



**INVITATION FOR PRE-QUALIFICATION OF BIDDERS
FOR CIVIL WORKS FOR UNDERGROUND ROCK CAVERNS
(PART-A) FOR STRATEGIC STORAGE OF CRUDE OIL PROJECT OF M/S ISPRL
AT MANGALORE IN THE STATE OF KARNATAKA, INDIA
(PQ DOCUMENT NO.: 6936/PQ- 024/08-09/RKS/02)**

(INTERNATIONAL COMPETITIVE BIDDING)

1.0 General:

M/s Indian Strategic Petroleum Reserves Limited (ISPRL), a wholly owned subsidiary of Oil Industry Development Board, Ministry of Petroleum & Natural Gas, Government of India proposes to construct underground-unlined rock cavern storage for imported crude oil at Mangalore in the state of Karnataka for approximately 2.0 MMT. M/s Engineers India Limited (EIL) is the Project Management Consultant for the above works.

The storage facility shall consist of two separate storage units for storage of two types of crude. The caverns shall have two or more legs in plan and shall have an approximate 'D' shaped cross-section with a horizontal roof level maintained throughout the cavern length. The product intake shall be located at the end of one leg and the pump installation located at the end of the other leg. At least one shaft shall be provided for each storage cavern.

The basic principle of storage in unlined rock caverns is the hydro-geological confinement. Thus, a water curtain system is provided consisting of galleries located above the crown of the cavern. Boreholes are drilled from the water curtain tunnel to intersect the joints of rock mass. A saturated rock mass and ground water flowing into caverns, ensures proper sealing of the stored product.

The total work is proposed to be carried out in two parts, Part-A and Part-B. Part-A, shall consist of civil works for underground rock caverns. Part-B shall consist of above ground facilities including all shaft and cavern equipment and mechanical works. The scheduled completion time for Part-A i.e. civil works for underground rock caverns is around 36 months.

The basic engineering for the underground works is under way to finalise the storage capacity, cavern layout, cross-sections, underground works and interface between Part-A and B, including finalization of construction schedule. Critical items related to the storage principle will be specified to a detailed level sufficient to ensure the functionality of the system by the Owner's engineer. These will include:

- i. Water curtain above the caverns
- ii. Concrete barriers in tunnels and Shafts (Plugs)
- iii. Shaft layout design
- iv. Pump pits in caverns
- v. Cavern floor
- vi. Test procedures to ensure tightness of concrete barriers and the complete tightness of the caverns.

Detailed engineering and design, preparation of working procedures and construction drawings for the underground works shall be carried out by the contractor.

The bidder will have to meet the requirements of ownership of minimum critical equipments at the time of submission of the final bid. Bidder will be required to identify source and location of these equipments and submit the required ownership details at the time of submission of final bid. A list of critical construction equipments to be owned by the bidder is given at Annexure-I for information.

2.0 Brief Scope of Work:

The scope of work for civil works for underground rock caverns for storage of crude oil (Part-A) comprises carrying out detailed engineering and design, preparation of working procedures and construction drawings, carrying out enabling and temporary works, supply of all materials, surveys, underground excavation for access tunnel, water curtain galleries including drilling of boreholes, main storage cavern, shafts and associated underground works using drilling and blasting technique, geological mapping, mucking, disposal of muck to identified dump sites, geotechnical and hydro-geological instrumentation, testing and monitoring, rock support, grouting, concrete works including plugs, pump pits and flooring, dewatering, water curtain testing, assistance during cavern tightness testing, coordinating with above ground contractor for installation of equipments in the shaft and cavern and removal of temporary works including mobilization and demobilization of all personnel, equipment as per job specifications, codes and drawings.

The underground works contractor (Part-A) shall interface with the above ground contractor (Part -B) for installation of equipments in the shafts and cavern and cavern tightness testing.

