



HINDUSTAN OIL EXPLORATION COMPANY LIMITED

EXPRESSION OF INTEREST

PRE-QUALIFICATION FOR CONSTRUCTION OF MODULAR NATURAL GAS PROCESSING PLANT ON LUMP SUM TURNKEY BASIS: DIROK FIELD – ASSAM: BLOCK: AAP-ON-94/1

Hindustan Oil Exploration Company Ltd. (HOEC)—Operator of Block AAP-ON-94/1 near Margherita, Tinsukia District, Assam—on behalf of its JV partners (Oil India Ltd. and Indian Oil Corporation Ltd.), invites Expressions of Interest under an International Competitive Bidding (ICB) process. The aim is to construct a **state-of-the-art modular natural gas processing facility** with a capacity of **2 MMSCMD of Gas, 1600 BOPD of condensate & 1000 BOPD of Produced water**, delivered on a **lumpsum turnkey (LSTK)** basis.

The tentative duration for the whole LSTK contract scope of work shall be 6 months, provided field work will start from Q2 of FY 2026-27 after prefabrication of modular equipment skid packages/ bunks.

Preliminary Process Parameters

- Plant processing design capacity shall be approximately 2 MMSCMD (70 MMSCFD), 1600 BPD & 1000 BPD of gas, condensate and produced water respectively.
- Arrival pressure range and temperature range at the processing plant as per the process design basis are 30-35 Barg and 18-25 Deg C respectively. Plant discharge of Natural Gas Pressure- 15 to 30bar and Temperature 25 to 55 °C.
- Plant natural gas discharge dew point must be 0 °C and water dew point must be 0 °C.
- The produced gas is rich and sweet in quality. Gas lab analysis report shall be provided along with the tender documents.
- For produced water outlet, all PCB quality requirements shall be fulfilled. COD/BOD, TDS, TSS, Salinity, PH, oil in water etc.
- Condensate to be preheated in Heat exchanger for better separation and super-heated in bath heater as per buyer's specifications.
- Condensate discharge quality: RVP shall be less than 11 Psig; BS&W shall be less than 0.01%.
- Facilities shall be designed for 20 years.
- Produced water salinity considered for design shall be in the range of 2000-8000 ppm.

Scope of Work

Currently, well fluids are processed in a rented modular plant. The new facility will be owned by HOEC and include critical processing and support systems.

The turnkey scope includes, but is not limited to:

- Detailed engineering shall be carried out by LSTK contractor. Basic design engineering package shall be provided by Company to the LSTK contractor.

- All works / systems provided under this contract shall be designed and constructed in accordance with the prevalent National / International codes and practices.
- Gas Production package (Slug catcher, Gas scrubber, Bath Heater).
- GDU/ MRU to achieve the dew point control for both water and hydrocarbon.
- Provision to tie-in booster gas compressors in future.
- ICS (Integrated control system) SIL 3(DCS, ESD, F&G).
- F&G System (detectors - HC, UV/IR and Smoke in enclosed spaces) to be part of the scope along with integration with ESD system and DCS/PLC for process control. Firefighting system to have automated deluge in process area, clean agent suppression system in enclosed spaces like Switch gear room, Generator enclosures etc.
- Condensate processing Package (2nd stage separator, Heat exchanger, bath Heater, LP separator, Transfer pumps Coalescer filter, Fuel Gas KOD).
- Condensate storage Tanks & Export Pumps Package.
- Tie in points for the future compressor installation in the export gas line.
- Tanker Loading & Loading Pumps package, & weigh bridge.
- PWT (Produced water treatment) package (Hydro cyclone, Degasser, Pumps, solid filters, Oil filters, Treatment).
- Online Gas chromatography cum H2S analyser & Total sulphur analyser must be installed for compliance purpose.
- Flare KOD, KOD Pumps, Ground flare, flare ignition package, net zero technical flare.
- Open drain package (Open drain Pumps, Skim oil Pumps).
- Instrument Air and Service Air package (Compressors, Dryers, Receivers).
- Gas power Generator package (GG's, EMDG).
- PMCC (Power cum motor control package) (Electrical switchgears, Distribution Transformer, Lighting Transformer, UPS).
- Normal lighting, Emergency lighting & critical lighting.
- Copper earthing grid or individual earth pits with copper strips wherever required for Electrical equipment's, Instrument Earth pits/Grid, Lightning arrestor Earth pits/grid, process equipment & structures etc.
- Chemical injection package.
- Fiscal metering package for internal gas consumption for Gas generator/ indirect water bath heater, Flare flow, Gas production, condensate production, produced water production and Produced water discharge after treatment.
- Fire water Package (Jockey pumps, Diesel driven pumps network, FH, FM).
- Raw water & service water package.
- Quality control Laboratory package.
- Fire alarm system package (Building Safety).
- Plant Communication package (PAGA, Microwave walkie talkies & Telephone system).
- Process Surveillance system package (CCTV, Weather Monitoring).
- Plant buildings, bunkers, and associated structures.
- Training to the field crew to get familiarized with the operations on the equipment/ systems provided by the LSTK contractor.
- Transportation/ installation of skid mounted modular units complete with skid piping, pressure vessels, instruments and control systems, electrical items, safety devices, all utility systems etc.
- Transportation/ installation of interconnecting piping, cables and supports between modules.

