REV. NO	CLAUSE NO.	REVISION DESCRIPTION	DATE OF ISSUE

1. INTRODUCTION

Gujarat Gas Ltd (GGL), is in business of distribution Natural Gas to Industrial/ Commercial/ Non-Commercial/ Domestic Customers and CNG Stations in various cities authorized to GGL by PNGRB Viz: in the state of Gujarat, Maharashtra, Punjab, Haryana, Rajasthan, Madhya Pradesh and Union Territory of DNH etc.

Gujarat Gas Limited intends to procure CNG Home Refueling Unit to ease of customer to door-step CNG Refueling to customer vehicles. CNG Home Refueling Unit Consist of Compressor with dispensing facility.

The present document contains Technical Specification for Design, Development, engineering, fabrication/manufacture, assembly of CNG Home refueling unit. , calibration of instruments, factory testing/ inspection, Factory Acceptance Test (FAT), Site acceptance test (SAT), supply of CNG Home Refueling Unit including packaging, handling, transportation, at GGL Stores/ Site, on-site trial run, Commissioning, performance testing along with all accessories, consumables & Commissioning spares, maintenance during warrantee period and comprehensive maintenance post completion of warranty period.

2. DEFINITION

In the Bid / Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires.

- a. The **"Bid"** shall mean the Bid submitted by the CONTRACTOR for acceptance by the GGL. The **"Contract"** shall mean the agreement and all other documents between the company and the contractor for providing the services mentioned herein.
- b. **"EIC"** shall mean Engineer In -Charge
- c. The **"GGL"** or **"Company"** or **"Owner"** shall mean GUJARAT GAS LIMITED (GGL), incorporated under company's Act 1956 having its Corporate office at Ahmedabad, Gujarat, hereinafter mentioned as **"OWNER"** which expression shall, unless repugnant to the context or meaning or meaning thereof, include all its successors, administrators, executors and assigns.
- d. **"GGL's Premises"** or **"Owner's Premises"** shall mean company's premise or its customer's premises where work is to be executed.
- e. The **"GGL Engineer-In-Charge"** or **"GGL's representative"** shall mean the person designated as such by the Gujarat Gas Limited and shall include his authorized nominee or agent, provided however that the GGL's Representative to be so designated by GGL may be one person for certain aspects of this agreement and another person for other aspects of work covered by this Bid / Contract.
- f. **"Guarantee"** shall mean the period and other conditions governing the warranty / guarantee in respect of the work as detailed in section hereunder.
- g. **"HSE"** shall mean Health, Safety & Environment.
- h. **"OEM"** shall mean Original Equipment Manufacturer
- i. The **"Specification"** shall mean all directions, the various technical specifications, provisions attached and referred to in the Bid documents which pertain to the method and manner of performing the work or works to the quantities and qualities of the work or works and the materials to be furnished under the contract or works or works as may be amplified or modified by the COMPANY during the performance of Contract in order to provide the unforeseen conditions or in the best interests of the work or works. It shall also include the latest edition of relevant standard specifications including all addenda / corrigenda published before entering into the contract.
- j. **"Stores"** shall mean the Companies Stores located at various location of Gujarat.
- k. The **"Supervisor" OR "work in charge"** shall mean the person deployed by the contractor for control & supervision of the work of his work force, as per the Scope of work mentioned and to receive instructions from OWNER's Engineer-In-Charge or his representative.

I. The **“Vendor”** shall mean the person or persons, firm or Company whose Bid has been accepted by GGL.

3. AMBIENT CONDITIONS

The climatic conditions to be considered for selection, design and rating of equipment shall be as indicated below:

- Design Ambient temp min/max °C - - 5 °C/ 50 °C
- Design relative humidity - 90 %
- Design Temperature - 60 °C

The equipment offered shall be suitable for smooth, efficient and trouble free service in the tropical climate prevailing at site as indicated above.

The equipment shall be designed to give efficient and reliable performance under industrial conditions and shall be rendered proof against rats, lizards and other vermin's.

4. GAS COMPOSITION

COMPONENTS	RANGE (% by Volume)
Methane	83.6553 (May vary up to 97)
Ethane	10.9330
propane	3.1570
i-butane	1.1002
n-butane	0.6188
i-pentane	0.1468
n-pentane	0.09219
C6+	0.05065
N2	0.2337
Co2	0.01184
Neo Pentane	0.0003
Odorant	10 PPM

5. AREA CLASSIFICATION

5.1 All the electrical and electronic components shall be in flame/ explosion proof housing suitable for area classification: Hazardous area, Class 1, Division 1, Group D as per NFPA or Zone 1 Class 1, Group IIA/IIB, T3 as per IS/IEC and completely enclosed in a securely lockable cabinet. No component of the unit shall be installed outside the cabinet. However, Final hazardous area requirement shall be as per statutory authority approval.

5.2 Certificate from statutory body in India or agency approved by statutory body in India to the effect is required to be produced that equipment supplied and/ or installed conforms to above area classification.

6. DATASHEET OF UNIT

Manufacturer	
Model	
Business Case Use	CNG filling for Home/ Office Premises for Outdoor Uses
Type of compressor	
No. of Stages	
Cylinder Lubrication	Lubricated / Minimum Lubricated/ Non Lubricated
Life of Compressor	10 Years with 16 Hours per day running
Flow Rate Capacity	Approx. 1.5 SCM/H but not more than 8 SCM/H
Inlet Pressure of Gas	21 mbarg to 110 mbarg

Outlet Pressure of Gas	200 bar/ 3000psi
Inlet Temperature of Gas	0-50°C
Outlet temperature of Gas	Max 55°C
Filling time	Slow filling
No. of Dispensing Hoses	Single Filling Hose (Hose Length – Min 3 meter with hose sleeve on entire hose)
Type of control	Electro actuated ball valve with fail safe condition (shall be in ON position only while running/ starting of unit)
DRIVER TYPE: ELECTRIC MOTOR	Drive/ V-Belts/ Direct with coupling
Electrical Supply	220V-/+10%, 50hz+/-5%, Single phase
Area classification	CLASS - I, ZONE (DIV)-1, GAS GROUP IIA / II B IS 5572 However, Final hazardous area requirement shall be as per statutory authority approval.
Noise Level	45 dBA at 5 meter distance from unit
Oil Separator/ Oil Filter (if present)	Yes/ No
Lubricating Oil + Oil Filter (if present)	Yes/ No
Alarm sensor / Safety Switches	Required
Safety Relief Valves (if present)	Yes/ No
Emergency stop switch	Required
Switch 1. High Outlet Pressure 2. High Outlet Temperature	Auto Stop
Gas Leak Detector	Auto Stop
Electrical Protection	Auto Stop
Manual Switch	Start and Stop Button
Mounting	Preferably wall mounted unit
Dimensions in Feet (Length X Width X Height)	Preferable dimension 1 X 1 X 2
Enclosure	IP54
Average power consumption	*
Output in SCM/Hour	*
Motor power (KW)	*
Fill Nozzle	NGV1

* To be filled by Bidder

7. BIDDER SCOPE OF WORK

- 7.1 The CNG Home Refueling Unit shall be of reciprocating, lubricated/ non-lubricated, high pressure, multistage, totally air cooled/ inbuilt water cooled, Pressurized/ non-Pressurized, electric motor driven and of robust construction.
- 7.2 Bare compressor, multiple-cylinder, Multi-stage, with SS/ CS inter-coolers and after cooler, flywheel acting as cooling fan, air cooled.
- 7.3 Bidder shall provide name plate in line with the PNGRB T4S Retail Outlet. Bidder shall find below mentioned minimum contain of name plate:
- Manufacturer's name;
 - Model;
 - Serial No. or month and year of manufacture
 - Certificate of approval no.;

