



## Energy for India

# CAIRN ENERGY INDIA PTY LIMITED

(Incorporated in New South Wales, Australia – ACN 002 066 784)

### Reference No. - CEIL/C&P/EOI/MDPP/BLENDER-VT/09

### GLOBAL EXPRESSION OF INTEREST (EOI) FOR DESIGN, SUPPLY, FABRICATION, ASSEMBLY, TESTING, PAINTING, ERECTION, SITE TESTING, COMMISSIONING, TRAINING INCLUDING GUARANTEEING FOR PERFORMANCE ETC OF SKID MOUNTED CRUDE OIL BLENDER FOR VIRAMGAM TERMINAL (GUJARAT) FOR MANGALA DEVELOPMENT PIPELINE PROJECT

Cairn Energy India Pty Ltd. ("CEIL") is the operator of block RJ-ON-90/1 (the "Block") in India, and operates the Block on behalf of itself and its Joint Venture (JV) partners Cairn Energy Hydrocarbons Limited and Oil and Natural Gas Corporation (ONGC). The Block contains a number of major oil discoveries, including the Mangala field, the largest onshore oil discovery in India since 1985. CEIL and its JV partners have approval from Government of India (GoI) for a pipeline to transport crude oil from the Block at Barmer, Rajasthan to a coastal terminal facility in Gujarat.

The pipeline project involves an Oil Evacuation Pipeline and Gas Pipeline of approximately 670 km, pumping / terminals and related facilities for the transportation of 1,50,000 to 1,75,000 barrels of crude oil per day from the upstream process terminal at the Mangala field to the downstream terminal point on the Gujarat coast at Bhogat, in Jamnagar District. The pipeline laying work in Barmer – Salaya section is in advance stage of completion.

Cairn Energy India Pty Limited (CEIL) is planning to supply crude oil from its main pipeline to one of its buyer through a tap off.

Owing to the nature of Rajasthan crude oil, it is transported at or above 65 Deg C and it would require blending with other crude flowing through the pipeline of the buyer before it can be introduced into the pipeline

To achieve the blend the entire crude oil of the buyer, desired quantity of Rajasthan crude oil shall be routed through a blender on a continuous basis to make a homogenous blend of crude oil and then this blend shall be introduced continuously at the suction of pipeline pumps.

The export capacity of Rajasthan crude oil can vary from 7,500 to 60,000 bopd, yet the maximum allowable volume for blending is 32,000 bopd (@15 vol%). The total flow through the blender shall not exceed 210,000 bopd.

The blender control system will ensure the crude blend does not exceed the more stringent condition of either 40 cSt viscosity or 15 vol% Mangala crude.

The functional requirements of the blender are to produce a homogenous blend of Rajasthan crude oil and other crude oil. It should be capable of monitoring the crude oil blend stream properties in real time such that:

- The blend viscosity is always precisely controlled.
- Ensure that the blended crude oil is always above the wax appearance temperature of the blend stream.
- Blender should capable of performing at turn down rates of flow from buyer and can handle a wide range of blend streams.
- Pressure drop across the blender should be minimal and the blended stream can be introduced into pump suction without the use of a booster pump.

- The control system is capable of controlling the blend stream specifications at all times, takes into account variations in crude oil properties of Rajasthan crude and buyer's crude and can handle the emergency situations arising out of utility failures. Sufficient redundancy shall also be provided in the control system to account for failure of control system itself.
- Automatic sampling shall be possible for all the inlet streams for determining the properties which affect the blend properties and also for the blended stream.

CEIL seeks Expression of Interest (EOI) from reputed Contractors for the above mentioned works. Only those companies possessing substantial and proven record of performance in executing similar jobs of this magnitude should respond to this notice. Companies are requested, as a minimum, to submit the following documents and details:

1. HSE systems:
  - a. HSE Statics for all projects executed in last 5 years
  - b. HSE Manual/Policy
  - c. Project specific HSE Plan for similar project
2. Letter of interest with detailed company information as follows:
  - a. State the name of the parent Company.
  - b. State the Name/Address/Phone/E-mail of the company that would execute the Contract.
  - c. If a Joint venture to be proposed, state the name/address/phone/email of all joint venture partners.
  - d. Organization structure
  - e. Size of Departments
  - f. Procurement system & procedure
  - g. Material control system.
3. Company's financial performance documents (including JV Partner's financials, if proposed) i.e. Audited Balance Sheets, Profit and Loss Account & Cash Flow Statement for the last 3 years & following details separately:
  - a. Company Turnover based on last 3 audited/Financial statement
  - b. Company's Net Worth based on last 3 audited/Financial statement
  - c. Return on Equity based on last 3 audited/Financial statement
  - d. Working Capital based on last 3 audited/Financial statement
  - e. State the banker's name, address and Solvency certificate from the bank indicating the credibility limit in financial terms.
4. Experience:
  - a. Lists of similar projects successfully executed with details in the last five years in India or abroad with completion Certificate and those of currently under execution in Oil & Gas sector.
  - b. Detail of similar jobs executed wholly by the Company or joint venture with scope split.
  - c. Detail of orders (minimum 3) executed recently.
  - d. Detail of current commitments.
  - e. List of previous project with specific experience in supply of similar equipment.
5. Quality Systems:
  - a. Copy of current ISO Certificate provided
  - b. Certification of the Companies QA system by an accredited certification body
  - c. QMS of the Company.

The envelope should be subscribed with "**Reference No. CEIL/C&P/EOI/MDPP/BLENDER-VT/09**". All information and documentation shall be provided at address below within 14 days of publication of this EOI by e-mail as attached PDF file and via courier to:

**General Manager – Contracts & Procurement**

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