



WE FUEL AMAZING

CAIRN INDIA LIMITED

(Incorporated in Mumbai, India – U11101MH2006PLC163934)

(INTERNATIONAL COMPETITIVE BIDDING)

**GLOBAL EXPRESSION OF INTEREST (EoI) FOR EPC WORKS FOR MANGALA
UPGRADATION AND BALANCE OF PLANT FOR SULPHATE REMOVAL PROJECT ON
EPC BASIS FOR RAJASTHAN BLOCK**

Cairn India Ltd (“CIL”) is the Operator of the Onshore RJ-ON-90/1 block, on behalf of itself and its Joint Venture (JV) partners Cairn Energy Hydrocarbons Limited (CEHL) and Oil and Natural Gas Corporation Limited (ONGC), located in Barmer district, in the state of Rajasthan, India. The Block contains number of major oil discoveries, including the Mangala, Bhagyam and Aishwarya (MBA) Fields and various other discoveries which would be developed over a period of time.

CIL on behalf of itself and its joint venture partners invites Expression of Interest for below Projects under International Competitive Bidding (“ICB”) process from reputed Contractors or Consortiums (Indian and International) with demonstrated HSE performance and proven track record with capabilities in Engineering, Procurement, Construction and Commissioning.

Part # A: MPT Upgradation Project

The scope of work involves Detailed Design, Procurement, Fabrication, Inspection, FAT, Packing, Shipping, Unloading at site, complete Erection and Installation, Testing, Pre-commissioning and Commissioning on EPC basis for the following:-

- Oil Processing System consisting of Slug Catcher and production separator to handle total liquid of around 430 KBLPD, Production Heaters of helical baffle type, Settling Tank with Degassing Boot, Stabilized Oil Pumps, and Produced Water Pumps;
- Produced Water Handling System consisting of Inline Coalescer to handle around 360 KBWPD, , Skim Tank De-oiled Pumps, Secondary Water treatment package (Dissolved Gas Flotation), Reject Oil Drum, online retractable pumps etc;
- Injection Water Handling System consisting of Nutshell type Injection Water Filter Package (360 KBWPD), Injection Water Tank, Injection Water Booster Pumps, Injection Water Heaters, Injection Water Pumps, De-sand Water Pumps;
- In addition to the above mentioned facilities, Chemical Dosing System, extension of Utility System, Auxiliary System, E-house including Process, Piping, Electrical, Instrumentation, Civil, Structural, Fire Protection and Firefighting Systems in brown Field desert environment with Seamless Integration with the Existing Facility involving brown field works;
- All the facilities indicated above will be designed to handle back produced polymer due to EOR implementation in MBA fields; and
- Contractors or any member of consortium shall have demonstrated EPC capabilities in Oil and Gas sector leveraging on prefabrication and maximum usage of modular/skid mounted process equipment to minimize in situ construction.

Part # B: EPC works for balance of plant for Sulphate Removal Project

The scope of work involves Detailed Design, Procurement, Fabrication, Inspection, FAT, Packing, Shipping, Unloading at site, complete Erection and Installation, Construction of facilities at site, Testing, Pre-commissioning and Commissioning on EPC basis for the following scope.

• **Erection and Commissioning of Sulphate Removal Plant (“the Plant”) comprising of following. The Plant will be free issued by CIL and supervision during erection & commissioning will be by the Plant Supplier.**

- **Pre-treatment:** Water Pre-treatment system consisting of Multi – media filters and cartridge filters to handle 350,000 BWPD. Pre-treatment to include Chlorine & SMBS Dosing of Multi-media filters, Anti – Scalants to treat water incoming at a temperature of 40-45 °C and pH in the range of 6.8- 7.2.
 - **Sulphate Removal Unit:** Unit will reduce inlet water sulphate concentration from ~500 to 550 ppm to < 10 ppm with a reject of < 10% at an inlet water flow rate of 350,000 BWPD. The recommended technology is NF (Nano Filtration) + RO (Reverse Osmosis) membranes. Additionally, setup to have a Cleaning in Place (CIP) system consisting of Cleaning tank, Electric heater, Pump, Filter, and Chemical injection skid.
- **Flow management:** Use of break tanks and corresponding pumps for managing flow for Feed inlet, product, reject system.
 - Additionally, facility to cover pipelines for raw water from the B/L, disposal of reject into reject disposal wells away from the plant in the proposed ROU and distribution of treated water (both metal and non-metal material of construction) to the existing plant.
 - **Utilities:** Utility System like Air and Nitrogen Package, Fire Fighting System, Emergency DG, Potable Water, Substation / E-house etc.
 - **Well pad for reject disposal wells:** Development of well pad including surface facilities like pipeline, OHL, substation/E-House, control room etc. **(well drilling by CIL)**

Contractors or any member of consortium shall have demonstrated EPC capabilities in Oil and Gas sector leveraging pre- fabrication and maximum usage of modular/skid mounted process equipment to minimize in situ construction.

