

**OIL INDIA LIMITED
DULIAJAN**

INVITATION FOR EXPRESSION OF INTEREST (EOI)

For

**Creation of Surface Production Facilities [One OCS (Oil Collecting Station)
and one ETP (Effluent Treatment Plant] on Build, Own, Operate and Transfer
(BOOT) Basis**

EOI REF. NO.: OIL PROJECT/C&P/62/LKN-01

DATE: 07.06.2021

Sub: Notice Inviting “Expression of Interest” (EOI) from reputed and experienced vendors for Creation of an OCS (Oil Collecting Station) and an ETP (Effluent Treatment Plant) on **Build, Own, Operate and Transfer** (BOOT) basis at Lakwagaon, near Moran town in Sivasagar District, Assam. All detailed Design, Engineering, Supply/Procurement, Construction, Execution and Commissioning including Performance guarantee test run (PGTR) of the plant shall be in the scope of the vendor and the same to be finally handed over to OIL on buyout/transfer basis

1. **INTRODUCTION:**

M/s. OIL INDIA LIMITED (OIL), a Navaratna Company, is a pioneer oil company engaged in Exploration, Production and Transportation of crude oil & natural gas with its Headquarters at Duliajan, Assam. The Company has operating interests across the country as well as in several foreign countries. The major Oil & Gas producing assets of the Company are located in Upper Assam Basin of North East India. The Operational area in Assam is spread over a radius of 150 km from headquarters at Duliajan. Duliajan is connected by Air with nearest Airport at Dibrugarh, 50 km away.

OIL is currently in the process of developing the Lakwagaon field, near Dimow in Sibsagar district, Assam, which is expected to boost OIL’s crude oil production.

2. **OBJECTIVE:**

OIL intends to hire integrated services of Contractors/Service Providers/Agencies/Firms (hereinafter called the “**Service Providers**”) for Design, Supply, Construction, Installation & Commissioning including Operation & Maintenance of an Oil Collecting Station and an Effluent Treatment Plant at Lakwagaon, near Moran town in Sivasagar District, Assam. Accordingly, this EOI is floated for seeking expression of interest (EOI) from suitably experienced Service Providers for Design, Supply, Construction, Installation & Commissioning including Operation & Maintenance of an Oil Collecting Station and an Effluent Treatment Plant on BOOT (Build-Own-Operate-Transfer) basis. The facilities/plant shall finally be handed over to OIL on buyout/transfer basis.

It may be noted that, gas processing / compression facility with gas dehydration plant is also expected in the field in future and hence at a later

stage, a Gas Compressor Station (GCS) is envisaged. Prospective vendors to take note of this requirement.

- **Investment:** Service providers shall be responsible for investment in CAPEX and OPEX required for creation of the facility and Operation & Maintenance including supply of all materials and consumables.
- **Duration of service:** Design, Engineering, Procurement, Construction, commissioning & PGTR within **30** months after issuance of LOA followed by **10 years** of Operation & Maintenance of the plant and Transfer the Facility to OIL thereafter.
- **Operation of the Facility:** The Facility shall be in operation round the clock on 24 X 7 basis.

3. **LOCATION OF THE AREA**

Lakwagaon is in Upper Assam and about 70 km from Dibrugarh town and 35 km from Sivasagar town. Moran is a small town in between Dibrugarh and Lakwagaon and is about 20 km from Lakwagaon. Lakwagaon falls in Sivasagar District of Assam. Nearest Airport is Dibrugarh and nearest Railway station is Moran.

4. **BROAD SCOPE OF WORK**

The scope of work/services shall include, but not limited to, the following:

- a) Design (including FEED), engineering, project management, procurement, manufacture, supply, transportation, storage, construction, erection, testing, commissioning, conducting performance guarantee tests and O&M for a period of 10 years and Transfer the facility (OCS+ETP) to OIL.

The installation shall have the following facilities in general. This is indicative only and the Party has to provide any other facilities as per operational and statutory requirement.

