

DETAILS OF THE EXPRESSION OF INTEREST (EOI)
for
*Utilisation of flared Natural Gas in Remote Location
by converting it to LNG and injecting the same
after Re-gasification in the oilfields of
Oil India Limited (OIL) in Upper Assam, India*

Expression of Interest:

Expression of Interest is requested by Oil India Limited (OIL) from Turnkey Solution / Service Providers (TSP) / Technology Providers for offering suitable service/solution package to tap flared natural gas in the order of 80,000 to 100,000 Standard Cubic Metres per Day (**SCMD**) in one of its oilfield located in Upper Assam, India (refer Annexure I for location) which includes primarily setting up of a small scale LNG plant and related facilities like LNG storage, Cryogenic tankers for transportation of LNG, transportation of other intermediate fraction produced during the liquefaction process along with installation of re-gasification plant, etc. LNG may be required to be transported to a distance of about 70 to 100 KM to reach the re-gasification/consumption site.

Preamble:

Oil India Limited (OIL), a national oil company in India engaged in exploration, drilling, production & transportation of oil & gas and production of LPG intends to hire the services of a competent Turnkey Solution/ Service Provider (TSP) / Technology Provider for tapping its flared gas of volume about 80,000-100,000 SCMD with an objective to monetise it by converting into LNG, transporting LNG by cryogenic tankers to re-gasification site and finally injecting the same after re-gasification into a available existing gas grid.

OIL has dedicated gas collection and distribution network including compression facilities in order to utilise the gas for various industries like Power Sector, Fertilizer sector, Petrochemicals, Tea Sector, fuel for commercial and domestic uses etc.

Background:

OIL has been carrying out its exploration and development activities in various areas in the state of Assam. The recent discoveries are in remote areas and the quantum of the associated gas produced along with crude oil is in the order of 80,000 to 100,000 SCMD. Due to the non-availability of local consumers as well as pipeline evacuation facilities, alternate arrangements are required to be planned to avoid the flaring of such valuable energy source. Moreover laying of long distance pipeline is not a viable solution in present circumstances for evacuating small quantity of gas. OIL, looking for a suitable solution in order to utilize/monetise the

flared gas as well as abatement of harmful effect of greenhouse gas emission, intends to establish commercially viable and proven small scale Liquefied Natural Gas (LNG) plant including related facilities like LNG Storage, LNG Transportation, Transportation of intermediate fraction produced during the liquefaction process along with re-gasification plant.

This concept of conversion of gas to LNG is considered as one of the options for monetisation/utilisation of flared gas and therefore it has been planned to establish a small scale LNG plant as a pilot project. Based on the success of this small scale LNG plant, OIL may consider extending the technology to its other fields. Since there is no market of LNG in the area, the LNG needs to be re-gasified and injected to gas grid. The relevant data relating to the gas composition, site conditions etc. is enclosed in Annexure-I.

Project Overview:

OIL has recently established a sizeable reservoir of oil and gas in one of its satellite fields namely Mechaki, located at a distance of around 75 kms away from its Field Head Quarters in Duliajan in the state of Assam. The associated gas produced along with crude oil from this field is presently in the order of 80,000 to 1,00,000 SCMD and is being flared. This location is about 3 to 4 kms from the National Highway (NH-37) and about 45 kms from the District Headquarter of Tinsukia. This gas needs to be converted to LNG near the location Mechaki or at a suitable location nearer to the National Highway. The distance from the site to the proposed LNG Plant shall be within a range of 3-4 kms. The LNG, duly loaded in tankers shall be transported for a distance of about 70 to 100 kms and brought to the proposed re-gasification site. The LNG will be offloaded at the re-gasification site and injected in the existing gas grid.