- Rated capacity (cubic meter per hour);
 - Operating speed (RPM);
 - Required driving power (in kW);
 - Maximum and minimum supply pressures;
 - Maximum outlet pressure; and
 - Certification for Natural Gas use.
- 7.4 Gujarat Gas Ltd logo and branding shall be pasted by bidder on all sides of CNG Home Refueling Unit. However, Gujarat Gas Ltd. logo and branding design will be provided by GGL to bidder.
- 7.5 Following warning and caution signage shall be provided on CNG Home Refuelling Unit:
- "NO SMOKING",
 - CAUTION NOTICE "THIS MACHINE MAY AUTOMATICALLY START AT ANY TIME",
 - "STOP MOTOR",
 - "STOP VEHICLE",
 - "NO OPEN FLAME PERMITTED",
 - "FLAMMABLE GAS",
 - "NO MOBILE PHONE",
 - "SWITCH OFF THE MOBILE PHONES"
- 7.6 CNG filling procedure will be pasted on the CNG Home refueling Unit.
- 7.7 1 No. of Gas Detector to cover entire canopy area and at suitable height (preferably at top) shall be installed inside compressor with interlock to auto stop the unit.
- 7.8 Bidder shall submit documents post Design, Development and engineering of CNG Home refueling Unit to carried-out HAZOP study. Bidder shall revise drawings in line with HAZOP recommendation. Cost of any additional equipment to be installed in CNG Home Refueling Unit shall be borne by bidder. List of documents are as follows:
- P&ID of system
 - Cause and Effect diagram
 - Operation philosophy
 - Alarm and interlock details
 - GAD of system
- 7.9 All other cables that (except main supply power cable) required for commissioning of CNG Home Refueling Unit shall be in the scope of vendor.
- 7.10 Single Earthing is considered for equipment with Single-phase electricity supply. All instruments earthing shall be provided till the single point outside Unit with suitable connection point for GGL.
- 7.11 All vent line shall be merge into a common vent line. Common vent line height shall be 3 meter above the highest working platform. Bidder shall provide proper support for the vent line. Color of Vent line shall be "Yellow".
- 7.12 Pressure switch for high discharge pressure at final stage
- 7.13 Temperature switch for high gas discharge temperature at final stage discharge
- 7.14 Pressure Gauges at final stage.
- 7.15 Condensate Separator with drain valve, as applicable during design stage
- 7.16 Suction and Discharge Filter as applicable, as applicable during design stage
- 7.17 Motor pulley, antistatic V-belts & belt guard as applicable
- 7.18 NRV at final gas discharge
- 7.19 Junction Box
- 7.20 Control cable up to junction box
- 7.21 Interconnecting gas piping, tubing within compressor skid
- 7.22 Isolation valve at inlet and outlet of compressor
- 7.23 Proper supports shall be provided for Tubing/ piping/ fittings and all material.

- 7.24 Rubber pad shall be provided between support and piping/ tubing. Sleeves shall be provided for U-clamp.
- 7.25 Copper jumper shall be provided for all flange joints.
- 7.26 Electrical power and control cabling, FLP glands including FLP glands for incoming cables to unit
- 7.27 Proper Structural supports within the CNG Home Refueling unit shall be provided for all tubing, piping, instruments etc. and all tube welds.
- 7.28 Compressor should shut down under following conditions :
 - Gas Leakage.
 - ESD Activation
 - Inlet Pressure Low
 - High Discharge Pressure.
 - High Discharge Temperature.
 - Motor Overload
 - Power Failure
- 7.29 CNG Dispensing Hose (Fill):
 - Hose shall be internally braided, electrically continuous, non-metallic and metallic hoses resistant to corrosion and suitable to the natural gas service are used for CNG service in the downstream of emergency and isolation shut off valve.
 - The flexible hoses and their connections are suitable for most severe pressure and temperature service condition expected with a burst pressure of at least four times the maximum working pressure.
 - Flexible hoses have permanent marking indicating the manufacturer's name or identification, working pressure and suitability for use with CNG.
 - CNG flexible electrically conductive hose is meeting the requirement as per NFPA-52 or NGV 4.2 or equivalent.
- 7.30 CNG flexible electrically conductive fill hose with NGV-1, type-2 class -A fill nozzles is required. Hose shall be 1/4" ID 5000 psig for fill line, length of hose shall be minimum 3m long.
- 7.31 NGV 1 fill nozzle. Nozzle shall be designed for high frequency use with a minimum cycle of 100,000 and shall meet all requirements of NGV-1 Type-2, Class A nozzle.
- 7.32 Safe venting arrangement shall be provided for venting of Nozzle and Unit.
- 7.33 Protective sleeve/ cover for filling hose shall be provided by supplier. Design of the protective sleeve/ cover shall be such that hose does not rub ground under normal operation.
- 7.34 One number of holster/ cradle for fill nozzles along with weather caps for the protection of nozzles
- 7.35 Bidder/ Service Provider shall supply all the necessary consumables, spares, piping and housings for CNG Home Refueling Unit.
- 7.36 Before starting of work at site, Contractor shall himself familiarize for the activities and obtain approval/ clearance from Owner and get work permit in one day advance before execution of job.
- 7.37 Supervisors, skilled/ semi-skilled/ unskilled labor required for the job shall be arranged by the contractor.
- 7.38 All the responsibility for the completion of job will be in the contractor's scope.

8. BIDDER SCOPE FOR DESIGN, DEVELOPMENT, ENGINEERING, FABRICATION/MANUFACTURE, ASSEMBLY OF CNG HOME REFUELING UNIT

- 8.1 Submission of detailed project report with timeline (i.e. Stage wise Prototype development timeline, statutory approval).
- 8.2 Detailed Project Presentation in presence of GGL team (Location of presentation will be decided by GGL)
- 8.3 Draft prototype design
- 8.4 Bidder shall submit detailed P&ID and GAD for Home CNG Refuelling Unit for GGL approval prior to start manufacturing.
- 8.5 Bidder shall obtain statutory approval (i.e. PESO) or exemption letter from PESO.
- 8.6 In case any change required as per PESO requirement, bidder shall conduct the same in the unit.

- 8.7 Bidders shall submit all required documents/ Drawings etc. for patent purpose as patent will be granted in the name of Gujarat Gas Limited (GGL). Bidder shall submit indemnity bond to GGL for not sharing any documents/drawings to any third party without permission of GGL.
- 8.8 Prototype design of first fully fabricated unit post all compliance of statutory requirement, will be directly transferred to GGL as per agreed unit rate.

9. QUALITY ASSURANCE

The Manufacture/ Bidder shall submit below tabulated documents after getting firm order from Owner for review and approval as per the requirement mentioned in the table. Vendor shall be responsible for the submitting of all drawing and technical documents including QAP to Gujarat Gas Limited for approval **post design, development and engineering after issuing of LOA/ Call-out Order.**

Sr. No.	Document	Requirement
1	Copy of CCOE (PESO) approval for Home CNG Refuelling Unit or exempted letter as applicable.	Information
2	Detailed P&ID for Home CNG Refuelling Unit including set points	GGL Approval
3	Bill of materials showing part numbers of all items such as fittings, valves (check valves, isolation valves, SOV etc.), pressure gauges, instruments, hose, breakaway coupling etc. along with the quantity of each items installed in unit and their makes.	GGL Approval
4	GA drawing for Home CNG Refuelling Unit and weight.	GGL Approval
5	List of bought out items along with their part numbers, make and manufacturer's warranty.	GGL Approval
6	Operation & Control Philosophy	Information
7	Operation, Installation & Maintenance Manual	Information
8	Quality Assurance Plan	GGL Approval
9	Name Plate	GGL Approval
10	Electrical and control drawings (including System architecture)	GGL Approval
11	Indemnity bond	Information

10. INSPECTION AND TESTING

- 10.1 Bidder shall submit QAP, PID and Drawings for GGL approval before manufacturing. Vendor shall carryout all the standard shop tests & inspection of cylinders as per GGL approved QAP and CCOE (PESO) guidelines. A copy of all the tests/ inspection procedure shall be provided to GGL.
- 10.2 Calibration and material test certificates complying with the statutory requirement are to be furnished for future reference.
- 10.3 Unit shall be purged with Nitrogen at required pressure prior to dispatch.
- 10.4 Any material/ goods covered under scope of supply, which during the process of inspection by appointed third party, at any stage of manufacture/ fabrication and subsequent stages, prior to dispatch is found not confirming to the requirements/ specifications of the Purchase order shall be liable for immediate rejection. Supplier shall be responsible and liable for immediate replacement of such material with acceptable material at no extra cost or impact on the delivery schedule to owner.

11. FIELD PERFORMANCE TEST

- 11.1 Once Module received at site, Bidder shall depute his representative for installation and commissioning and to demonstrate satisfactory operability of the system within specified parameters for a period of four (4) hours after commissioning.
- 11.2 There shall not be any back flow between unit and car during actual operation. If any leakage, back flow or any other malfunction is observed during test period, Bidder shall do the necessary repairs and repeat the test afresh without any additional cost & time implication to GGL.

