



TENDER NO. MISCP/09/2014



Majis Industrial Services SAOC

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Expression of Interest

for

**Performance-based Operation and Maintenance
(O&M) Services**

for the

20 MLD Majis Seawater Desalination Plant in

Sohar, Oman



General

Majis Industrial Services SAOC (Majis) is a wholly Government of Oman owned company that provides various water utility services at Sohar Industrial Port Area (SIPA).

Majis has recently commissioned a 20 MLD SWRO based desalination plant (Facility) at SIPA built by VATECH WABAG-NCC JV (EPC Contractor). The Facility has capability to produce potable and process water (together **Product Water**). The EPC Contractor is currently undertaking 6 months of operation and maintenance as required under the EPC contract.

Majis has Take or Pay Agreements with customers with penalties for shortfall in supply. Majis is therefore looking for an experienced and qualified O&M contractor to undertake O&M of the Facility for a period of 5 years commencing from 1st September 2014.

Purpose of this document

The purpose of this document is to invite applications for pre-qualification from eligible Local or Foreign Firms/Joint Ventures (JVs), capable of operating and maintaining the Facility for a period of five years. Pre-qualified applicants will then be invited to participate in the tender.

Brief Scope of Work

The O&M contractor shall operate the Facility in accordance with the requirements of an O&M Agreement which shall be provided along with the tender documents issued to the pre-qualified bidders. The brief scope of services under the O&M Agreement encompasses the operation and maintenance of all equipment, instrumentation, processes, facilities, systems, structures and utilities within the boundaries of the 20 MLD Majis SWRO desalination plant as defined under ("**Facility Description**") including two potable water pipelines to a customer reservoir (both GRE and DI); 20 ML reservoir and two booster pump stations for desalinated water and the high-voltage transformers with 33 kV cables.

The O&M Scope of Services shall be performed in accordance with legal requirements and



prudent industry practice standards and will include, but not be limited to:

- Operation and maintenance, (to include repair and maintenance) of the Facility, including meeting the water quality and quantity obligations, including conformance to the agreed dispatch protocol. The O&M Contractor will be responsible for purchasing of the necessary, chemicals, membranes, spares and other consumables to meet these requirements;
- Providing an operating plan and annual budget;
- Determining and maintaining appropriate staffing levels;
- Maintaining comprehensive records relating to Facility performance; providing monthly reports and invoices to Majis and additional reports as may be required;
- Conducting appropriate inspections and making the Facility available for inspections by Majis, lenders, Landlord, Government Agencies ,water customers and other third parties designated by Majis;
- Obtaining and maintaining sewer, electricity and telecommunications services necessary for the operations of the Facility;
- Development, implementation and enforcement of programs for safety, quality assurance and quality control;
- Development of and assurance of adherence to a preventative maintenance program that will ensure that the Facility can meet all fresh water production/performance requirements. Contractor shall operate and maintain the Facility such that at the end of the O&M contract fresh water production capacity, operability, integrity of equipment and structures, spare parts, number and type of duty and spare MF and RO membrane elements, and overall asset value are retained at their initial level and condition with reasonable level of amortization determined by an independent third-party audit.
- Appropriate disposal of all discharge water and concentrate, and other waste, including without limitation, wastewater and spent chemicals;



- Compliance with all permits and governmental approvals related to Facility operation;
- Making its personnel available during the end of the operation period for transition activities.
- Support Majis's in maintaining good relationships with water customers, and governmental authorities and general public (including tours, community relations programs, etc.).
- Put in place, respond to and maintain records of all dispatch control and communication as required by Majis.
- Comply with labor law in Oman as applicable from time to time which at present requires 30 % of the employer work force to be Omani nationals.
- Put in place Transition Plan to be implemented during the last year of the O&M contract term, which is designed to allow Majis staff to take over plant operations at the end of this term. The plan shall include training of Majis staff over the last 12 months of the contract term in order to allow smooth turnover of plant operations from O&M contractor to Majis.
- In addition, Majis and the O&M contractor will select mutually agreed upon third party consultant to verify whether O&M contractor has completed all preventive maintenance necessary to retain the value of the desalination plant facilities, equipment and structures.
- Majis expects the O&M contractor to cooperate in exploring the possibility of Majis to retain O&M contractor plant employees at the end of the contractual term.

The operation of the intake pump station collecting raw water and delivering it to the desalination plant site is not included in the scope of services for this O&M Agreement. However, the operation of the intake pipeline connecting the intake pump station to the desalination plant site as well as the 300-micron micro-strainers installed on this pipe are included in the O&M contractor scope.

Operation and maintenance of the high-voltage electrical supply system (substations,



transformers, 33-kV cables, etc.) for the desalination plant are included in the scope of O&M services for this Facility.