3.0 PRE-QUALIFICATION CRITERIA:

Bidder seeking pre-qualification shall meet the following minimum pre-qualification criteria:

3.1 TECHNICAL CRITERIA

3.1.1 IN CASE OF SINGLE BIDDER

3.1.1.1 The bidder shall possess experience of having successfully completed, either as a single bidder or as a leader of consortium:

At-least one project of underground mined rock caverns with at-least one cavern of minimum 300m^2 cross sectional area and a minimum volume of $50,000\text{m}^3$

And

At least one project with minimum total volume of underground rock excavation (caverns, tunnels, shafts, etc) of at least $250,000\text{m}^3$

OR

At-least one project of underground mined rock caverns with at least one cavern of minimum cross sectional area of 300 m^2 and a minimum volume of $50,000\text{ m}^3$ and total underground rock excavation (caverns, tunnels, shafts, etc.) of $300,000\text{ m}^3$

The above projects should have been completed during the last 10 (ten) years from the last date of submission of Pre-Qualification bid. The scope of work should include, detailed design and engineering (as per clause 3.1.1.2), underground rock excavation using conventional drilling and blasting techniques, concrete works, rock supports and grouting works.

Note 1: The individual qualifying projects executed by the bidders as a single bidder or as a leader of consortium or the combination thereof shall be acceptable.

Note 2: A bidder who meets the criteria indicated at 3.1.1.1 above as a leader of a consortium should have carried out project management in the relevant qualifying projects.

3.1.1.2 Bidder who satisfies the criteria given in clause 3.1.1.1 above, except for detailed engineering and design, shall also be considered subject to engaging an engineering sub-contractor for detailed engineering and design for the underground rock caverns and tunnels, as given under clause 3.1.1.1. The engineering sub-contractor should have carried out detailed engineering and design of an underground rock cavern and tunnels as per clause 3.1.1.1 during the last 10 (ten) years from the last date of submission of Pre-Qualification bid. The scope of work shall have included geological mapping and rock mass characterization, cavern stability analysis, design of rock support and concrete design.

Note: Bidders may be allowed to submit a list of more than one sub-contractor for detailed engineering and design works at PQ stage, subject to a maximum of three sub-contractors. However, successful bidder shall have to choose one approved engineering subcontractor out of the sub-contractors proposed by him in the final bid. However joint ventures between engineering sub-contractors are not acceptable and each engineering sub-contractor shall individually meet the above criteria in 3.1.1.2.

3.1.2 IN CASE OF CONSORTIUM BID

3.1.2.1 The leader of the consortium shall meet the criteria indicated at clause 3.1.1.1

3.1.2.2 The division of scope of work among the consortium members shall be generally commensurate with their past experience. The leader of the consortium shall be solely responsible for the project management.

3.1.2.3 In case the consortium satisfies the criteria requirement given in clause 3.1.1.1 above, except for detailed engineering and design, the bid shall also be considered subject to engaging an engineering sub-contractor/ consortium partner who meets the requirements of clause 3.1.1.2.

3.1.2.4 Total number of consortium members, in a consortium, excluding leader of consortium, shall not exceed two.

3.2 FINANCIAL CRITERIA

3.2.1 IN CASE OF SINGLE BIDDER

3.2.1.1 Annual turnover of Bidder shall not be less than **INR 2375 Million for Indian Bidders or US \$ 57 Million for Foreign Bidders** as per audited financial results in any one of the three preceding financial years upto the due date for submission of PQ bids.

3.2.1.2 The Net worth of the bidder as per latest audited financial results shall be positive

3.2.2 IN CASE BIDDER IS A CONSORTIUM

3.2.2.1 At least one of the members of the Consortium shall meet the financial criteria stipulated at 3.2.1.1 above.

3.2.2.2 The Leader as well as all the other members of the consortium shall meet the financial Criteria stipulated at 3.2.1.2 above.