12. SPARES

- 12.1 Vendor shall provide necessary spares and consumables required for start-up and Commissioning at no extra cost to GGL.
- 12.2 All the spares shall be properly tagged, coded, wrapped and packaged so that they will be preserved in original condition under the normal conditions of storage.

13. SPECIAL TOOLS AND TACKLES

- 13.1 Bidder shall supply all one set of special tools and tackles for each Home Refuelling Unit, if any for normal maintenance.

14. OWNER SCOPE OF WORK

- 14.1 Gujarat Gas Ltd shall provide required portable type fire extinguishers as per GCR 2016 for the same including their testing, refilling, calibration at company's cost & risk.
- 14.2 Gujarat Gas Ltd will provide location address to install CNG Home Refuelling Unit.
- 14.3 Gujarat Gas Ltd shall provide all the required statutory permissions for site to make CNG Home Refuelling Unit operational; however, Bidder shall be responsible to get all permissions pertaining to the CNG Home Refuelling Unit.
- 14.4 Gujarat Gas Ltd shall provide suitable earthing pit.
- 14.5 Gujarat Gas Ltd shall get equipment foundation etc.
- 14.6 Gujarat Gas Ltd shall provide PE gas supply connectivity up to CNG Home Refuelling Unit.
- 14.7 Gujarat Gas Ltd will installed their electrical supply distribution board and cable connectivity from distribution board to CNG Home Refuelling Unit.
- 14.8 Gujarat Gas Ltd will carry out all required safety engineering studies for setup and operation of CNG Home Refuelling Unit. Required Supporting documents/ Technical Input shall be provide by vendor. Any recommendation pertaining to CNG Home Refuelling Unit shall be implement by Vendor or supplier.

15. PAYMENT TERM

- 15.1 Fixed Charges for Design, Development, Engineering, Fabrication/ Manufacture, Assembly of Home Refueling Unit:
- 50% advance post compliance of below points and submission of necessary document by successful bidders:
 - ✓ Submission of detailed project report with timeline (i.e. Stage wise Prototype development timeline, statutory approval).
 - ✓ Detailed Project Presentation in presence of GGL team (Location of presentation will be decided by GGL)
 - ✓ Draft prototype design
 - ✓ Acceptance of project report and prototype design by GGL (In case, any change suggested by GGL then bidder shall do necessary changes and resubmit details for GGL acceptance)
 - Remaining 50%, post completion of Design, Development, Engineering, Fabrication/ Manufacture, Assembly of unit including statutory approvals.
- 15.2 Supply, Installation, Testing and Commissioning of CNG Home Refueling Unit
- 100% post successful completion of activity
- 15.3 Comprehensive Annual Maintenance Contract for CNG Home Refueling Unit
- 100% post successful completion of activity

16. PENALTY TERM

16.1 Penalty for Power Consumption:

The Quarterly penalty for power per unit shall be the calculated as follows:

$$PY \text{ (in Rs)} = (PH - (PG \times S)) \times CP$$

Where,
PY = Penalty Cost

CP = Actual per Unit cost charged by the Electricity Supplier Company

Calculated Power (KWH) (PH) = Total Unit Consumed by the unit should be calculated by subtracting the Opening Power Meter Reading from Closing Power Meter reading for quarter.

S = Gas compressed by the unit should be calculated by subtracting the Opening Gas Meter Reading from Closing Gas Meter reading for quarter.

Guaranteed power KWH/SCMH for month (PG):- Value arrived from Guaranteed Power Consumption in KWH and output SCMH quoted by the Bidder in the N-procure portal (Division of Guaranteed Power Consumption in KWH and output in SCMH).

16.2 Other Penalty

16.2.1 If the maintenance team is not using PPE then Rs.1000 per instance will be levied as penalty.

16.2.2 Rs.1000/- per instance to be levied for non-compliance to Gujarat Gas Ltd Limited Life savers. Instance will be restricted to one per day for the same Service Provider for same site.

16.2.3 Rs. 1000/- per instance for Un-availability of First-Aid Box in line with GGL process requirement.

16.2.4 Penalty Matrix Related to Injury Cases:

Sr. No.	Parameter	Penalty (INR)
1	Fatal incident	For each fatal case in an incident either 1,00,000/- or 10 % of total contract value, whichever is lower
2	Lost time injury	For each injury case in an incident either 20,000/- or 5 % of total contract value, whichever is lower
3	Medical Treatment case / Restricted workday case (Excluding animal/insect bite cases)	For each injury case in an incident either 10,000/- or 2 % of total contract value, whichever is lower

Note: Penalty shall be imposed over and above the payment & compensation that would be made by the service provider to the injured person or family of deceased vide the statutory provisions.

17. WARRANTY

Unit shall be warranted for 12 months from the date of commissioning or 18 months from the date of supply, whichever is earlier.

18. PERIODIC MAINTANANCE

18.1 Bidder shall provide maintenance schedule as per OEM recommendation

18.2 Bidder shall provide free of cost servicing during warranty period.

18.3 All calibration, preventive maintenance (quarterly and hourly), breakdown maintenance of CNG Home Refueling Unit shall be performed by the bidder during warranty and comprehensive AMC period without any cost.

18.4 Oil replacement/ top-up shall be performed by the bidder without any cost.

18.5 Any material required replacement during warranty period. Bidder shall replace the material/ spare without any cost.

18.6 OEM/ Service Provider to provide relevant technical and HSE training to the personnel engaged by issuing them individual identity card with a validity of one year. The identity cards will be renewed every year by the service provider based on the competency and performance of his person.

ANNEXURE-1 QHSE REQUIREMENT

1. SCOPE AND APPLICATION

Contractor/Service providers are the key stake holder and an integral part of Gujarat Gas Ltd (GGL's) business. Contractors'/Service provider' Quality, Health, Safety and Environment (QHSE) performance reflects on the company's business performance and reputation. GGL has established QHSE Management Systems, Procedures & Guidelines to ensure compliance with GGL's QHSE requirements. These requirements apply to all jobs whilst conducting work for GGL including; Project, Construction, Operation & Maintenance, Field Operations and Services within any given contract or agreement.

The overall objective of QHSE management in contract/agreement is to improve the company and Contractor's/Service providers' QHSE performance in all aspects of activities. Active and on-going participation by both the GGL and Contractor/Service provider is essential to achieve this objective.

2. RESPONSIBILITIES

It is responsibility of GGL management and staffs to ensure that all Contractors/Service providers work under their direction & control are provided with relevant Integrated Management System (IMS) Policies, Procedures & Guidelines that describe the GGL requirements for undertaking work within the company. It is also the responsibility of Contractors/Service providers to ensure that their staff are informed of and comply with GGL's requirement whilst working for the company.

GGL HSE department provides advice and assistance on QHSE requirements across the complete spectrum of all work activities. Contract Owner (Department Head) and Contract Holder (Work in-charge) are responsible to ensure safe execution of work/service include the following:

- Ensuring that the QHSE Policy, Procedures & Guidelines are known and understood by all contractors'/ service providers' staff and work force
- Monitoring, Inspecting & Auditing execution of work, activities to ensure adherence to the QHSE compliance requirements

The Contractors'/ Service provider' will take the responsibility for implementation of GGL's QHSE Policy, Procedures, Guidelines and other requirements with the advice and support of the GGL's Contract Owner/ Contract Holder and HSE representative.

Contractor/ Service provider to ensure that all aspects relating to QHSE are adequately addressed and implemented in accordance with the GGL QHSE requirements and QHSE Management Plan, which shall include the management processes and activities to be implemented during the course of work with GGL.

Contractor/ Service provider shall be responsible for ensuring that adequate HSE resources are put in place to enable satisfactory implementation of QHSE Management Plan.

This responsibility also applies to ensure the Health and Safety of the people are directly and indirectly engaged/ involved whilst working or present at GGL's work area/ sites.

3. MOBILIZATION

- Post selection and awarding of contract, GGL shall arrange a kick-off meeting with Contractor/ Service provider where GGL team members Contract Owner (CO), Contract Holder (CH) & HSE representative) will discuss on QHSE Management aspects/ plan and requirements in order to make sure that Contractor/ Service provider and their team are fully understand the expectation of GGL. During the meeting, QHSE Management Plan shall be discussed and agreed between GGL and Contractor/Service provider
- Contractor/ Service Provider shall ensure that all tools, tackles, equipment, machineries & instruments are adequately deployed and are 'Fit for Purpose'. Pre mobilisation checks/ inspection shall be carried out by GGL team for the same before the start of work.

