

Qualification Statement

**Oil & Gas • Water • Electricity
Generation**



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WINTARA

CORPORATE BACKGROUND

Wintara, Inc. World Headquarters is housed in a modern 5 story office building, located at 6710 Oxon Hill Road, National Harbor, Maryland, USA. Wintara occupies 25,000 square feet on the 5th Floor. The office is in close proximity to the Capitol and the Pentagon, as well as the World Class National Harbor Complex featuring Meeting & Convention Centers, Hotels, and Restaurants for all tastes and a variety of shops.



Wintara offices are security controlled and certified at TOP SECRET level for classified processing, storage and meetings.

The Wintara offices are fully equipped to provide a pleasant and highly productive environment. Features include an Executive Meeting Room equipped for Worldwide Audio and Video Conferencing, a High Security Meeting Room, and three Multi-Purpose Meeting Rooms. Thirty (30) private offices are provided for Executive and Management personnel and for visiting clients and friends.

Wintara maintains state-of-the-art communications, reproduction and computer equipment, and the latest in productivity software.

TEAM OPERATING LOCATIONS



TEAM PROFILE

- Drilling Equipment
- Steel Pipeline
- Field Instruments
- Blowout Preventers
- Wellhead Equipment
- Fishing Tools
- Power Plant Engineering and Construction
- Heavy Equipment Acquisition and Installation
- Information Systems Engineering
- Large Team Customer Base
- Worldwide Service Capability

PROGRAM OVERVIEW

Wintara's Team brings exceptional capabilities and experience in the water, energy, oil and gas industries. **Wintara** offers a unique package of services to the U.S. Army Corps of Engineers, Republic of Iraq and other Middle East Nations.

Power is critical:

Infrastructure is the core of any nation, and Power is a critical component. Wintara plays a Major and Key role in this most important sector in the Middle East.

Wintara provides a highly mobile, engineering *Rapid Response Force* that repairs and overhauls utility systems, theatre wide. The team consists of approximately 500 self sufficient personnel, vehicles and equipment capable of independent operations in remote, high threat environments.

PROGRAM OVERVIEW cont'd

The unit is structured with the following packages:

- Commissioning, Piping Works for Oil Refineries, Chemical Plants are areas our team is capable of providing
- Turn Key Power Stations
- Equipment Erection, Testing
- Engineering Design
- Overall Plant Design
 - System Design
 - Mechanical Design
 - Electrical Design
 - Controls Systems Automation
 - Civil Works Design
 - Field Engineering (erection & commissioning)
- Installation and Dismantling
- Operation Maintenance
- OEM Services, GE Frame 5, 6, 7, 9 LM6000, TM2500
- Equipment, State of the Art Technology, Critical Spare Parts acquisition –new and refurbished
- Transportation – harden vehicles equipment, refuelling, maintenance

PROGRAM OVERVIEW cont'd

Energy Service Package

- Turnkey Construction and Facilities Additions
- Turbine/Generator Removal and Installation
- Preventative Maintenance, Operational Maintenance, Major Inspections
- Turbine Services for all OEM's - GE Steam & Heavy Industrial and Aero Gas Turbines Siemens/Westinghouse, Alstom/ABB, Pratt-Whitney
- Critical Spare Parts Acquisition - New and Refurbished
- Remote Monitoring Systems

Training – Two Schools on site/off site

- Electrical Generation, Transmission, and Distribution Systems
 - Operations and Maintenance (O&M)
 - Additional critical course as required
 - Train the Trainer

Oil Refinery Solutions

Wintara employs Oil Industry experts with many years of extensive experience in the exploration, production and refining/processing fields.

We provide our customers the best of class equipment, on time and at competitive prices to meet their needs.

Wintara offers a wide variety of Oil Sector Equipment and Services

- **Drilling Equipment**
- **Steel Pipeline**
- **Field Instruments**
- **Blowout Preventers** - including manual, hydraulic ram, hydraulic annular and closing units.