3.3 GENERAL CRITERIA IN CASE BIDDER IS CONSORTIUM

3.3.1 The Consortium leader and the distribution of work will be identified and set forth in the PQ bid and will not be permitted to be changed thereafter.

3.3.2 The selected leader of the Consortium shall be authorized to incur liabilities and receive instructions for and on behalf of any and all member(s) of the consortium.

3.3.3 All the members of the Consortium shall be liable jointly and severally for the performance of the contract and discharge of the contractor's obligations and liabilities under the contract.

3.4 GENERAL

3.4.1 ISPRL/ EIL reserve the right to use in-house data for qualification of bidders.

3.4.2 The Bidder shall furnish documentary proof of fulfilling the Pre-Qualification Criteria mentioned in clause no.3.0 along with the PQ Bid. This documentation shall include but not be limited to the following:

a) Details pertaining to projects completed by single bidder/ leader of consortium/ consortium partner and/ or engineering sub-contractor for the pre-qualification:

- i. Name and description of the project
- ii. Type of contract
- iii. Contract Agreement/ relevant pages of contract
- iv. Scope of Work (as per Clause no.3.1.1.1/ 3.1.1.2 above)
- v. Engineering consultant
- vi. Size and volume of cavern and underground works(with supporting documents)
- vii. Scheduled and actual completion dates
- viii. List of key construction equipments deployed (nos. and capacity)
- ix. Value of award
- x. Completion certificates

b) Details of Bidder's organization, procedures and equipment:

- i. Safety Records
- ii. Health and safety, Environmental policy and system
- iii. Risk Management System

- iv. Equipments owned and proposed to be used for this project, including rock mass grouting, ground water management.
 - v. Copy of consortium agreement with clear division of responsibilities, if applicable
 - vi. Sub-contract agreement with the proposed agency, if some job is proposed to be subcontracted in terms of above BQC
 - vii. CVs of key personnel.
 - viii. Engineering capability (in-house or subcontract)
 - ix. Quality System
 - x. Financial Statements including audited Profit and Loss Account, Balance Sheets etc. for the three preceding financial years.
 - c) In case of foreign Bidder/ Foreign consortium member (s) all supporting documents, pertaining to qualification criteria submitted as evidence shall be certified true copies duly signed, dated and stamped by an official authorized for this purpose in Indian Embassy/ High Commission in Bidder's country.
- 4.0 Evaluation for Pre-Qualification bids shall be carried out as specified in Pre-Qualification Booklet.
- 5.0 Bidder/ consortium members submitting their PQ bid shall not be under liquidation, court receivership or similar proceeding.
- 6.0 Non-transferable Pre-qualification (PQ) Booklet can be purchased by the bidder from Cashier, Engineers India Limited, El Annexe, UG Floor, 1, Bhikaiji Cama Place, R.K. Puram, New Delhi-110066 (INDIA) on any working day (Monday to Friday except Holidays) between 1400 Hrs. to 1600 Hrs. from **05-06-2008 to 16-07-2008** on payment of non-refundable booklet cost of US \$ 475 (US Dollars Four Hundred Seventy Five only)/ INR 20,000/- (Indian Rupees Twenty Thousand only) for foreign Bidders and INR 20,000/- (Indian Rupees Twenty thousand only) for Indian Bidders through a crossed demand draft drawn in favour of Indian Strategic Petroleum Reserves Limited payable at New Delhi. Agencies are required to collect the PQ Booklet personally or through their authorized representatives. Request for sending the Booklet by post, courier or any other mode shall not be entertained. Authorized representatives of foreign agencies can purchase the PQ Booklet on payment in Indian Rupees or in Foreign currency (US \$) on or before submission of PQ Bids. PQ Booklet can also be down loaded from the web site of ISPRL (<http://www.isprlindia.com>) or EIL (<http://www.indianprocessplants.com>). Small scale units registered with NSIC and Central Govt. Public Sector Undertaking will be issued PQ Document free of cost. Agencies who have downloaded the PQ Booklet from the ISPRL/EIL web site are required to pay the Booklet cost by Demand Draft/Banker's cheque at the time of submission of their Pre-Qualification Bid (PQ Bid without the cost of PQ Booklet shall not be entertained).
- 7.0 Pre-Bid Meeting
- a) Time & Date : **1000 Hrs. (IST) on 30.06.2008.**
 - b) Venue : Indian Strategic Petroleum Reserves Ltd.,
424-425, World Trade Centre,
Babar Road, New Delhi-110 001