- GGL emphasizes on the importance of the Health and Fitness of all staff/ work force deployed at GGL work sites. Contractor/ Service provider shall adhere to medical check-up as per the GGL Health check-up matrix (as applicable) in GGL prescribed format attached as Annexure-
- A proper HSE orientation and training will be organised by GGL for the Contractor/ Service provider workforce before the start of work; under no circumstances should the Contractor/ Service provider commence the work unless they have undergone the HSE training (as applicable)
- Contractor/ Service provider shall ensure that all their staff/work force are provided required Personal Protective Equipment (PPEs) as per GGL PPE matrix (as applicable)
- Contractor/ Service Provider shall ensure all required emergency arrangements like Medical treatment, FIRST AID box and Firefighting equipment (as applicable)

4. EXECUTION

Contractor/ Service provider is responsible to ensure the compliance with GGL QHSE requirements. GGL overall QHSE performance is directly influenced by the contractors' performance.

- Contractor/ Service provider is responsible for QHSE compliance monitoring at site/ work activities to ensure that work/ activity is performed in a safe manner. Moreover, they are responsible for reporting of all incidents, Hazard and Near Miss that might happen during work/ activity
- Contractor/ Service provider shall follow and comply with GGL "Work Permit" system
- During work execution and activities, GGL team will regularly monitor and evaluate the performance of the Contractor/ Service provider to identify the shortfalls and weaknesses and assist to improve the overall performance including QHSE performance through CPAR process (as applicable)
- We believe that everyone at GGL, Employees, Contractors, Service providers and Associates have the right to go home safely to their families.

5. QHSE GUIDELINE (AS APPLICABLE) FOR ALL TYPE OF CONTRACTS

5.1 CONTRACTOR/ SERVICE PROVIDER

- a) shall ensure that all staff/ work force comply with the requirements of the GGL HSE Management System, QHSE policy, standard, procedures, guideline, plan & Life Savers at work site
- b) shall ensure issuance of Identity Card to their team members
- c) shall apply and obtain Permit to work (PtW/ WA) before start of the work
- d) shall arrange work related Personal Protective Equipment (PPEs) for their staff/ work force and ensure proper use during the execution of job
- e) shall carry out the work within the duty hours/ office hours. No Work shall be carried out without permission of GGL's representative beyond the official duty hours unless otherwise agreed upon prior to start of work and recorded appropriately
- f) shall ensure that all tools, tackles, appliances, machines, vehicles, instruments or other equipment are Fit for Purpose and maintained safe working condition at all times and are used only by authorized and competent persons
- g) shall ensure that all the QHSE requirements are properly discussed for any sub-contracted activities with GGL. No such activity shall be performed without clearance from GGL management
- h) shall ensure that all Hazards, Near miss, accident, incident, injuries are reported promptly to GGL. Action arises due to reported Hazards, Near miss, incident investigation; audit/inspection shall be closed out as per agreed timelines with site in-charge
- i) shall deploy staff & work force trained, qualified and competent for the work and well aware of risks and mitigation action/s for the activities undertaken
- j) shall make necessary arrangements for safe custody of equipment, materials in stores/ warehouse and at site
- k) shall ensure safe transportation, storage and handling of materials to prevent any damage which may impair safe performance of the equipment / material etc
- l) shall initiate immediate actions to hospitalize injured person(s)
- m) shall ensure an injury free, incident free workplace and protect people from harm caused by work activities

- n) shall ensure use of seatbelts while driving four-wheeler and use of crash helmet for Two wheeler riders during job execution
 - o) shall ensure Lock out and Tag out (LOTO) after de-energizing and double check before starting any jobs. In case of conducting job for the purpose of fault finding & monitoring of voltage & current it is to be considered live working and all PPE'S to be worn to avoid exposure of flash arc current
 - p) shall take note that the use of open wires in sockets, use of wires with tape joints shall not be accepted at work site.
 - q) shall ensure proper collection, storage and disposal of solid/ liquid waste as per GGL procedure and guideline
 - r) staff/ work force shall not smoke or resort to misuse of drugs, medicines or alcohol while on duty
- 5.2 In case of any incident like fire, gas leakage etc. due to gross negligence of the Contractor's staff/work force, GGL reserves the right to impose penalty up to actual damage cost and or termination of work order depending upon the gravity of the situation.
- 5.3 Any breach of the QHSE requirements shall be deemed by the company to be a material breach of the terms & condition of the contract. GGL shall be entitled to take appropriate actions including instructing the contractor to
- Remedy the breach
 - Suspend the work
 - Terminate the contract.
- 5.4 All activities shall be carried out as per GGL's documented procedures and QHSE requirements, deviation from it shall be dealt with very strictly



USER GUIDE –HOW TO USE CISCO WEBEX MEETING FOR VIDEOCONFERENCING

Overview:

This guide will walk you through the steps to use Videoconferencing via Cisco WebEx.

Mandatory : Open the meeting link in Google chrome browser , If your default browser is Internet explorer (IE) ,then copy the link and open in Google chrome browser.

Step-1 : User will receive automated email -meeting invite as below for Videoconference meeting .

The screenshot shows a meeting invite from Google Calendar. On the left, there is a calendar widget for April 1st (Wednesday). The main content area displays the meeting details: 'sop', 'View on Google Calendar', 'When: Wed Apr 1, 2020 21:55 – 22:25 (IST)', 'Where: https://gujaratgasltd.webex.com/gujaratgasltd/j.php?MTID=m2a65f34d5286d678793be58f7c658a71', and 'Who: Rakesh Prajapati*'. Below the details are buttons for 'Yes', 'Maybe', 'No', and 'More options'. On the right, there is an 'Agenda' section for 'Wed Apr 1, 2020' with items: '08:00 sketing', '17:25 testing.for.ggl', '21:55 sop', and 'No later events'.

Rakesh Prajapati invites you to join this Webex meeting.

Meeting number (access code): 576 663 626

Meeting password: cWX8rMxHU35

wednesday, April 1, 2020

9:55 pm | (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi | 30 mins

Join meeting

Step 2: User need to click on “Join Meeting” button. user will be redirected to new page.



The screenshot shows the Cisco Webex meeting page. At the top, it says 'sop' and 'Wednesday, Apr 1 2020 | 9:55 PM - 10:25 PM'. The main message reads: 'Install the Cisco Webex Meetings app and start collaborating.' Below this, it says: 'Having trouble downloading the app? Join from your browser.' An arrow points upwards from the bottom of the page towards the 'Join from your browser' text.

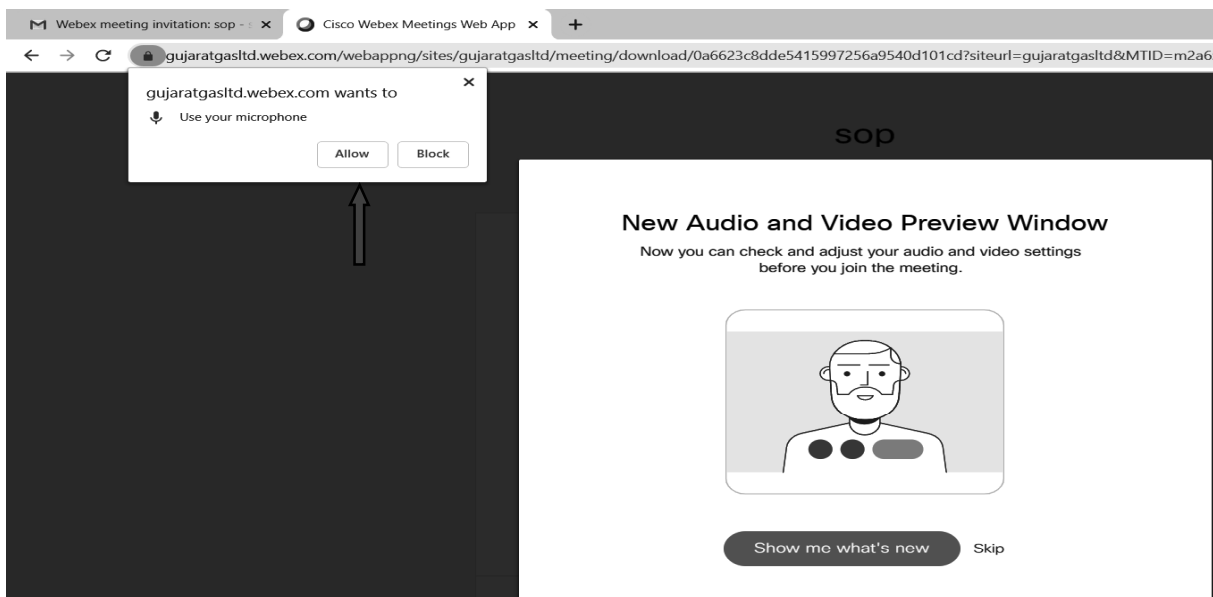


Step 3: Users need to click “Join from your browser” written in blue color. Then fill out basic Details and click next.