- Liquid handling capacity: 1000 KLPD Crude oil + 1000 KLPD produced water
 - Gas handling capacity : 0.45 MMSCMD
 - : Low pressure gas (1 to 2 Kg/cm²g) - 0.30 MMSCMD
 - : High pressure gas (20 to 25 Kg/cm²g) - 0.15 MMSCMD
 - Effluent water treatment plant: 1000 KLPD
 - Non-luminous, enclosed ground flare system with Flare Stack as per design and requirement.
 - All auxiliaries and utilities as per operational and statutory requirement for the entire plant
- b) The plant is to be constructed on modular concept. The installation shall have the following facilities in general. This is indicative only and the Party

has to provide any other facilities as per operational and statutory requirement.

Process Systems

- HP/LP Production and Test Manifolds
- Crude oil heating system
- Crude oil separation & stabilization system
- Test separator with Test Tanks
- Crude dehydrator with electrical emulsion treater
- Chemical injection system
- Produced water treatment system (ETP)
- Fuel gas treatment System
- Trunkline KOD
- Crude oil pumping system
- Treated Formation water disposal Pump system.
- Oil and Gas Metering system

Utility Systems

- Captive Power generation system
- Raw Water supply and treatment system
- Fire fighting system
- Online gas monitoring system
- Instrument air / Utility air system
- Electrical distribution system
- Distributed Control System
- SCADA
- Emergency shutdown system
- Instrumentation system
- Plant illumination, earthing and lightning protection system
- Effluent water Treatment System including sewage/contaminated rain water treatment
- HP and LP flare system
- Electrical heat tracing system
- Closed drain system
- Control Rooms
- Air Conditioning system
- Operator's Cabin, Office cabins, Amenity Cabin
- Security system including CCTV
- Security barracks

Other Facilities:

- Crude Oil Storage Tanks including off-spec Tanks
- Pipe racks
- Produced Water Storage Tanks including off-spec Tanks
- Fire Water Storage Tanks
- Maintenance yard/material godown etc.
- All Civil works like foundations, footings, pedestals, sheds, parking yard, internal roads, drains, culverts, green belt, guard pond etc.

5. **DESIGN BASIS**

a) Modular design concept:

The Facility is to be constructed on a modular design concept already explained in Para 4 above. All the equipment/piping/instrumentation will be supplied as skid mounted units and the interconnection between the skids will be done at site.

Design Capacity

- Liquid handling capacity: 1000 KLPD Crude oil + 1000 KLPD produced water
- Effluent water treatment plant capacity : 1000 KLPD
- Non-luminous, enclosed ground flare system with Flare Stack as per design and requirement to handle 0.45 MMSCMD of gas

b) Wells, flow rates and operating/design conditions

Total numbers of wells to be produced are expected to be 25 nos. However, number of well to be connected to the facility for production will be in phases and shall be decided by OIL

The well operating pressures and temperatures for one of the producing wells are given below as a sample.

Well Operating Pressure (maximum/minimum), Kg/cm ² g	20 / 1-2
Well Operating Temperature (maximum/minimum), °C	50/7
API Gravity at 15 Deg. C	23.8
Water content (% V/V)	5
Oil content (% V/V)	95

c) Desired Product Characteristics: Crude oil

: 0.15% BS&W (V/V)

d) Desired Product Characteristics: Treated water

Oil content : Less than 10 ppm
Sludge content : Nil

6. **SITE DATA**

A plot of land measuring 70 Bigha (93668 Sq. Mts) enclosed by brick boundary wall is available for the Facility. The entire plot is graded and leveled. However, the plot of land is envisaged for one OCS, one ETP, one Gas Compressor station, and one Water Injection Station (in a later phase). **Hence the OCS and ETP are to be designed keeping in view the future**

requirement of the GCS and the Water Injection Station as well as provision of future expansion of all these facilities.