The operation and maintenance of the product water delivery system to the point of delivery of potable water to the customer reservoir, including DI pipe and GRE pipe and flow meters as well as the process water to the 20 ML reservoir and two booster pump stations are included in the scope of O&M services.

Facility Description

In general, the 20 MLD desalination plant includes the following key facilities:

- Piping, 300-micron micro-strainers, and Structures Conveying Intake Water from the Open Intake to the Desalination Plant;
- Source Seawater Pretreatment Facilities;
- Reverse Osmosis Desalination System Equipped with Pressure Exchangers;
- Buildings Housing RO System and Plant Operations Staff;
- Post Treatment System for Re-mineralization and Disinfection;
- Chemical Storage Facilities;
- 20 ML On-site Process Water Storage Tank and
- Two Booster Pump Stations;
- Pipelines Delivering Potable Water to customer Reservoir (GRE and DI Pipeline);
- Electrical Substation Connected to the Power Grid with High-Voltage Transformers and 33 kV Power Conduits;
- Other Service Facilities Typical for SWRO Desalination Plants (Workshop, Laboratory, Internal Roads, etc.).
- Onshore Discharge of brine and neutralized wastewater via Open Canal



The desalination plant pretreatment system utilizes PALL membrane microfiltration (MF) which provides pretreated seawater system of quality and quantity that are adequate for membrane RO seawater desalination and which allows to maintain the customary performance warranties, cleaning frequency and useful life of the RO membrane elements. The MF pretreatment system is directly coupled with the RO feed system.

The seawater RO desalination system of the 20 MLD plant will be operated to meet the product water quality requirements. This system consists of two two-pass RO trains for production of 8 MLD process water and three single-pass RO trains for production of 12 MLD of potable water. All RO trains are equipped with ERI pressure exchangers (PX-300).

The type and quality of materials used for construction and for key equipment and piping are selected to allow maintaining plant structural and mechanical integrity, and performance for at least 25 years. The materials which are used for the construction of key desalination plant structures would be of type and quality customary for SWRO membrane desalination plants with typical useful life of 50 years.

Brief Performance Obligation

The performance obligation is detailed in the O&M Agreement which will be made available to the pre-qualified bidders.

Briefly the performance obligations are as follows:

1. O&M Contractor is expected to produce Potable and Process Water in compliance with the specified Standards.
2. The Facility is designed to produce on an annual average basis 92% of its installed capacity of 20 MLD for a given range of seawater parameters. Such design parameters shall be provided to the pre-qualified bidders along with the tender document. O&M Contractor will be required to bid for an **O&M Contractor Guaranteed Available Capacity (OMCG)**. If the daily dispatch notification is for less than or equal to OMCG, then the O&M Contractor shall deliver this flow in compliance with Standards or would be penalized for the flow that they have not delivered. If the daily dispatch notification is for more than OMCG while the O&M Contractor is not obliged to provide such volume, it shall be incentivized for making

available such additional volume.

3. O&M Contractor shall guarantee a Maximum Electricity Consumption Guarantee (ECG) for each cubic meter of product water. In the event of higher consumption than the ECG the additional cost shall be recovered from the O&M Contractor.
4. O&M Contractor shall be expected to comply with all legal and permitting requirements.

Compensation to O&M Contractor

O&M Contractor will be expected to bid with a minimum fixed monthly fee for each of the 5 years of the term of the O&M Contract along with a variable charge per cubic meter of Product Water that shall be paid for each cubic meter of Product Water delivered.

Price option will also be sought for an additional 2 years in the event of Majis opting to extend the contract by an additional 2 years after the initial term of 5 years.

Majis will also seek an optional termination fee in the event that Majis chooses to terminate the O&M contract for convenience after year 3 or year 4.

O&M Contractor's fee will be open to adjustment for the impact if any of Change in Law occurring after the effective date.

Indicative time table of procurement

Milestone	Timeline
Invitation for prequalification	Friday 4 th April 2014
Digital submission of statement of prequalification	Monday 14 th April 2014
Announcing prequalified bidders	Thursday 24 th April 2014
Workshop for prequalified bidders	Monday 28 th April 2014
Collection of tender fee	Tuesday 29 th April 2014
Collection of tender document	Wednesday 30 th April 2014
Site Visit	Sunday 11 th May to Thursday 15 th May 2014
Clarifications closing	Sunday 25 th May 2014
Bids Due	Sunday 8 th June 2014
Award of contract	Sunday 29 th June 2014
Mobilisation	Thursday 31 st July 2014
Transition period	Friday 1 st August 2014 to Sunday 31 st August 2014
Commencement Date	1 st September 2014
Contract Completion	31 st August 2019