- Participant Name
- Email Id for login (ex : @gujaratgas.com)

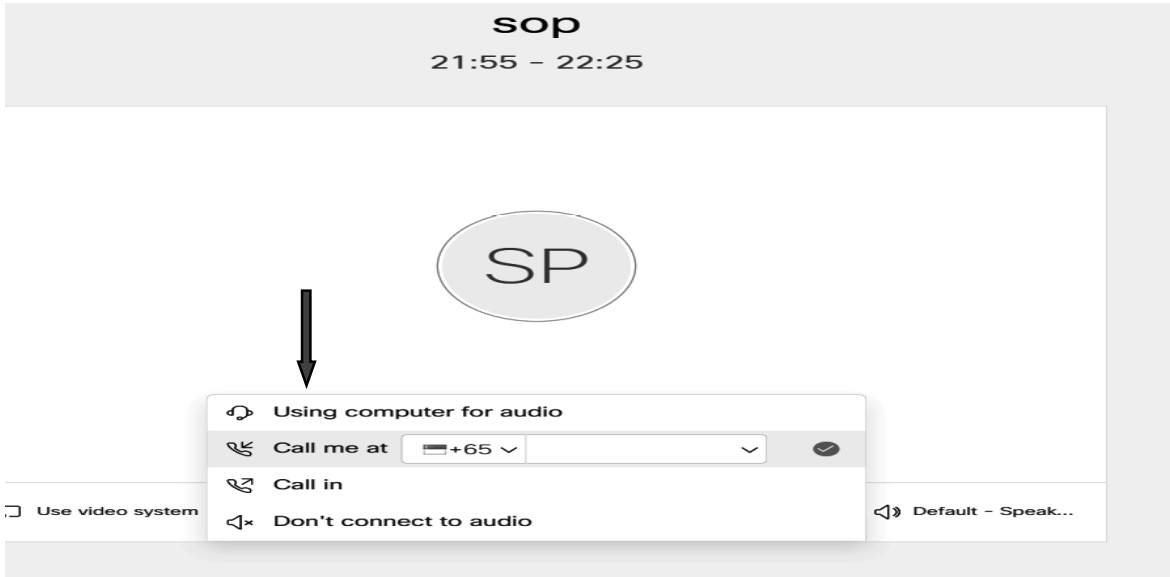
A screenshot of a Webex meeting join form. At the top, it shows the time "9:55 PM - 10:25 PM". Below that is the heading "Enter your information". There are two input fields: the first contains "Sandip Patel" and the second contains "sandip538@gmail.com". Below the input fields is a "Next" button. Underneath the "Next" button is the text "Already have an account? Sign in" and "More ways to sign in" with three social media icons: Google, Microsoft, and Facebook.

Step 4: Click “ Allow “ button to use your Microphone and Video Camera permission notification, if prompted.