Scope of Work for the Project:

Under the Project Scheme, Turnkey Solution/ Service provider / Manufacturer is expected to perform the activities outlined above as per any one of the options mentioned below. OIL shall opt for any one of the following modalities best suited to them:

Option-I: Outright Purchase by OIL, O&M by party

OIL purchase the Plant & accessories/ facilities and subsequently outsource installation, commissioning, Operation & Maintenance services to interested parties on an agreed terms and condition for an agreed period.

Under this option, the party's obligation will be to recommend suitable package, help OIL in finalising the specification of the plant & accessories, take active part in the procurement process including technical scrutiny of the offers, take responsibility in getting necessary clearances from statutory bodies, install and commission the plant and related

accessories/facilities, operate and maintain the plant and related accessories/facilities, transfer the unit to a new location if required for an agreed period as per the agreed terms and condition.

Option-II: Build Own & Operate (BOO) by party, providing gas by OIL

Interested Parties may offer Build Own Operate (BOO) concept by supplying and commissioning the Plant & accessories / related facilities and subsequently providing operation & maintenance services for agreed period of 10/15 years on a yearly / monthly rental basis.

Under this option, the party will undertake all activities as listed below but not limited to the same:

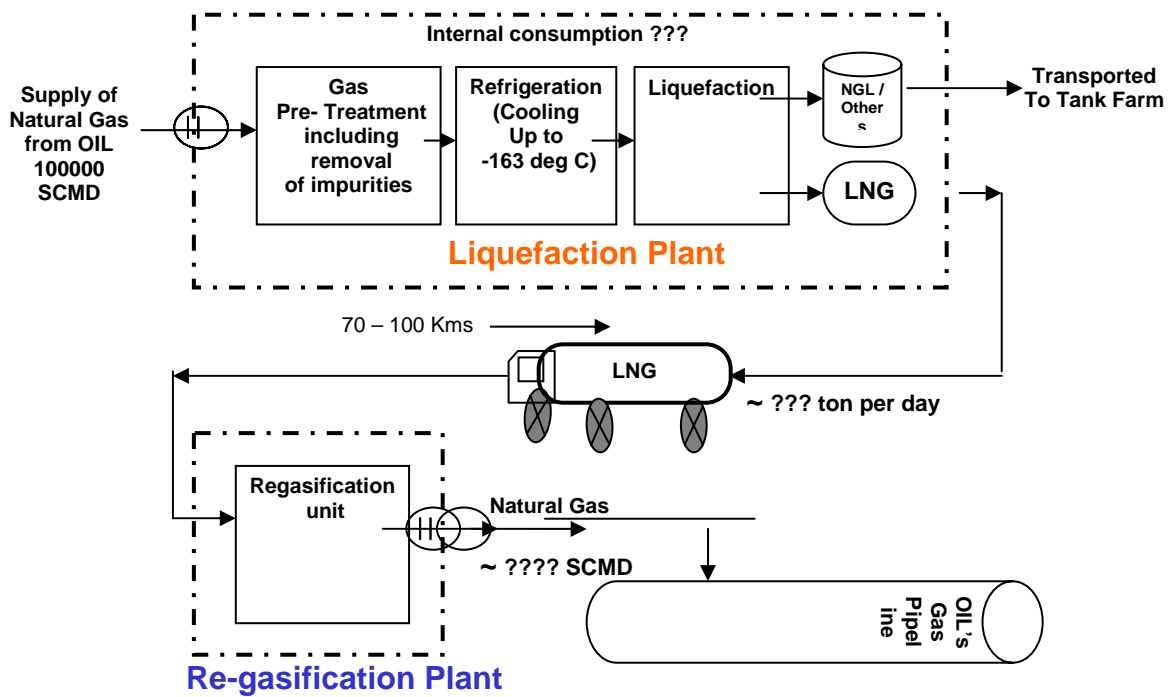
- a) Land Acquisition & Development- For LNG & Re-gasification Plant
- b) Design, Supply & Erection of LNG & Re-gasification Plant
- c) Commissioning of LNG & Re-gasification Plant
- d) Transportation of LNG / other products (if any) to Re-gasification Plant
- e) Re-gasification and injection of gas in OIL's Pipeline
- f) Creation of storage facilities as required
- g) Operation and Maintenance of all Facilities and Plants
- h) Security of All Facilities and Plants
- i) Creation of requisite utilities
- j) Compliance to all statutory rules & regulations
- k) Transfer of the Plant & accessories / related facilities to OIL's other satellite field/location in Upper Assam as and when required