Oil Refinery Solutions cont'd

• **Wellhead Equipment** - including Adapters for Casingheads and Tubingheads, Back Pressure Valves, Ball Valves (Full Opening), Bails (Elevator), Baskets, Bell Nipples, Bull Plugs, Casingheads, Casing Spools, Chokes (Positive, Manual Adjustable, and Hydraulic), Collars (Rotary Drill), Drifts (Casing and Tubing), Drilling Bits, Elevators, Flanges (Companion and Weldneck), Flow Tees, Gauges, Gate Valves (Manual and Dual), Gate Valve Actuators, Hoses (Rotary), Landing Bases, Mud Mixers, Muleshoe (Joints), Nipples, Plugs (Bull, Lift and BOP), Primary Seals, Pup Joints (Drill Pipe, Tubing, Collar), Racks (Pipe), Ring Gaskets, Scrapers (Casing), Secondary Seals, Slips (Rotary), Slip Assemblies, Spiders (Rotary), Spools (Rotary), Stripper Heads, Stripper Rubbers, Studs & Nuts, Subs (Lift and Rotary), Swabs (Casing and Tubing), Swab Equipment, Tanks (Mud), Tees and Crosses, Tongs (Hydraulic Rod, Manual & Hydraulic Tubing), Tubing Hangers, Tubingheads, Unions, Valves (Ball, Check, Gate, Inside BOP & Safety), Wear Bushings, Wraparounds, Wrenches (Sucker Rod and Hammer)



Oil Refinery Solutions cont'd

• **Fishing Tools** - including Bailer (Bulldog and Hydrostatic), Baskets (Junk), Bits, Blocks (Impression), Broach (Tubing), Bushings, Cutters (Internal & External), Depthometer, Die Collars and Nipples, Grabs (Wireline), Hot Tap (Gate and Ball Valve), Jacks (Hydraulic and Casing), Jars (Hydraulic, Bumper Sub, Rod or Wireline), Joints (Safety), Knife (Paraffin), Lubricator (Back Pressure Valve), Magnet (Ditch and Fishing), Mills, Overshoots, Pipe (Washout), Pump (Sand), Shoes (Rotary and Washout), Socket (Clulow, Bull Dog Oversocket), Spears (Packer Retrieving, Rotary Releasing), Stabilizer (Welded Blade), Subs (Cut Lip, Screw In, Drain, Jet, Circulating Pump Out), Swages (Casing Roller), Swivels (Circulating), Taps (Box Die), Traps (Mouse), Wiper (Key Set)



FUEL ADDITIVES

There is the world-wide critical, economic need to utilize under-processed or unprocessed petroleum fuels. The major challenge has been to make them compliant with engine OEM requirements. One prime example is fuel additives used successfully to allow powering of **Gas Turbine Engines with crude oil**.

Through our strong partnerships with manufactures of oil-soluble metal components and developers of proprietary manufacturing processes and combustion catalyst technology, Wintara has the unique capability to provide a wide range of **Petroleum Fuel Additives to the Power Generation Industry** and other volume fossil fuel consumers. These additives :

- Prevent deposits and hot corrosion on hot path metal parts in various kinds of engines caused by oil-soluble metals and water-soluble alkali metals and alkaline earth salts
- Catalyze combustion, reduce particulate emissions and improve fuel efficiency
- Neutralize sulfuric acid in exhaust gases to reduce acid rain

Wintara offers new improved products based on newly patented Combustion Catalyst Technology using a unique combination of iron and magnesium. The catalyst results in more efficient combustion of fuels.

- Reduce carbon emissions up to 90% in engine exhausts compared with 50% reduction reported in the literature
- Yield fuel savings in Diesel engines commensurate with the level of particulate emissions in the exhaust.

The technology supporting the product line is a result of years of study and application of scientific principles to products and their use as fuel additives.

BENEFITS

A Rapid Response Team with a unique range of capabilities that allows the Government to meet engineering and optimization needs through a single source.

- Rapid Response to overhaul, design, bill, repair, logistics and maintenance services.
- Reduced Cost of Operations & Maintenance (O&M)
- Cost Effective Security Solution
- Maximize reconstruction contract revenue flow to the region
Economy

STRATEGIC ALLIANCES



WOOD GROUP

Wood Group has world-leading positions in engineering for deepwater topsides and subsea pipelines, mature field production support and enhancement, and the provision of electric submersible pumps, surface wellheads and valves.



EDAC Engineering Limited (EDAC)

EDAC has executed several prestigious projects in India and abroad in Oil & Gas, Power, Petrochemical and Chemical sectors. EDAC has extended its construction business in overseas by executing projects in U.A.E, Oman, Saudi Arabia, Jordan, Algeria, Yemen, Singapore, Malaysia, Curacao (the Netherlands Antilles). EDAC is also an ISO 9001: 2000 certified company accredited under RvA scheme by DET NORSKE VERITAS (DNV), The Netherlands.



SIEMENS

Siemens has many years experience in power generation - combined cycle, simple cycle, IGCC or steam power plants. Siemens offer advanced compression solutions - for the oil and gas industry as well as for applications in air separation plants, metal making and in the chemical industry.

STRATEGIC ALLIANCES cont'd



DEMAR, LTD.