- Provision/ transportation / installation/ testing/ hook up of process piping from tie points of incoming pipeline from GGS and outgoing pipelines tie in points to buyer's battery limit all within plant area.
- Contractor to make all necessary arrangements to tap the power through already laid underground power cable from existing company's system to its own switch gear with all necessary safety and earthing interfaces. PMCC (switchgear) shall have suitable breaker with Protection relays to supply power to GGS/wellsite through already installed MV power transformer/ breaker (with Protection relay) and laid underground cable from HMGPP to GGS.
- Contractor shall comply with the requirements for statutory approvals including but not limited to the Director General of Mines Safety (DGMS), Forest department, OISD, APGCL (Assam Power Generation Corporation Limited), Assam Electricity Regulatory commission (AERC) , Pollution Control Board (PCB) Assam, Director General of Hydrocarbons (DGH), PNGRB, PESO, Central Controller of Explosives (CCOE)/ local authorities, CGWA, etc and perform work in accordance with such approvals.
- The design, manufacture, testing shall comply to relevant sections of the latest API, ASME, IEC, NFPA, etc & also meets latest OMR, DGMS, OISD, PNGRB, state and central pollution control board as a minimum.
- Contractor should put maximum efforts to engage eligible, skilled/ semi-skilled workers for the construction services and get supplies from the local vendors as much as practically possible.
- All the vessels/ equipment/ instruments/ systems/ sub-systems should be named/ tagged suitably. Piping flow direction arrow marking/ color coding must be properly shown and line number (as in ISO drawings) should be written clearly. Basic information like vessel capacity, MAWP, hydrotest date, Hydro test pressure, Last Hydrotest date, next hydrotest due date, PSV pressure set pressure, PSV Calibration date, Next PSV Calibration due date etc. must be written on the vessels. As per IS 2379 latest revision, Pipeline identification & colour code shall be complied with.
- HAZOP and HAZID study must be carried out by the contractor and the company shall participate in this study. The study recommendations shall be complied with and closed out as advised and agreed in the HAZOP/HAZID report by the respective parties.
- All electrical apparatus and instrumentation items/ system/ fittings shall be suitable for the hazardous area classification as per applicable National /International standards and statutory regulations like DGMS.
- All pressure vessels of the units need to be tested and proof of such test as certified by a reputed third-party agency approved/accepted by company needs to be submitted prior to commissioning of the unit. Similarly, all PSVs should be tested/ calibrated and proof of such test as certified by manufacturer (in case of new PSVs) or certified by a reputed safety valve calibration agency for oil & gas industry (in case of old PSVs) needs to be submitted prior to commissioning of units.
- All systems should be designed, constructed and operated for uninterrupted continuous operation to supply gas and condensate at the specified pressure & temperature and as per the specification provided.

Inspection Requirements Before Dispatch

The Contractor must carry out the Third-party Inspection (TPI) of the vessels /heat exchangers/safety critical items and any other items identified by the company on submission of the equipment list by the contractor.

In addition, Company may choose to depute a Third-Party Inspector at its cost. Contractor shall allow such inspection team and facilitate all such inspections at no cost to the Company.

Inspection and Testing at Site

The Company representative or Company appointed Third party Inspector (TPI) will carry out the inspection of the vessels /heat exchangers/safety critical items and any other items identified by the company on arrival of the equipment at site.

Any nonconformity to agreed supply specification shall be addressed and rectified by the contractor at no cost and time impact to the company.

TPI/Company representative team will do inspection during testing and commissioning of the units at site by the Contractor to verify that the units are as per agreed tender specifications and meets all safety and statutory norms and tender requirements.

The units shall be run continuously for minimum 72 hrs before acceptance for contract operation. Any defects, defective elements in the units that caused the failed continuous 72 hrs run test shall be replaced immediately at no cost to the company.

ACCEPTANCE OR NON-ACCEPTANCE OF ABOVE UNITS BY COMPANY SHALL IN NO WAY RELIEVE CONTRACTOR FROM HIS RESPONSIBILITY FOR SAFE & SMOOTH OPERATION OF THE ENTIRE FACILITY.