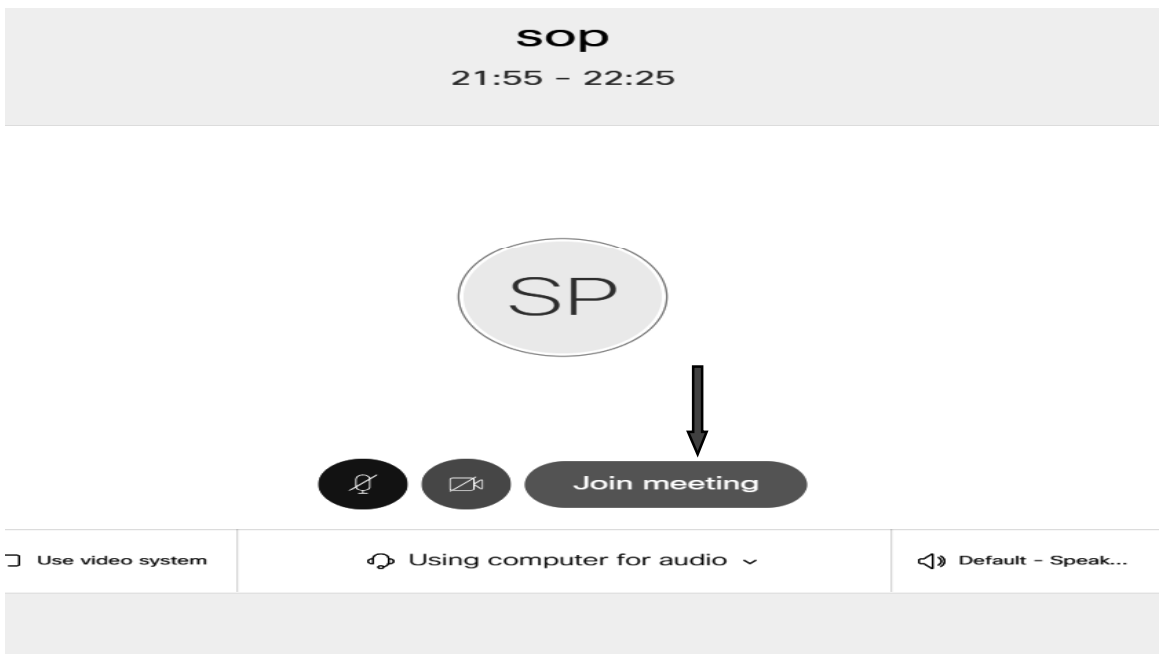




Step 5: Select "Using Computer for audio" button



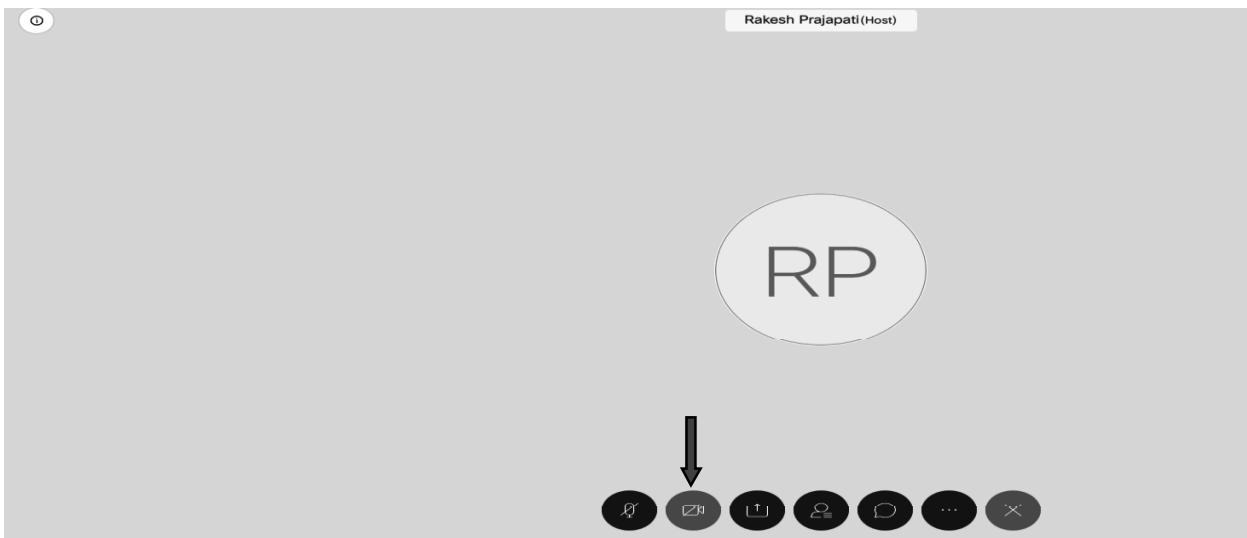
Step 6: select "Join Meeting" button



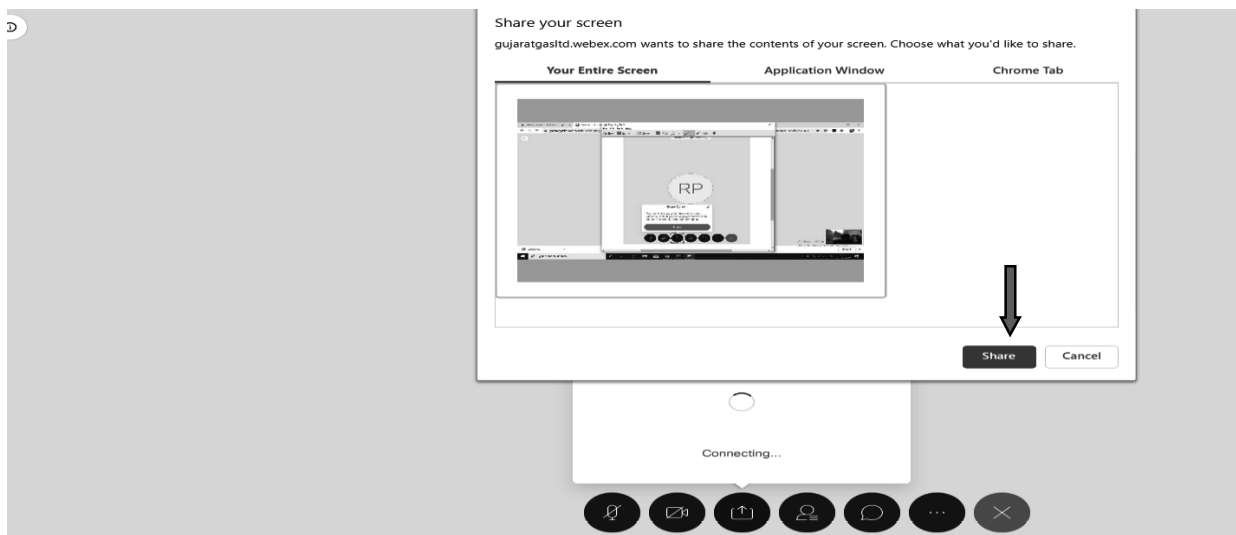


Step 7: User will be in meeting as participant “Participant name will appear in topmost right corner of screen”

Click on “Start video option” button in below pane

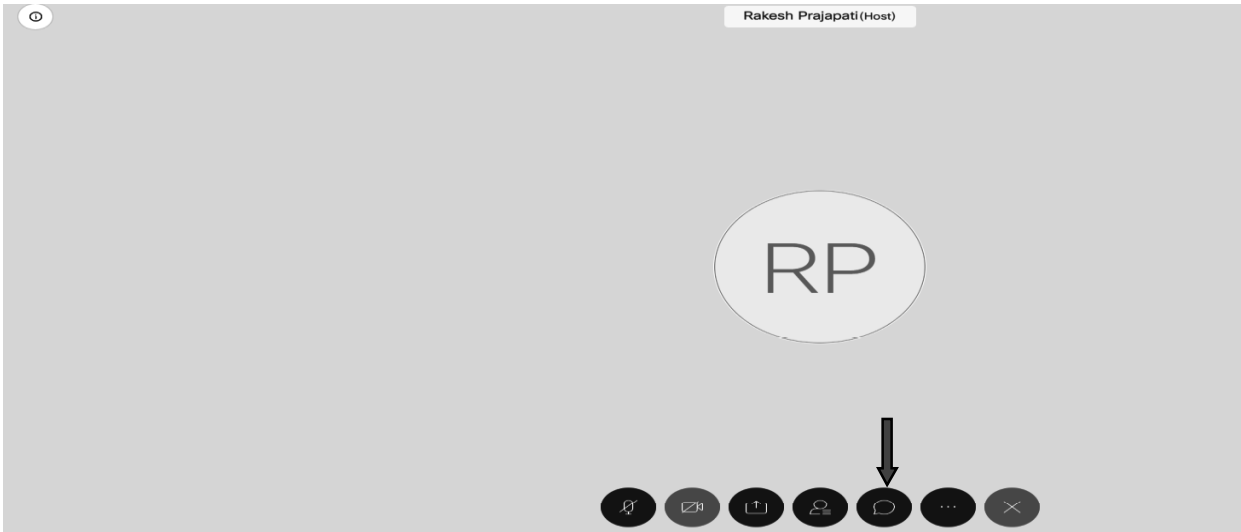


Step 8: user can share their screen by clicking “Share ” button in below pane

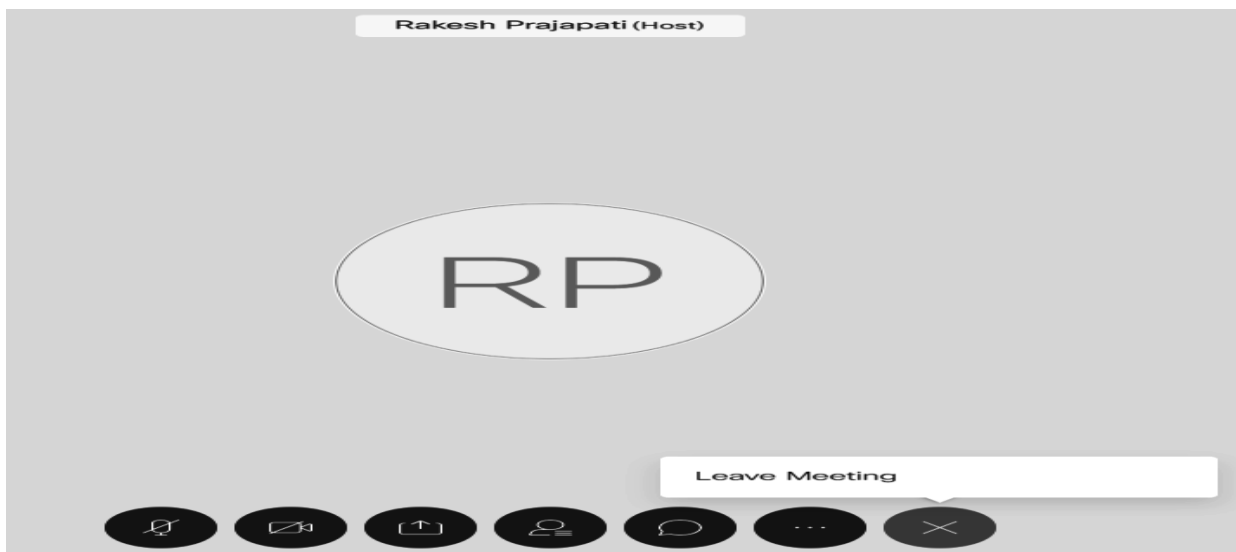




Step 9: user can chat by clicking “chat “ button in below pane



Step 10: User can exit by clicking “leave meeting” button



For any issue user may contact : IT Helpdesk - 7574 800 400 / 9714 800 500

F. PPT discussed during Discussion Meeting



GUJARAT GAS



Discussion Meeting - Home Refueling Unit (HRU)

1

Background



GUJARAT GAS

- Gujarat Gas Limited (GGL) is India's largest City Gas Distribution (CGD) Company in terms of sales volume. GGL is operating in 6 states and 44 districts Gujarat, Maharashtra, Rajasthan, Haryana, Punjab & Madhya Pradesh and 1 Union territory of Dadra & Nagar Haveli.
- In India ratio of CNG Vehicles to total vehicles is increasing. There is also introduction of new technology in market to penetrate more CNG vehicle. In July 2024, Bajaj has launched 1st CNG 2-wheeler in India with 2 kg CNG fuel capacity. Similarly, other 2-wheeler auto manufacturing company is planning to introduce similar type vehicle.
- These types of low volume vehicles are expected to penetrate market very rapidly. This needs to address on priority to enhance the customer orientation and to increase the conversion rate.
- To reduce queue at CNG stations and to utilise idle time of vehicle, GGL is going to introduce **"CNG Home Refuelling Unit (HRU)"**.
- Advantage of HRU is that people can utilise their vehicle idle time (i.e. night time) for refuelling of vehicle as per their convenience at home.