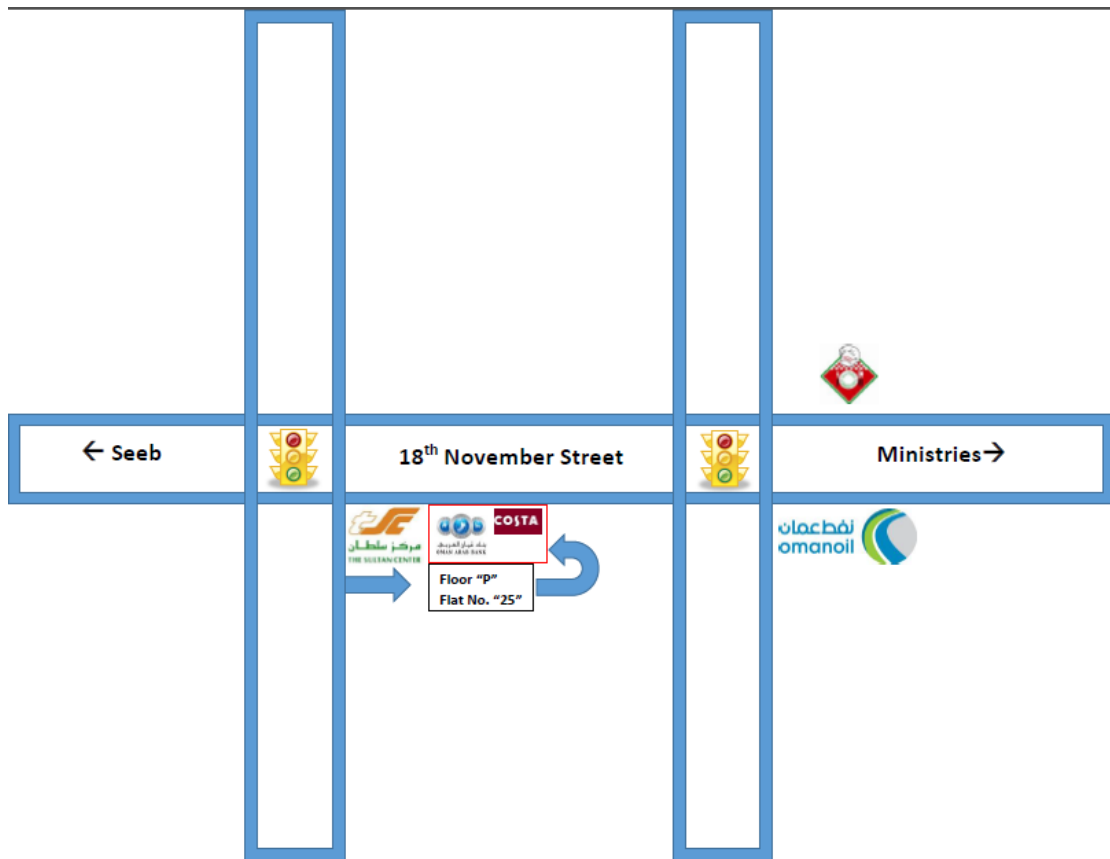
Instruction to Applicants

Interested parties satisfying the minimum eligibility criteria mentioned below are requested to submit their statement of qualification in 2 sets of hard copies and 2 soft copies in USB flash memory

A sealed cover containing the hard copies and USB shall be titled

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and hand delivered at Majis’s Muscat Office at the following location no later than at 2pm on Monday the 14th April 2014.





The sealed cover shall not carry the name or identity of the bidder.

Any query with regard to this invitation should be sent in writing to the email ID room@miscoman.com

Minimum Eligibility Criteria.

Following shall be the minimum eligibility criteria. Bidders not meeting all of the minimum eligibility criteria may not be invited to tender for the project.

1. Experience of operating and maintaining at least 2 SWRO based desalination plants of a minimum 20 MLD capacity for a duration of 2 years as at the date of submission of expression of interest.
2. The applicants must have in their employment suitably qualified personnel with relevant experience to fill the following key management and specialist positions. The applicant will supply information on a prime and an alternate candidate for each position
 - a. Plant Manager
 - b. Maintenance Manager
 - c. Process Engineer
 - d. HSE Officer
3. Net Worth of the parent company or the bidding company shall be a minimum of RO 20 million.

Documents to be Submitted

Section 1 – Executive Summary

Section 2 – Information on Experience with details of the plants operated along with contact references and consent to facilitate reference visits.



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Section 3 – Information on qualified personnel with CV's

Section 4 – Audited financial statement of bidder and parent company for the last 3 financial years.

The Executive Summary shall be written in a non-technical style and shall present general information sufficient to familiarize reviewers with the capability of the Applicant.

Information of Experience shall contain statements and evidence in support of the Minimum Eligibility Criteria with respect to experience along with contact references of such relevant clients and an authorization for Majis to visit and or seek client references.

Information on qualified personnel shall contain one main and one alternative CV's for the relevant positions

Information on financial capability shall contain the audited financial statements for the last 3 years of the Applicant and its parent company.