- 8.0 PQ Bids duly filled with all information and supporting documents shall be submitted in the office of the undersigned latest by **1200 Hrs. (IST) on 17-07-2008**. Bidders should ensure submission of complete information/ documentation in the first instance itself. Pre-qualification may be completed based on the details so furnished without seeking any subsequent additional information.
- 9.0 PQ Bids shall be opened on **17-07-2008 at 1400 hrs (IST)** in the presence of attending representative of bidders in EIL office at New Delhi
- 10.0 PQ Bids not received by the due date and time shall be rejected.
- 11.0 Issuance of PQ Booklet and/or submission of PQ Bids shall not be presumed as pre-qualification or entitle the agencies to participate in the main bidding process.
- 12.0 ISPRL/EIL will not be responsible for any costs or expenses incurred by the Bidder in connection with preparation or delivery of PQ Bids participating in discussions etc. including costs and expenses related with visits to the site.
- 13.0 ISPRL/ EIL shall allow purchase preference to Indian Central Government Public Sector Undertaking/ Enterprises as admissible under the existing policies of Government of India.
- 14.0 Telex/Telefax/ Telegraphic/E-mail PQ bids shall not be accepted. ISPRL/EIL takes no responsibility for delay, loss or non-receipt of PQ bid sent by post/Courier.
- 15.0 ISPRL/EIL reserves the right to reject any or all PQ Bids at their sole discretion without assigning any reason whatsoever.
- 16.0 Canvassing in any form by the Bidder or by any other Bidder on their behalf may lead to disqualification of their PQ Bid.
- 17.0 Contact Details are as follows:
Telefax No. : 91-11-26191714/26167664
Telephone No. : 91-11-26102121
E-Mail : rk.sabharwal@eil.co.in

ASST. GENERAL MANAGER (C & P)
ENGINEERS INDIA LTD., NEW DELHI

**Annexure-I to
Invitation for Pre-qualification**

LIST OF MINIMUM CRITICAL CONSTRUCTION EQUIPMENT

S.No.	Equipment Description and Capacity	Minimum Number Required to be owned
1	Hydraulic Drilling Jumbos, 2 boom(minimum)	4
2	Grouting Equipments (Pumps, High speed mixers, agitators)	2
3	Dump Trucks, 25T(minimum)	20
4	Shotcrete Robots, 20m ³	4
5	Loader, 6.5 m3 (minimum)	4

Notes:

- a. Equipment as per above list are necessarily to be OWNED by the BIDDER. BIDDER has to submit the proof of Ownership (Copy of Invoice Payment/ Insurance Cover/ Registration with Statutory Body) along with the final BID. Lease contract documents of major equipment are also acceptable. However these are to be supported with the ownership documents of the lessor. The lease should be valid for the complete schedule of the project.
- b. Equipment not OWNED but ordered for purchase, supported with a copy of Purchase Order duly accepted by the vendor shall also be considered as "OWNED", subject to its delivery period being within 3 months from the last date of submission of final bid.
- c. The equipment shall not be more than 5 years old from the last date of submission of the final bid and shall be in good working condition.
- d. Successful bidder may be allowed to deploy the critical construction equipment either equivalent to or better than the equipment proven as 'OWNED' by the bidder in the final bid, subject to meeting the deployment schedule of the particular equipment and without affecting the overall project completion schedule.
- e. The number of equipment given above does not form the total requirement of critical equipment envisaged for construction.