Option-III: Build Own Operate & Transfer (BOOT) by party (transfer after a period of 5-10 years, providing gas by OIL

Interested Parties may offer Build Own Operate Transfer (BOOT) concept by supplying and commissioning the Plant & accessories / related facilities and subsequently providing operation and maintenance services for an agreed period of 5-10 years on yearly/monthly rental basis and finally transferring everything to OIL.

The obligation under this option will be same as per Option-II (BOO) till the time the transfer of the Plant & accessories / related facilities. However, the party will also be responsible for successful transfer of the Plant & accessories / related facilities after an agreed period at an agreed cost.

The Tentative Schematic



Qualification Criteria for the Parties:

The Interested parties must fulfil the following criteria to become eligible for the proposed project:

A. Minimum one of the following:

- (i) The Party should be a Manufacturer and must have supplied and commissioned at least 2 nos. (two) small scale LNG Plants and the accessories/ facilities as explained above in last 10 years in any part of the world.
- (ii) The party should have the experience of providing consultancy services for implementing cryogenic plants/ small scale LNG plants and have a tie up with the Manufacturer, who is having the qualification mentioned under (i) above.
- (iii) The party should be a Solution/Service provider who has the experience of undertaking and completing minimum 2 nos. (two) similar project successfully in respect of small scale LNG plant as explained above in any part of the world.
- (iv) The party should have the experience of providing at least one BOO / BOOT Services earlier to any reputed organisation in the last 5 years and should have tie up with

any manufacturer / solution / service provider of similar project.

- (v) The party who do not possess the above experience as indicated for carrying out all functions independently, but have experience in any one or more such functions in matters of cryogenic plant activities, providing services for E&P activities (supply & operation of drilling rig, work over rig, coil tubing operation, etc.) may also show interest on the strength of collaboration to cover the shortfall of relevant experience as mentioned above. The kind of collaboration shall be through a pretender bi-partite agreement or MoU between the primary interested party and collaborator well documented.

Note: Documentary evidence for above needs to be enclosed along with the letter of interest from the parties.

- B. The parties qualifying under above clause should show their financial credibility by submitting their annual turnover for last five years.

Submission of Letter of Intention

The interested parties meeting above requirement must forward their letter of intention **along with initial proposal and relevant supportive documents** meeting the qualifications given above. The parties are required to submit their letter of interest with clear mention of the Option(s), which they intend to carry out. The options are detailed under “Scope of Work” above. The same is to be submitted to **Sr. Adviser (C&P), Oil India Ltd., Plot No. 19, Sector – 16A, Noida – 201301 (U.P.)** in two copies in a sealed cover superscribing with **“*Expression of Interest(EOI) for Utilisation of flared Natural Gas in Remote Location by converting it to LNG and injecting the same after Re-gasification in the oilfields of Oil India Limited (OIL) in Upper Assam*”** so as to reach **Sr. Adviser (C&P)’s office** on or **before 4.00 PM(IST) on 15th June, 2009.**

Further, the interested parties are to attend a discussion and give a presentation about their technical capabilities, credentials, experience of working in similar such project anywhere in the world, and tentative technical cum commercial proposal in a Pre-Tender conference to be organised by OIL in one of the two locations Kolkata/ Delhi, tentatively scheduled in the Last week of June’09. The suitable participating parties will be short listed based on the merits of the discussions for further participations in the tender.

For clarifications, if any, the parties may contact on following e-mail addresses:

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2. samirkdas@oilindia.in
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