Average ambient conditions of the site is as below:

Design ambient temperature Maximum, °C	40
Design ambient temperature Minimum, °C	7
Dry bulb temperature Maximum, °C	36
Dry bulb temperature Minimum, °C	8
Average Rainfall (in full monsoon)	194.2 cm
Average Rainfall (in 24 hours)	15.9 cm
Wind velocity at 10m height	50 m/s
Maximum relative humidity	93%

7. SAFETY AND OTHER COMPLIANCES

The Service Provider is expected to have established health, safety, security and environment management system and shall have to comply with the applicable and prevailing provisions of The Mines Act, 1952, OMR (Oil Mines Regulations) 2017, OISD (Oil Industry Safety Directorate) guidelines, DGMS (Directorate General of Mines Safety) Regulations and directives, Labour laws/ rules & Amendments, MoE&FCC (Ministry of Environment, Forest and Climate Change) directives of Govt. of India and any other applicable statutory regulations as per the law of the land.

The following studies are to be carried out and necessary documentation/reports are to be generated and submitted to OIL. Approval from OIL, other Government and statutory bodies, as applicable, are to be obtained by the Service Provider. This is indicative only and the Party has to carry out any other studies as per operational and statutory requirement.

- Hazards and Operability (HAZOP) Study
- Quantitative Risk Assessment (QRA) Study
- Environmental Risk Assessment (ERA) Study
- Safety Integrity Level (SIL) study
- Escape, Evacuation and Rescue Analysis (EERA) Study
- Disaster Management Plan (DMP) and Environmental Impact Assessment (EIA) Study
- Any other study as per statutory requirement.

CTE/CTO (Consent to Establish/Consent to Operate) from Assam Pollution Control Board, CGWA approval, DGMS approval etc. are to be obtained by the Service Provider.

8. PRE-QUALIFICATION CRITERIA

a) The Service Provider shall be registered as business entity under Registrar of Firms / Companies in India.

b) The prospective/interested Service Provider should be technically as well as financially competent on its own or through a Consortium of Companies or Joint Venture Company. Consortium or Joint Venture EOI(s) shall be submitted with clearly defining the role/scope of work of each partner of Joint Venture /members of the consortium. Joint Venture Agreement or Memorandum of Understanding (MOU) between the consortium members duly signed by the Authorized Executives of the Joint Venture partner or consortium members will be required during bidding stage. Detailed modalities of participation in case of consortium of companies or Joint Venture will be a part of the Tender.

c) The Service Provider Shall indicate on what capacity they want to bid i.e. either as single entity, Joint Venture, Consortium etc.

d) The Service Provider must be in the business of Construction of Oil Collecting Station (OCS) or Group Gathering Station (GGS) or Oil Refinery or Field Gas Gathering Station (FGGS) or Natural Gas Processing Station in hydrocarbon sector (except hydrocarbon pipeline job) in BOOT/EPC mode, including Design, Engineering, Procurement and Operation and Maintenance.

e) The Service Provider will demonstrate their experience and capability against this EOI through video conferencing or at Duliajan, Assam.

f) The Service Provider will provide the following Information:

- Details of Incorporation of Service Provider's along with date and place of Incorporation
- Contact Details
 - Name of concerned person
 - Designation
 - Telephone number
 - Mobile number
 - Fax number
 - Address & e-mail
- If a Joint Venture/Consortium is proposed, Name, Address, Phone, E-mail of all Joint Venture partners /consortium members.

9. **GENERAL NOTES:**

- a. All documents submitted along with the EOI should be clear & legible.
- b. The EOI is liable to be ignored in case of submission of any misleading / false representation by the Service Provider.
- c. OIL INDIA LIMITED reserves the right to ignore any or all EOIs and also to curtail/ enhance the scope of work stated above, if required, without assigning any reason thereof.
- d. Details of scope of work, experience and qualification criteria and other requirements of the EOI etc. will be available and regularly updated at OIL website www.oil-india.com. All corrigendum, addendum,