Specific Pre-Qualification Criteria:

- Contractor or any member of Consortium should have carried out at least two (2) major projects as Contractor or member of Consortium on EPC basis involving process plants pertaining to Petro Chemical / Refinery / Oil & Gas / Fertilizer Industries of value more than USD 84 Million each in the last five years or at least one (1) major Petro Chemical / Refinery / Oil & Gas processing project of value more than USD 125 Million in the last five years.
- Liquidity ratio in each of the preceding two (2) financial years should not be less than 0.75.

The interested contractors are requested, as a minimum, to submit the following documents and details:

1. Letter of interest from interested contractor on their Letter Head.
2. Detailed contractor Information with Organization structure, List of manpower with CVs of key personnel, Plant and Machinery list mentioning year of manufacturing, Support agencies and other facilities and resources.
3. Details of completion of major projects on EPC basis involving process plants pertaining to Petro Chemical / Refinery / Oil & Gas / Fertilizer Industries in the last five(5) years under headings: a) Brief scope of work b) Value of work in INR / USD c) Contractual Duration d) Actual completion of Project with Completion Certificates e) Clients name f) Contact details of the Client g) Safety Certification / Inspection of plant and machineries h) HSE statistics, LTI graph etc. i) Current ongoing and future project commitments.
4. Specific Execution Strategy outlining Engineering, Procurement, Project controls Construction and Commissioning functions along with geographical locations for each of the functions.
5. List of current contracts of similar nature under execution with the value of the Contract and percentage completion.
6. Experience of working in Remote Onshore location , Desert terrain and demonstrated experience in executing brown field project of large scale.
7. List of Projects demonstrating Capabilities and Experience in modularizing various processing equipment in Oil and Gas Industry.
8. Health Safety and Environment (HSE) policies, HSE Safety Manual / Procedures, Organogram inline with internationally accepted practices with statistics for last three (3) years.
9. LTIFR track record for last three (3) years.
10. Quality Manual, Policies and Procedures, Organogram in line with internationally accepted practices.
11. Copies of ISO certifications for ISO 9001, EMS 14001, OHSAS 18001 etc.
12. Financial performance documents (Audited Balance sheets, Profit and Loss statements etc.) for last two (2) years. Apart from above specified pre-qualification criteria, the following financial evaluation criteria will be used for evaluation of financial standing and the Contractor or lead member of the Consortium not meeting any of the following criteria shall be disqualified from the bidding process
 - a. Net Worth– Positive net-worth of at least 20% of annual contract value in each of the immediately preceding two financial years
 - b. Turnover - Annual Average turnover in each of the immediately preceding two financial years should be two times the average annual contract value
13. Completion Certificate / Feedback Certificate from Customers in last 5 years Petro Chemical / Refinery / Oil & Gas / Fertilizer Industries
14. Reference List (Clientele)
15. Technical / Managerial Resources availability
16. Inhouse Engineering Resources / Alliance Partnership with Engg firms /Engg Softwares / Tech support Availability
17. Project Execution & Management / Planning & Scheduling methodology
18. Reference of Inhouse Construction division handled similar type of projects / Fabrication and Testing Capacities & capabilities
19. Reference to demonstrate knowledge & capability for Similar jobs under Indian Statutory and Regulatory requirements
20. Availability of Spare capacity and ability to supply within the project schedule based upon current shop floor loading
21. Possess owned fleet of construction equipment, tools & tackles and has record of establishing large scale mobilization capabilities in short period of time

The interested contractors should evince interest to participate in the Expression of Interest by clicking on the “Evince Interest” link against the corresponding EoI listing on the Cairn India website i.e. <http://www.cairnindia.com> and submit their contact details online.

Further to this, interested contractors would be invited to submit their response via Smart Source (Cairn's e Sourcing Platform). The contractors would be requested, as a minimum, to submit the above documents and details for prequalification for via Smart Source within Fourteen (14) days of publication of this invitation for Expression of Interest.