2

Scope



- Design, Development, Engineering, Fabrication / Manufacture & Assembly of Home Refueling Unit
- Obtain statutory approvals as required for Supply of Home Refueling Unit
- Supply, Installation, Testing & Commissioning (Includes loading, unloading, freight, insurance, etc.) of CNG Home Refueling unit including comprehensive AMC for five years.
- Prototype design of first fully fabricated unit post all compliance of statutory requirement, will be directly transferred to GGL without any additional cost
- Bidders shall submit all required documents/ Drawings etc. for patent purpose as patent will be granted in the name of Gujarat Gas Limited (GGL). Bidder shall submit indemnity bond to GGL for not sharing any documents/drawings to any third party without permission of GGL.

3

Technical Data Sheet



Parameter (Few Important Parameters)	Vendor to quote or confirm as applicable
Business Case Use	CNG filling for Home/ Office Premises for Outdoor Uses
Cylinder Lubrication	Lubricated / Minimum Lubricated/ Non Lubricated
Life of Compressor	10 Years with 16 Hours per day running
Flow Rate Capacity	Approx. 1.5 SCMH but not more than 5 SCMH
Inlet Pressure of Gas	21 mbarg to 110 mbarg
Outlet Pressure of Gas	200 bar/ 3000psi
Inlet Temperature of Gas	0-50°C
Outlet temperature of Gas	Max 55°C
Filling time	Slow filling
No. of Dispensing Hoses	Single Filling Hose (Hose Length – Min 3 meter with hose sleeve on entire hose)
Type of control	Electro actuated ball valve with fail safe condition (shall be in ON position only while running/ starting of unit)
DRIVER TYPE: ELECTRIC MOTOR	Drive/ V-Belts/ Direct with coupling
Electrical Supply	220V-/+10%, 50hz+/-5%, Single phase
Area classification	CLASS - I, ZONE (DIV)-1, GAS GROUP IIA / II B IS 5572
Noise Level	45 dBA at 5 meter distance from unit
Oil Separator/ Oil Filter (if present)	Yes/ No
Lubricating Oil + Oil Filter (if present)	Yes/ No
Alarm sensor / Safety Switches	Required
Safety Relief Valves (if present)	Yes/ No
Emergency stop switch	Required

4

Technical Data Sheet



Parameter (Few Important Parameters)	Vendor to quote or confirm as applicable
Switch 1. High Outlet Pressure 2. High Outlet Temperature	Auto Stop
Gas Leak Detector	Auto Stop
Electrical Protection	Auto Stop
Manual Switch	Start and Stop Button
Mounting	Preferably wall mounted unit
Dimensions in Feet (Length X Width X Height)	Preferable dimension 1 X 1 X 2
Enclosure	IP54
Average power consumption	*
Output in SCM/Hour	*
Motor power (KW)	*
Fill Nozzle	NGV1
Compressor Trips	Gas Leakage. ESD Activation Inlet Pressure Low High Discharge Pressure. High Discharge Temperature. Motor Overload Power Failure

* To be filled by Bidder

5

Bidder selection Criteria & Documents



Sc No	Criteria	Supporting Document
1	Zero deviation letter on technical specification	Bidder shall submit Undertaking on their letter head for zero deviation on technical specification. Format is attached as Annexure-1
2	a. Bidder shall have supplied one unit of Gas Compressor. Or b. If bidder is a dealer, Authorized from OEM for Dealership for Supply of compressors. OEM shall have supplied one unit of Gas Compressor.	a. Order copy from client company representative Or b. Authorization letter from OEM to bidder along with Order copy

Notes:

- Bidder shall submit all qualification documents in physical format at the address provided in the EOI document. Additional documents may also be asked from bidders, if required.
- All the documents submitted by Bidder shall be clearly legible and shall be in English Language.
- Documents shall be submitted in line with BQC requirement only
- GGL/ GGL authorized third party can verify documents submitted by the bidder. Bidder shall provide below details for verification purpose:
 - Name of issuing authority
 - Contacting Person Name
 - Contacting Person Mobile No.
 - Contacting Person Email ID

6

Bidder selection Criteria & Documents



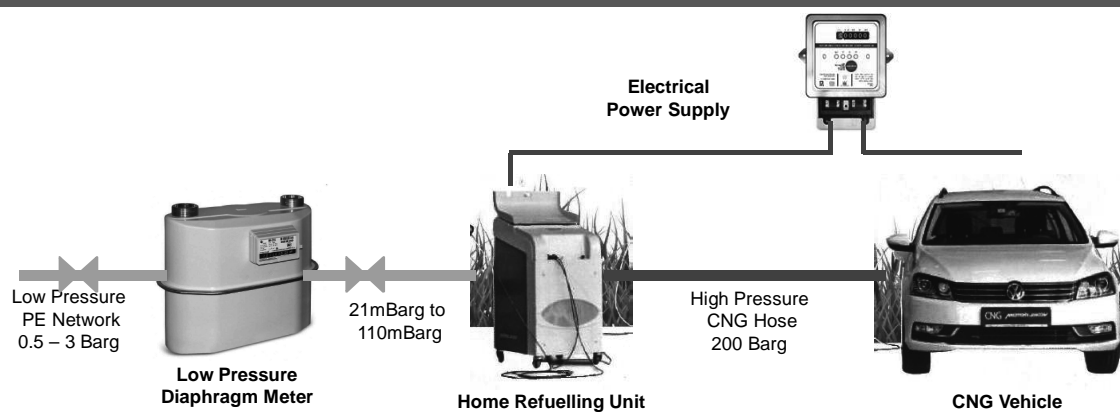
- Bidders qualified under this process will be empaneled for a period of 1 (One) years from the effective date of empanelment.
- Empaneled contractors will be considered for tendering/ RFQ/ Development process for future requirements of the respective work categories, based on business requirement, at the sole discretion of GGL.
- Bidder shall submit Annexure-1 to Annexure-5 along with BQC supporting document. During qualification process all Annexures (Annexure-1 to Annexure-5) will be checked by GGL.
- The expression of interest along with all required supporting documents should be sent to below mentioned address captioned with EOI Reference no. within stipulated EOI submission date:

Vice President- Technical and CNG Projects
 (C/o Mr. Vinit Goel/ Mr. Vaibhav Bansal)
 Gujarat Gas Limited,
 Office No. 4 & 5, Ground Floor,
 IT Tower -2, Infocity
 Gandhinagar – 382009; Gujarat

- Total 10 lakh rupees development charges to be given to finalized bidders.

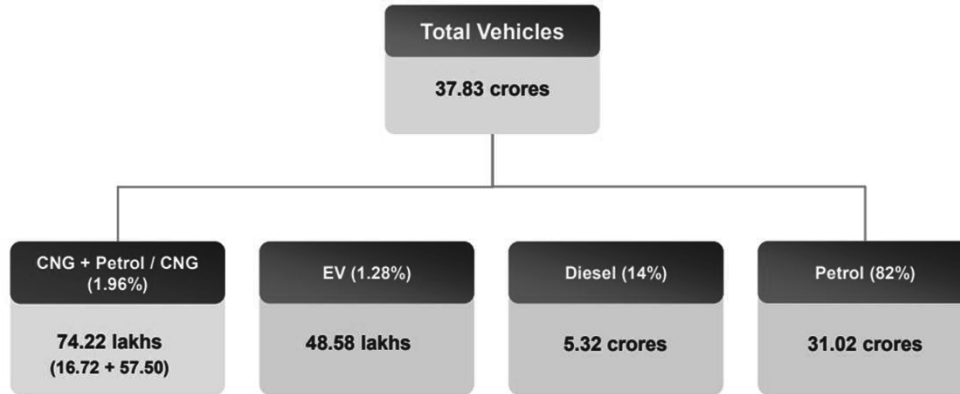
7

HRU Concept



CNG Home Refueling Unit Consist of Compressor with dispensing facility.

