

PARTIAL LIST OF DESALINATION PROJECTS

CLIENT/LOCATION	PROJECT DESCRIPTION	CAPACITY	SCOPE OF SERVICES
MARAFIQ, Jubail City, Saudi Arabia	Feasibility and Optimization Study, Conceptual Design and Preparation of Tender Documents for Marafiq Independent Water and Power Project (IWPP)	Power generation in combined cycle mode for 2400 MW/ 66 MIGD (Phase I) and 1800 MW/22 MIGD (Phase II) power. generation seawater desalination	Feasibility with Optimization Study including Detailed Marine Recirculation Study, Optimization Study for Power and Seawater Desalination including Intake Selection, Conceptual Design, Cost Estimates, Economic and Financial Analysis, Implementation Schedule and Study Report
Saline Water Conversion Corporation, Saudi Arabia	To increase the total production in the three (3) R. O. Plants in Umm-Lujj, Haqual, and Duba.	The increase in capacity is to be determined after integrating into of the proposed alternative arrangements using Nano-filtration/SWRO arrangements.	Study, primary engineering, preparation of tendered specifications and tender documents for the production of upgrading in the three (3) R.O. Plants
Ministry of Works Power and Water Manama, Bahrain	Ras Abu Jarjur Desalination Plant	10 MGD R.O. to be expanded to 15.84 MGD Desalination Plant.	Design, Engineering, Procurement including Specification, Bid Evaluation, Vendor Drawing Review, Shop Inspection, Construction Supervision and Supervision of Testing and Commissioning.
Saline Water Conversion Corp. (SWCC) Riyadh, Saudi Arabia	Medina-Yanbu Power and Desalination Plant	2 x 81 MW Power 15 x 2.25 MGD R.O. Desalination Plant and 4 x 7.9 MIGD MSF Desalination Plant.	Post Contract Engineering including Review of Vendor Drawings and Documents, Vendor Shop Inspection, Construction Supervision and Supervision of Start-up and Commissioning. Services also include training of SWCC Engineers.
Saline Water Conversion Corp Al-Jubail, Saudi Arabia	Al-Jubail II Desalination/ Power Complex	250 MGD Desalination 10 x 130 MW Power	Site Selection, Design, Engineering, Procurement, Tender Evaluation, Inspection, Construction Supervision, Start-up, Commissioning, Training of Owners Personnel and Initial Operation.
Saudi Consulting Services/Water and Sanitation Drainage (WSD) Authority, Riyadh, Saudi Arabia	Two Water Treatment Plants at Salboukh and Bowaib	60,000 m ³ /day each including reverse osmosis	Review Vendor's Design Drawings in the areas of Process, Mechanical, Electrical and Instrumentation and Controls.
Ministry of Works, Power and Water, Manama, Bahrain	Rehabilitation Study for 10 MGD Ad Dur R.O. Desalination Plant.	10 MGD	Study on Rehabilitation for Improvement of Production, Furnishing Recommendations and Preparing Outline Specifications and Detailed Cost Estimate.

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Ministry of Electricity and Water, Dubai, U.A.E.	Power and Desalination Plant	MSF Desalination Units 2 x 5 MGD at Galliah 2 x 5 MGD at New Qidfa and 2 x 5 MGD at Rafah.	Study, Optimization Preliminary Engineering and Cost Estimate.
Project Preparation Unit (PPU) Ministry of Finance and Economic Planning, Government of Sudan (Funded by African Development Bank)	Combined Power and Desalination Plant at Port Sudan and Suaikin Area.	21.1 MGD Desalination 240 MW Power	Feasibility Study including Demand Forecast, Evaluation and Assessment of Existing Facilities, Techno-Economic Evaluation of various Alternatives to meet the Demand, Recommendation Best Alternative, Preliminary Engineering and Feasibility Grade and Design of Selected Alternative, Cost Estimate, Financial Analysis, and Review of Commercial Operations of both Institutions on Power and Water.
Saudi Consolidated Electric Company, Saudi Arabia	Qurayyah Desalination/Power Plant	3 x 1.06 MGD MSF for Plant Makeup, 2 x 600 MW Power	Post Contract Engineering including Audit of Vendor Design Drawings and Documents, Construction Supervision of Startup and Commissioning.
Saline Water Conversion Corp. Al-Jubail, Saudi Arabia	Al-Jubail III Desalination/Power Complex	24 MGD Desalination 2 x 65 MW Power Documents.	Site Selection, Design, Engineering, Tender
Saline Water Conversion Corp. Tabuk, Saudi Arabia	Tabuk Desalination/Power Plant	43 MGD Desalination 210 MW Power	Site Selection, Design, Engineering and Tender Document.
Ministry of Electricity & Water, United Arab Emirates	Qidfa Desalination/Power Complex connected to exhaust of existing	10.0 MGD Desalination 4 x 25 MW Power	Site Investigation, Conceptual Design Report, Design, Engineering and Tender Document and Bid Evaluation.
Florida Keys Aqueduct Authority Key West, Florida, USA	Key West Desalination Plant	2.62 MGD	Design & Engineering of Desalination Plant Expansion.
Harvey Aluminum St. Croix, Virgin Islands	St. Croix Desalination Plant	1.25 MGD	Plant Layout, Heat Balances, Equipment Sizing & Preparation of Specification.
Jordan Electricity Authority, Jordan	Reverse Osmosis Water Treatment Plant	0.45 MGD	Design, Engineering, Preparation of Bid Evaluation, Construction Supervision, Shop Inspection, P&A Testing and Post Commissioning Warranty Period Assistance.