Demar qualified staff of project managers, estimators, and field superintendents represents a vast range of experience in many types of projects. Their background includes structural steel, pre-cast, tilt-wall, poured-in-place concrete, pre-engineered metal, masonry, metal stud, wood framed, and much more. Demar will promptly respond to meet the challenge whether interior renovation, an exterior expansion, or a brand new multipurpose facility. In addition to meeting the construction needs, Demar Constructors can also work with their other operating divisions to complete the entire turnkey project.



Power Engineers

Power Engineers has experience on the ground in Iraq with projects completed for the US Government in support of rehabilitation of the Power Sector.

STRATEGIC ALLIANCES cont'd



GENERAL ELECTRIC(GE)

GE provides advanced power systems and around-the-clock energy services around the world. GE installed the first steam turbine in 1901, our installed base of steam and heavy-duty gas turbines has grown to over 10,000 units, representing over a million Megawatts (MW) of installed capacity in more than 120 countries. With over 5,500 wind and 3,600 hydro turbines, the installed capacity of renewable energy exceeds 160,000 MW.



Bharat Heavy Electricals Ltd. (BHEL)

BHEL is a world leader in the engineering and production of power generation/transmission equipment and services. Employing over 42,600 highly skilled personnel, BHEL is a certified ISO 9001 and ISO 14001 TQM contractor and also Occupational Health and Safety (OSHA) 18001 compliant. BHEL's market leadership and presence in Iraq enhances our offer substantially.

RELEVANT EXPERIENCE

Client: M/s Gas Authority of India Limited, New Delhi

EDAC

Project Title: Mechanical Erection works for Gail Pata Gas Cracker & Processing

Scope of Work: Fabrication & Erection of Piping & related Civil works. Erection of Equipments, Stack, Structural and Centrifugal Compressors.

Date of Completion: December 1997

Client: M/s. Technip, Chennai

EDAC

Project Title: Civil works for Niko Dew Point Control unit project

Scope of Work: Civil Woks for Substation, DG Room and Civil foundation for Equipments

Date of Completion: June 2004

RELEVANT EXPERIENCE cont'd

Client: M/s. L&T Ltd, Mumbai

EDAC

Project Title: Mechanical Erection works for IOCL Expansion Project.

Scope of Work: Fabrication & Erection of Hot Oil, Fired Combustion & Xylene Heaters.

Date of Completion: June 2005



Client: M/s. IOCL, Gujarat

EDAC

Project Title: Civil & Structural works for IOCL FCC Shutdown at Gujarat Refinery.

Scope of Work: Replacement of Column, Civil & Structural works.

Date of Completion: October 2007

RELEVANT EXPERIENCE cont'd

Client: M/s. Clough Engineering Limited, Australia

EDAC

Project Title: Electrical and Instrumentation installation works for ONGC G1 & GS15 Fields Development Project at Amalapuram, AP.

Scope of Work: Installation of Switchgear, Cables, Cable Trays, Termination, Electrical Equipments, Panels, Instruments Installation, and Instrument cable, Field Instruments & Instrument loop checking.

Date of Completion: March 2008



Client: M/s. Reliance Refinery Limited, Jamnagar

EDAC

Project Title: Mechanical works for Sulphur Recovery

Unit (SRU) 3 Trains at Reliance Jamnagar Refinery Expansion project.

Scope of Work: Erection of Piping and Structural works.

Date of Completion: March 2008



RELEVANT EXPERIENCE cont'd



Client: U.S. Army Corps of Engineers, Gulf Region Division

Project Title: GE Frame 9E Combustion Inspection at Khor Al-Zubhair

Scope: Combustion inspection of two (2) General Electric Frame 9E gas turbines, including inspection and repair of the generators, auxiliaries and BOP. Provided engineering, equipment, parts, repairs, labor, life support, security, start-up and commissioning.

Equipment: Two (2) General Electric Frame 9E Combustion Turbines, Generators and Auxiliaries

Fuel: Natural Gas

Rating: 123 MW



GE Frame 9E Combustion Turbine

RELEVANT EXPERIENCE cont'd



Client: U.S. Army Corps of Engineers

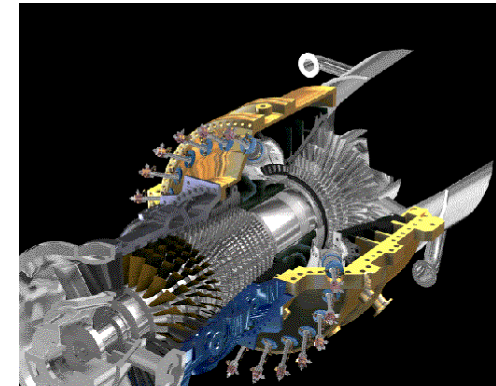
Project Title: Siemens V64.3A & V94.3A
Combustion Inspection at Taza Power Plant

Scope: Combustion inspection of 1 Siemens V64.3A and 1 Siemens V94.31 gas turbines, including inspection and repair of the generators, auxiliaries and BOP. Provided engineering, equipment, parts, repairs, labor, life support, security, start-up and commissioning.

