



EXPRESSION OF INTEREST (EOI) FOR WATER PLANT OPERATIONS MANPOWER SUPPORT

Cairn Energy India Pty Ltd. ("CEIL") is the Operator on behalf of Joint Venture partners CEHL, Cairn Energy Hydrocarbons Limited and Oil and Natural Gas Corporation, of the Contract Area RJ-ON-90/1 at Barmer in the state of Rajasthan. The RJ-ON-90/1 Block contains northern oil discoveries namely Mangala, Bhagyam and Aishwarya.

The JV is operating an onshore oil and gas processing facility known as Mangala Processing Terminal (MPT) at Nagana village near Kawas about 40 km from Barmer, Rajasthan for processing of crude oil. For routine water plant/systems operations in its processing facility, Mangala well-pads and NR1 water fields, CEIL plans to award contract to interested party after technical and commercial evaluation.

The brief scope of work of the Contractor under this service order is to provide skilled/semi-skilled manpower support to carry out but not limited to routine water plant/systems operations and maintenance activities in the below mentioned areas

- a. Raw Water Filter Package
- b. Wipro Desalination Plant (Pass-I & II)
- c. RO Augmentation Plant.
- d. Seion Plants-I & II
- e. Filter Package
- f. Condensate Polishing Unit (CPU)
- g. Construction RO Plant
- h. MS-1 water injection well Pad.

The scope of work for this EOI is limited to works within the Mangala Processing Terminal, Mangala well pads and NR1 water field (24 km from MPT).

The work scope broadly consists of the following:

1. WORK SCOPE SPLIT

The contractor shall provide operation support man power services for the above mentioned process plants, but not limited to these areas.

Process Description

The MPT receives raw water from the Thumbli water wells. Most of the water is filtered and stored before passing to a desalination plant. The first stage of the desalination plant provides treated water that is stored and further treated to become potable water. The potable water is stored and distributed to end users as required. Within the second stage of the desalination plant, demineralised water is produced. This demineralised water is sent to the boiler feed water make-up tank, CPU tank, Turbine cold well and boiler initial filling.

Demineralised water is supplied from the Desalination Package as feed water and is stored under a nitrogen blanket in Boiler Feed Water Make-up Tanks. Condensate from the Hot Condensate, recycle line, air cooled condenser packages and various other sources are also returned to these tanks.



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Condensate Polisher Package is installed to reduce the silica content and conductivity of the condensate. Through five dearators, any residual gases, typically oxygen and carbon dioxide are removed. Eight Boiler Feed Water Pumps route the treated feed water to five Steam Boiler Packages.

- MPT complex houses 5 high pressure boilers each having capacity of 115 MT/hour operating at a pressure of 42 kg/cm².
- Feed water make up is constituted by recycled turbine condensates and balance make up is by fresh DM water.

The heating and power requirements for MPT are very demanding so a steam-based heating and power system is provided to meet these needs. The steam distribution system consists of high pressure (HP), medium pressure (MP) and low pressure (LP) networks. Three levels of steam are provided; HP steam nominally at 600 psig and 370°C, MP steam nominally at 100 psig and 180°C and LP steam nominally at 58 psig and 177°C.

A more detailed description of the overall system is will be provided in Scope of work

2. SERVICES TO BE PURCHASED

Service to be purchased for MPT Production under this Purchase Requisition is as under.

- Supervisor - 1,702 MDY
- Operator - 11,914 MDY
- Helper - 8,510 MDY

The above quantity is estimated for the three years. Its year wise segregation is as below:

Sr. No.	Quantity	UOM	Description
1	243	Man Day	Supervisors required during 01st Dec, 2011 to 31st March, 2012 (Its @ 2 per day)
2	1,694	Man Day	Operators required during 01st Dec, 2011 to 31st March, 2012 (Its @ 14 per day)
3	1,210	Man Day	Helpers required during 01st Dec, 2011 to 31st March, 2012 (Its @ 10 per day)
4	730	Man Day	Supervisors required during 01st April, 2012 to 31st March, 2013 (Its @ 2 per day)
5	5,110	Man Day	Operators required during 01st April, 2012 to 31st March, 2013 (Its @ 14 per day)
6	3,650	Man Day	Helpers required during 01st April, 2012 to 31st March, 2013 (Its @ 10 per day)
7	730	Man Day	Supervisors required during 01st April, 2013 to 31st March, 2014 (Its @ 2 per day)
8	5,110	Man Day	Operators required during 01st April, 2013 to 31st March, 2014 (Its @ 14 per day)



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9	3,650	Man Day	Helpers required during 01st April, 2013 to 31st March, 2014 (lts @ 10 per day)
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CEIL on behalf of its joint venture partners invites reputed O&M Contractors with demonstrated HSE performance to express their interest to participate in pre-qualification as bidders and to participate in the competitive bidding process. In view of the nature of the scope, only those Companies possessing the requisite and proven record of performance in executing at least 8 projects of similar job of value exceeding INR 2 crore/annum and an annual turnover of minimum INR 6 crore with minimum 10 years experience as an O&M contractor should respond to this notice.

In addition to the above requested documentation, bidders shall also submit credentials to support the specific qualification criteria for each package. Companies are requested, as a minimum, to submit the following documents and details for prequalification:

1. Letter of interest clearly indicating the Project reference
2. Detail Company Information with Organisation structure, List of manpower with CVs of key personnel, Plant and Machinery list mentioning year of manufacturing, Support agencies and other facilities & resources.
3. Details of completion of similar type of projects in the last five years under headings:
 - a) Brief scope of work
 - b) Value of work in INR
 - c) Contractual Duration
 - d) Actual completion of Project
 - e) Clients name
 - f) Contact details of the Client (CEIL may approach the client directly for the feedback)
 - g) Safety Certification / Inspection of plant and machineries
 - h) HSE statistics, LTI graph etc.
4. Typical Project Planning and Execution methodology.
5. List of all jobs under execution with the value of the Job and percentage completion. (With particular emphasis on project of similar magnitude carried out in Oil and Gas Sector)
6. Experience of working in similar terrain.
7. HSE policy and implementation procedures in line with internationally accepted practices with statistics for last four years.
8. Quality assurance & Quality control practices currently in place for the execution of similar work.
9. Company's financial performance documents (Audited Balance sheets and Profit and Loss statements etc.) for last 3 years.

The envelope should be subscribed with Reference No. CEIL/C&P/EOI/WATER PLANT OPERATIONS MANPOWER" 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:

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