



NIT FOR MICRO LNG LIQUEFACTION PLANT

1. COMPANY BACKGROUND:

The consortium of Dinesh Engineers Ltd., Resonance Energy Pvt. Ltd., and Tolani Projects Pvt. Ltd has been authorized by PNGRB in 11 rounds of bidding for four Geographical Areas (GA's) of:

1. Mandi, Kullu, Kinnaur, and Lahaul & Spiti districts in the state of Himachal Pradesh,
2. Bikaner & Churu districts in the state of Rajasthan
3. Pauri Garhwal, Uttarkashi, Rudraprayag, Tehri Garhwal districts in the state of Uttarakhand,
4. Pithoragarh, Almora, Champawat, Chamoli & Bageshwar districts in the state of Uttarakhand

The consortium has established three companies, namely Gasonet Service (HP) Ltd, Gasonet Service (RJ) Ltd, Gasonet Service (UK) Ltd, and GA of one and two above have been transferred to GA of Gasonet Services (HP) Ltd, Gasonet Services (RJ) Ltd respectively and GA of 3 and 4 above have been transferred to Gasonet Services (UK) Ltd. These companies are engaged in City Gas Distribution to supply natural gas for domestic, automobile, industrial, and commercial purposes. The each company is operating from its office in respective GA with corporate offices at 807, World Trade Tower, Sector 16, Noida-201301.

2. BRIEF OF PROJECT:

Gasonet Services (UK) Ltd. intends to own and operate LNG Liquefaction Plant in its authorized geographical area in Uttaranchal state. Initially, one plant will be installed near Rishikesh location, with a plan to replicate such facilities in Himachal Pradesh and Rajasthan.

3. THE PROPOSAL:

Gasonet intends to firm up the design parameters including optimal plant size (expandable) through modular design of the liquefaction plant, the technical bids are invited from established/reputed manufacturers/suppliers of entire plant. However, exclusion can be considered for indian (domestic/supply items/systems) but the budgetary quote include such price component.

4. SCOPE OF SUPPLY

Supply of LNG Liquefaction plant with following specifications:

- a. LNG Liquefaction plant of modular design with a provision for scaling up the capacity starting from 40 TPD to 150 TPD (desirable) but the modules of different capacity with standard design of the supplier shall also be considered.



- b. LNG Liquefaction plant will have complete facilities, e.g. gas treatment unit (if required), liquefaction unit, utilities, power supply and storage vessel up to a production capacity of two (2) days

5. STATION LOCATION PARAMETERS:

Plant shall be located near Rishikesh, Uttarakhand. Station location parameters are as follows:

Longitude: 30.058725N

Latitude: 78.2155567E

Elevation: 329.6 mtrs.

6. GAS SPECIFICATION:

- i. **Gas Composition:** Intake Gas composition is almost 98% Methane with small amount of Ethane and other inclusions/state shall conform to Schedule VI of PNGRB (Access code for City or Local Natural Gas Distribution Network) Regulation 2020. Accordingly, threshold limit for Gas Parameters on City or Local Natural Gas Distribution Network will be as under:

Parameters	Limit
Hydrocarbons dew pt (Degree Celsius, max.)	0
Water dew point (Degree Celsius, max)	0
Hydrogen Sulphide (ppm by wt. max.)	5
Total Sulphur (ppm by wt. max.)	10
Carbon dioxide (mole % max.)	6
Total inerts (mole %)	8
Temperature (Degree Celsius, max.)	55
Temperature (Degree Celsius, min.)	10-20
Oxygen (% mole vol. max.)	0.2
Wobbe Index for domestic consumers (based on MJ/SCM)	39-53

- ii. **Gas Pressure:** Approx. 49 barg (300#)

7. INSTRUCTION TO BIDDERS:

- a. Please provide the liquefaction technology being employed with the number of plants running employing this technology.
- b. Vendor to specify “Quantum of OEM supply” and “Site Fabrication” along with “Area requirement” for setting up LNG Liquefaction plant
- c. Vendor to specify the applicable code being employed such as EN 1473 / NFPA 59A / EN 13645 / ISO/IFDS 16290
- d. Prepare design to be similar to cold box used for air liquefaction and to include standard plug-and-play model



e. Vendor to explore possibilities of intermittent running of the plant; frequency/duration to be mentioned

8. THE OFFER:

- a. Vendor to quote for the optimal size of the plant being offered including that of the utilities and gas treatment plant etc. as complete offer
- b. In case of addition of the liquefaction capacity, additional cost of utilities / gas treatment be specified.
- c. The price quoted are only Budgetary and the firm offer shall be invited when the company finalizes the optimum size with economy of cost.

9. FURTHER DISCUSSION - PRESENTATION:

The bidders may like to present their product through presentation either in physical form or through video conferencing to enable to understand their best design .

10. COMMUNICATION ADDRESS:

Please send your technical offer by 23.02.2024 address to:

Vice President (EP & P),
Gasonet Services Limited
807, Tower-B World Trade Tower,
Sector-16, NOIDA - 201 301
Email: alok.thakur@gasonet.in