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Empresa Nacional de Luz y Fuerza, Puerto Somoza, Nicaragua	Puerto Somoza Desalination/ Plant Complex	0.60 MGD Desalination 106 MW Power	Plant Layout, Conceptual Design, Preparation of Technical Specifications, Technical Specifications, and Review of Vendor Drawings.
Public Utility Board, Singapore	State-of-the-Art Desalination Study for Large Scale Desalination R.O. Sea Plant.	50 MGD Desalination project to Augment Existing Water Supply of Singapore.	Study to evaluate the viability of seawater as an alternate source to meet future demand of potable water economic and technical aspects of desalination assessment of available resources, screening of desalting processes, conceptual design of the plant for large-scale desalination plants to meet future water requirement.
Ministry of Electricity & Water	Desalination/Power Plant	150-200 MW 15-20 MGD	Feasibility Study including projection of future demand for water in the region vs. supplies, determination of plant size and phasing, screening of desalination processes for techno-economic viability, process optimization, site selection and investigations, conceptual plant layout and design for the dual purpose facility, cost estimate & project schedule.
Saudi Consolidated Electric Company Saudi Arabia	Jizan Power/Desalination Project	600-800 MW 40-60 MGD	Feasibility Study including a Techno-Economic comparison between a conventional steam power plant and a combined cycle power plant not only a single purpose generation but also considering dual purpose plant with production of potable water by seawater desalination.
Italimpianti Societa Italiana Impianti P.A. Genoa, Italy Sitra, Bahrain	MSF Desalination Plants, Units 2, 3 and 4 at Sitra	3 MSF Desalination units each 22,500 M ³ per day (about 5 MIGD)	Analysis of cause of premature failure of Cupro Nickel Tubes in the heat reject section of all three desalination units. Included site visit, collection of samples, extensive lab analysis, establishing the cause of failure and suggesting remedial measures.
Ministry of Electricity and Water, Oman	Masirah Island Desalination Plant	830 M ³ /hr seawater intake including pretreatment.	Field Investigation, Modeling, Study Report, Design Criteria, Preparation of Tender Specification and Bid Evaluation.



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KTI, Inc., Maine	Overseas Location	Power/Desalination Complex	Feasibility Study including Selection of Process, Sizing of Plant, Concept Design and Cost Estimate.
Asiatic Petroleum Electrica Siciliana Palermo, Italy	Puerto Miranda Desalination/ Power Plant	0.9 MGD	Design and Engineering, Preparation of Specifications, and Bid Evaluation.
Globespan Corporation	New York, USA	Desalination Plant	Floating Desalination Facility 36 MGD
Ministry of Works Bahamas	New Providence Island, Bahamas	Water/Power Facility	Master Plan for Water and Power Production through 1980.
Birch De Jongh & Farrelly	St. Thomas, Virgin Islands	St. Thomas Desalination Plant	2.5 MGD Plant-Design Analysis & Review of Operating Procedures.
Cable Beach Service Company (Nassau Beach Hotel)	New Providence Island, Bahamas	Desalination Plant.	Study of Alternate Desalination System.
Princess Hotels International	Southampton Princess Hotel, Bermuda	Desalination/Water Resource Management.	On Site Evaluation of Desalination Operation.
Westinghouse Electric Corp./Malta Electricity Board, Malta.	Marsa Creek Desalination Plant	3.6 MGD	Plant Layout, Heat Balances, Equipment Sizing and Preparation of Specifications.
AES/Ohana Inc. Virginia, USA	Desalination Plant in Hawaii using steam from a cogeneration plant	1 MGD and 5 MGD	Feasibility Study including Selection of Process, Finalization of Parameters, Concept Design and Cost Estimate.
ABB Energy Ventures New Jersey, USA	Desalination Plant in Hawaii using steam from a cogeneration plant	5 MGD and 10 MGD	Study on Finalization of Scheme & Performance and Preparation of Concept Design and Cost Estimate.
Saline Water Conversion Corporation, Saudi Arabia	Installation of New MED Desalination Plants at 3 Nos. West coast sites of Haql, Duba & Al Wajh and an East coast site of Al Khafji.	Haql – 2x1 MIGD Duba – 2x1 MIGD Al Khafji – 2x3.3 MIGD Al Wajh – 3x1 MIGD	Tender Document Preparation, Issue and Evaluation of Tenders
Saline Water Conversion Corporation, Saudi Arabia	Installation of New RO Plant (Phase – 3) at existing Jeddah plant.	53 MIGD RO plant	Tender Document Preparation, Issue and Evaluation of Tenders



Al Rajhi International/Al Khorayef Group/Saudi Masader Co. for Water & Power, Saudi Arabia, Arab Bank	Ras Az-Zawr Independent Water and Power Project (IWPP) in Saudi Arabia	850 MW – 1100 MW Power and 1,000,000 m ³ /day Seawater Desalination	Technical Advisory (TA) services prior to bidding.
Malakoff (Malaysia), Project location - Bahrain	Al-Hidd Power and Desalination IWPP Independent Water and Power Project	1100 MW Power and 100 MIGD Seawater Desalination	Technical Advisory services prior to bidding.