



**CAIRN ENERGY INDIA PTY LIMITED**

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

**GLOBAL EXPRESSION OF INTEREST FOR DESIGN,ENGINEERING SUPPLY,INSTALLATION AND COMMISSIONING OF LEVEL PROFILER FOR SLUGCATCHER AND PRODUCTION SEPARATOR OF MPT CAPACITY EXPANSION PROJECT**

Cairn Energy India Pty Ltd. ("CEIL") is the Operator on behalf of Joint Venture partners CEIL, Cairn Energy Hydrocarbons Limited and Oil and Natural Gas Corporation, of the Contract Area RJ-ON-90/1 in the state of Rajasthan. The RJ-ON-90/1 Block contains a number of major oil discoveries, including the Mangala field, the largest onshore oil discovery in India since 1985. The Mangala field development consists of well pad facilities and processing hub named Mangala Processing Terminal (MPT) which is currently under implementation. It is proposed to develop satellite fields Bhagyam and Aishwariya and expand the processing capacity in MPT by addition of one processing train with associated facilities under Integrated MBA project.

CEIL on behalf of its joint venture partner's invites reputed Indian and International Suppliers/Manufacturers to express their interest, for pre-qualification as bidders to participate in an International competitive bidding Process from reputed contractors with experience across design, engineering ,supply, installation and commissioning of level profiler for various vessels applications in oil and gas facilities . The main intent is to place one or more umbrella contracts for carrying out supply, installation and commissioning of level profiler.

The 'Expression of Interest' is sought for the design, engineering, supply, and installation and commissioning of level profiler (2nos) with PLC for slug catcher (horizontal vessel) and production separator (horizontal vessel) of MPT expansion project. The level profiler shall be suitable for measuring emulsion type of fluid ( oil+ gas+ water) and shall be able to measure 5 phases ( sand, water, emulsion ,oil ,foam and gas) of measurement .The horizontal vessel size is 5800mm(ID) and 28000mm(T/T). The dip pipes shall be designed, manufactured and tested in accordance with ASME VIII Div1.They shall be manufactured from Titanium and all materials in contact with process fluids shall comply with NACE standard MR-0175:2000.The flange connection shall be 8 inch, 300#, RF. The minimum and maximum operating temperature shall be -55 deg C to +135 deg C. The minimum storage temperature shall be -55 deg C. The PLC cabinet comprising of 2100x800x800 mm Rittal TS8, necessary input/output cards, MODBUS RTU for DCS communication, dual redundant 24V DC power supplies, galvanic isolators and fiber optic line drivers. The hazardous area rating shall be Zone2 IIA/IIB T3, IP 66.

The range of services required covers a design, engineering, supply, installation and commissioning of level profiler for various applications in the oil and gas facilities. Hence contractors with wide ranging capability shall be preferred. Cairn may select more than one Contractor to provide redundancy and to ensure that the full spectrum of services is provided. In the event that more than one contractor is selected, work parcels will be allocated to suit the capabilities and key skill sets of the contractors and the availability of resources. Therefore, Contractors who are not able to supply the complete range of services mentioned in this document should submit a tender indicating the types of work for which they have experience and capability.

In brief, the scope of work shall include:

- Design, engineering, supply, installation and commissioning of level profiler (2 nos) along with PLC control panel in accordance with datasheet.
- Project Management of contract including, planning, procurement, sub contractor liaison and expediting.
- Design and detail of titanium dip pipe assembly in accordance with vessel design code including preparation of design calculations, suitable for 3rd party verification.
- Preparation of documentation package, including GA, Operating and Maintenance Manuals, Test Certification etc
- Packing 2 years spares, commissioning/special tools
- Factory Acceptance Testing of complete unit prior to despatch, in accordance with contractor standard procedure.
- Training to plant personals

Companies are requested, as a minimum, to submit the following documents and details:

- Letter of interest with detailed company information. Number of current personnel on discipline basis as well as the CV's of the key nominated personnel for all disciplines who would be assigned to this work. Also details of support agencies and other facilities and resources.

- Details of software available, management of change systems, project controls systems and procedures, quality systems etc. List of policies, procedures and quality assurance practices currently in place for the execution of similar work.
- Reference list of relevant facilities experience for onshore and offshore oil and gas projects including processing facilities, pipelines, terminals, gathering systems / field production, brown field/ green field.
- Quality assurance/control practices and certifications to manufacture such item/packages.
- Health, Safety and Environment (HSE) policies, certifications, procedures and statistics on HSE performance covering the last 3 years.
- Company's financial performance documents (Audited Balance sheets and Profit and Loss statements etc.) for last 3 years.

All information and documentation should be provided at address below within 10 days of publication of this Expression of Interest by e-mail as attached PDF file and via courier to:

**Director – Procurement & Supply Chain Management**

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