Vehicles Data



Source - parivahan.gov.in

Data as on September 2024. 9

Financial Year wise Vehicles Growth



Fuel-wise growth of Vehicles

Fuel	Mar-22	Mar-23	Mar-24	CAGR
CNG	51.05 lakh	58.61 lakh	68.99 lakh	16.25%
EV	11.48 lakh	23.31 lakh	40.14 lakh	87.02%
Petrol	26.45 cr	28.23 cr	30.10 cr	6.68%
Diesel	4.70 cr	4.95 cr	5.21 cr	5.24%

Category-wise growth of Vehicles

Fuel	Mar-22		Mar-23		Mar-24		CAGR	
	3-W	4-W	3-W	4-W	3-W	4-W	3-W	4-W
CNG	15.71 lakh	35.09 lakh	18.16 lakh	40.19 lakh	21.72 lakh	47.00 lakh	17.61%	15.74%
EV	6.92 lakh	0.48 lakh	10.95 lakh	0.99 lakh	17.28 lakh	2.00 lakh	57.97%	103.48%
Petrol	21.05 lakh	2.77 cr	21.20 lakh	3.03 cr	21.35 lakh	3.28 cr	0.71%	8.83%
Diesel	45.30 lakh	4.15 cr	46.36 lakh	4.37 cr	47.69 lakh	4.61 cr	2.61%	5.51%

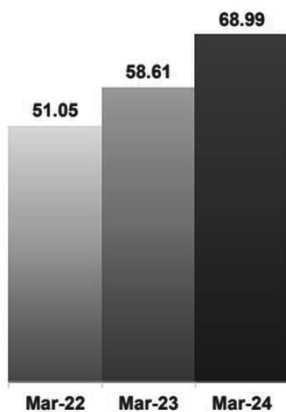
Data as on September 2024. 10

Progress of CNG Vehicles, Stations and Sales



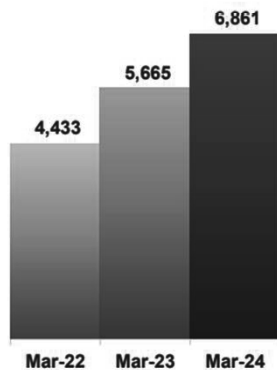
CNG Vehicles (in lakhs)

CAGR : 16.24%



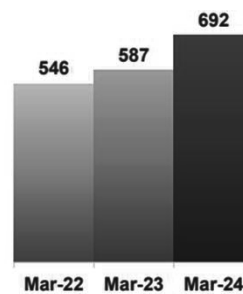
CNG Stations (in Nos.)

CAGR : 24.41 %



CNG Sales (MMSCM)

CAGR : 12.58 %



Data as on September 2024. 11



GUJARAT GAS

Thank You

G. Clarification of Queries Submitted

CLARIFICATION OF DISCUSSION MEETING FOR DESIGN, DEVELOPMENT, ENGINEERING, FABRICATION/ MANUFACTURE, ASSEMBLY, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF CNG HOME REFUELING UNIT (COMPRESSION & DISPENSING UNIT OPERATED ON LOW PRESSURE ON PE NETWORK) FOR SLOW FILLING OF CNG INTO VEHICLES WITHIN CUSTOMER PREMISES				
Ref. No.: GGL/EOI/2024-25/019				Date / Time of Pre- Bid : 18.01.2025 / 15.00
Sr. No.	Page No	EOI Clause No./ Annexures	Bidders Comments / Queries	Gujarat Gas Reply / Clarification
1		General Queries	What is the expected timeline for the development of this product?	The bidder shall consider a timeline of maximum one year for the development and supply of the unit, including obtaining compliance with statutory requirements.
2			What are the expected volumes (year-wise, if any projections have been made)?	The overall idea is to provide a unit that enhances customer comfort while minimizing capital expenditure and ensuring cost-effective operation and maintenance. Due to these factors, demand for the product is expected to grow naturally, especially given India's expanding CNG vehicle population is increasing around 16% CAGR (as per data available on Parivahan.gov.in). However, for clarity, there is no volume projections available as of now.
3			What is the expected percentage of indigenous components used in the entire package?	There is no restriction of minimum requirement of indigenous components used in the entire package.
4			The sales of this product will always be routed by GGL? Or there will be an agreement between the end client and vendor directly?	Terms & conditions for marketing & sales of product, will be jointly agreed during agreement stage with successful bidder.
5			The gas composition of PNG is different from CNG? Will the usage of PNG impact the mileage of the automobile?	There is no difference in the Gas Composition of CNG and PNG. Only Difference of working pressure of CNG and PNG.
6	Page 17 of 31	Clause 5 Area Classification	The Technical Specification asks for Class 1 Div 1 Group D or Zone1 Div 1 Group IIA/IIB as per NFPA. Please note that as per NFPA 52, these small home refueling machines are excluded and they are considered as home appliance. Since the volume of gas within the system is too less, hence these machines are categorise as non hazardous and hence they may not be Class 1 Div 1 machines. Asking for the same, would over designing and would a huge implication on the cost of manufacture of these machines.	Expecting to develop cost effective product with all safety compliance and statutory approvals.
7	Page 17 of 31	Clause 6 Data Sheet	As per the data sheet the capacity of the machine is approx. 1.5 SCMH but not more than 5 SCMH. We strongly feel that the capacity for the proposed machine must be from 1.5 SCMH to 20 SCMH. For home refueling world over the allowed capacity is 1.5 SCMH to 8 SCMH and for Vehicle refuelling appliance it is upto 20 SCMH. Since this is first time a Indian CGD is trying out such a solution, this equipment will go through lot of scrutiny from PESO and PNGRB and it is better to try and push for compressor upto 20 SCMH in the interest of project push in terms of regulational changes.	You may consider flow range of HRU from 1.5 SCMH to 8 SCMH.
8	Page 18 of 31	Clause 7, 7.2	Specifications asks for SS Inter Coolers and After coolers. Please note that these machines are typical and design of these machines with material selection of accessories like coolers is proprietary and block manufacturer may or may not allow change of design or deviate from their tried and tested designs. Kindly allow CS Cooler.	Expecting to develop cost effective product with all safety compliance and statutory approvals.
9	Page 20 of 31	Clause 8.5	Since this is completely new concept introduction in India and hence all regulatory compliance for the concept machine has to be joint responsibility of Gujarat gas and supplier.	Regulatory compliance for CNG home refueling is to be managed by the bidder. However, Gujarat Gas will provide necessary support to the bidder for statutory approval.
10	Page 21 of 31	Clause 8.8	As per the technical document, the prototype is to be transferred free of cost to Gujarat Gas. Please note that this may not possible for vendors. Generally for such a concept development, vendor has to product 2 to 3 prototype machines before final designs are freezed. Vendor can eventually deliver final finish machine at extra cost. In case gujarat gas insist, than these prototypes can be transferred to Gujarat Gas at mutually agreed price levels.	GGL will purchase the final product as per agreed unit rate.
11	Page 22 of 31	Clause 15	As we understand GGL intents to Pay Rs 10 Lacs as fixed devlopment cost. We believe this amount is too less. Generally such a development project would involve an invetsment of Rs 1.5 Crore. This investment will allow vendors to buy technology from europe or america and allow development of product in India under make in India scheme. Request you to kindly reconsider the one time development cost financial support.	As mentioned, GGL will provide only Rs. 10 lakhs as a development charges to each vendor by limiting maximum 5 vendors. Development charges will be given in stage wise as mentioned in EOI. There are readily available HRUs internationally, only need to develop a cost effective products considering Indian market.

CLARIFICATION OF DISCUSSION MEETING FOR DESIGN, DEVELOPMENT, ENGINEERING, FABRICATION/ MANUFACTURE, ASSEMBLY, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF CNG HOME REFUELING UNIT (COMPRESSION & DISPENSING UNIT OPERATED ON LOW PRESSURE ON PE NETWORK) FOR SLOW FILLING OF CNG INTO VEHICLES WITHIN CUSTOMER PREMISES				
Ref. No.: GGL/EOI/2024-25/019				Date / Time of Pre- Bid : 18.01.2025 / 15.00
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				<p>Below is reference link of product available in international market. You may also search similar products.</p> <p>1. https://www.alibaba.com/showroom/cng-home-fueling-station.html#:~:text=Portable%20CNG%20home%20refueling%20kits,their%20vehicle%20for%20home%20refueling.</p>
12	Page 22 of 31	Clause 16	As per the tender conditions there is penalty based on power consumption. We have more than 28 years of experience in compressor field. Such small size Home refuelling appliance comes under various capacity and power consumption designs. We request you to kindly give a band for power consumption, specifying maximum power consumption allowable value. This should fair requirement for the present development project.	Power consumption is one of the major OPEX parameter. Considering the high compression ratio we are expecting to develop power efficient product.
13	Page 17 of 31	Clause 6 Data Sheet	The data sheet asks for single phase power supply. We request you to kindly allow both ie single phase and 3 phase power supply. We do understand that there could be challenge for 3 phase power supply, but generally it is preferred.	<p>The unit needs to be installed at the customer's premises. However, a three-phase supply is generally not available in residential homes.</p> <p>Therefore, Vendor need to consider single phase power supply only.</p>