Project Documentation

After successful completion of contractor's scope of work, they shall hand over the final project documentation to Company as outlined below:

- The number of sets of final documentation to be handed over shall be:
- Hard Copy: 2 Sets.
- Electronic Copy (DVD) or Pen Drive or External HDD: 3 Sets
- Hard copies shall be properly labelled, in hard covers and bound with head-screwed brass paper fastener with complete documentation index.
- Electronic copies shall be on DVD with labels and List of Contents or Pen Drive or External HDD.
- The Final Project Documentation shall include, but is not limited to the following:

- All the Daily progress Reports (The DPR format shall be reviewed and decided by Company). The same format DPR shall be submitted by Contractor on daily basis from the day of Kick-off meeting).
- QAQC Dossier.
- As-Built Documents and Drawings.
- Construction Documentation and Records.

Final Acceptance certificate shall be issued by Company only after hand-over of complete final documentation by Contractor to Company's satisfaction.

Special Notes

- All the equipment/ vessels/ instruments etc. should be brand new.
- Most of the equipment packages should ideally be "fit for purpose" modular type so that construction duration can be minimized at site.
- Hook-up piping spools shall be prefabricated as much as possible. The Contractor is advised to adopt the modular approach and use prefabricated spools/modules to reduce installation schedule effectively and drastically.
- It is recommended that all the interested pre-qualified bidders visit the existing plant for better understanding and attend pre-bid meetings to be conducted on a suitable date to be timed perfectly after floating the tender.
- A storage yard, in a designated location near the existing plant, shall be set up by the LSTK contractor and all the equipment packages/ bunks shall be stored there prior to start of decommissioning of the existing plant. Installation of the stored equipment packages/ bunks shall be started gradually upon removal of the existing equipment/ packages/ bunks.
- Existing equipment civil foundations shall be modified by Company as per the approved equipment skid GADs to be submitted by the LSTK contractor. Civil foundation drawing shall be submitted by LSTK contractor.
- Company shall have the right to inspect the facilities / equipment deployed by the contractor and if any deficiencies are observed by company, the contractor shall rectify such deficiencies promptly upon receipt of such instructions from company.

Shortlisting of bidders for issue of Tender Documents

Considering the criticality and complexity of the requirement, bidders/ consortium of bidders who meet the following minimum experience and financial capability shall only be shortlisted for issue of Tender Documents.

Experience

Minimum five (5) years of demonstrable experience in construction of such facility on LSTK basis. If required, HOEC representatives will have to be provided with access to visit such operational facility where the bidder has already carried out construction.

Financial Capability

Bidder should meet following financial criteria:

- Annual Turnover: Average annual Turnover of the past 3 years should not be less than USD 20 million.
- Positive Net worth at least USD 15 million in the past preceding three financial years.
- Company should have demonstrable working capital to meet its project obligation.

Bidder to Submit following documents:

- Details of Organization, HSE Organization with responsibilities, resources owned and at disposal, Quality Standards and documentation practices, Risk management, Planning and performance monitoring practices.
- Organizational outline proposal detailing their nominated management and staff and brief execution plan to provide such works on turnkey basis.
- Details of jobs currently under execution and likely date of completion.
- Technical Job Capability. List of Similar work with contract values successfully executed in the last 5 years and projects currently under execution.
- A demonstrable capability to mobilize and commence work to meet HOEC schedule. The Contractor's experience in mobilizing on schedule shall be clearly stated.
- Audited financial statements for the last three years.
- Details of latest technology (if any) applied by the Contractor around company's operational area.
- Reference of two or three major clients that can be contacted for information and reference for similar work.

Interested bidders/ consortium of bidders who can fulfill all the specifics listed above must submit their responses within 15 working days from the day of publication of this advertisement. All responses should be sent, in a sealed envelope superscripting the respective supply/service for which the interest is being expressed. Responding to the EOI does not entitle any commitment from HOEC or its Partners. HOEC has the sole discretion without assigning any reason whatsoever to accept or reject any of the submissions. Responses submitted through agents/ intermediaries will not be considered and rejected out rightly. The envelope shall be superscripted with

“PRE-QUALIFICATION FOR CONSTRUCTION OF MODULAR NATURAL GAS PROCESSING PLANT ON LUMP SUM TURNKEY BASIS: DIROK FIELD – ASSAM: BLOCK: AAP-ON-94/1”

and shall be addressed to:

**Responses are to be addressed to
Head – Contracts and Procurement
procurement@hoec.com
Hindustan Oil Exploration Company Ltd.
Lakshmi Chambers, 192, St. Mary's Road, Alwarpet,
Chennai-600018, Tamil Nadu, India**