Equipment: 1 Siemens V64.3A and 1 Siemens V94.3A Gas Turbine and 2 Sets of Generators, Auxiliaries and BOP.

Fuel: Natural Gas

Rating: 65 MW and 260 MW



Siemens V64.3A Gas Turbine



Siemens V94.3A Gas Turbine

RELEVANT EXPERIENCE cont'd



Project Name: Operation and Management, Mussayib Power Plant, Iraq

Client: U.S. Army Corps of Engineers, Gulf Region Division

Scope: Provide facility engineering improvements, facility operations, maintenance, and management to include Life Support, PSD Security, Force Protection

Equipment: Ten (10) each, General Electric LM6000 Combustion Turbine, Generator, Auxiliaries and BOP

Fuel: Diesel currently; scheduled for conversion to dual fuel (diesel and natural gas)

Rating: 50 MW each – 500 MW total



RELEVANT EXPERIENCE cont'd



The Malburg Plant, Vernon, California, in 2004



The generator lift at the City of Riverside, 2005.

U.S. DoD, Buzurgan Power Plant, Iraq	43 MW GE LM6000 Gas-Fired	Site selection, conceptual design, equipment location and expediting, detailed design and site supervision.
U.S. DoD, Nasiriyah Black Start Gas Turbine Unit, Nasiriyah, Iraq	40 MW Oil-Fired GE Frame 6	Site selection, equipment location and expediting, conceptual and detailed design and site supervision during construction.
U.S. DoD, Khor Al-Zubayr 63 MW Gas Turbine Peaking Plant Upgrade, Iraq	63 MW ABB Gas Turbine	Repair-or-Replace evaluation and installation design for rehabilitation of an existing peaking unit in Iraq.
GE Power Systems Cannon Falls 375 MW Two-Unit Peaking Project, Minnesota	375 MW 2 x 0 GE/7FA	Complete design provided to GE Power Systems for a large, fast-track, dual-fuel simple cycle project developed to supply peaking power to Invenergy
Imperial Irrigation District, Niland Simple Cycle Power Plant, Southern California	45 MW LM6000 SC	Owner Engineer support to IID for EPC development of the repowering, including a new gas turbine and HRSG. Scope included permitting, plant cycle definition, equipment selection, and EPC documents.
Tucson Electric Power Valencia Peaking Unit, Nogales, Arizona	GE LM2500 Simple Cycle	Installation and BOP engineering for a dual-fuel GE LM2500 peaker unit at the Valencia Substation site in Nogales.
Calpine, Long Island Combined Cycle Plant, New York	80 MW 1-on-1 LM 6000 CC	Full installation and BOP engineering for a fast track combined cycle project at an existing peaking project site.

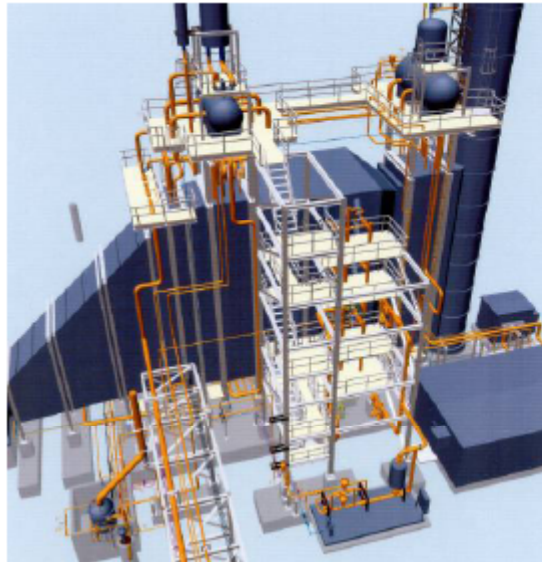
RELEVANT EXPERIENCE cont'd



The Afton 7FA: let the work begin! 2005.

City of Vernon, Malburg Combined Cycle Power Plant, California	138 MW 2-on-1 GTX 100 CC	Project definition and full engineering for a high-efficiency two-on-one combined cycle project for a California muni.
PNM, Afton Generating Station, New Mexico	135 MW GE 7FA SC	Owner Engineer for project definition, equipment selection, EPC development and construction support.
City of Redding Combined Cycle Plant, Redding, California	50 MW 1-on-1 GTX 100 CC	The first CC use in the U.S. of advanced GTX 100 turbine. A complex detailed design assignment for the repowering of an existing steam turbine.
Calpine, Bethpage Energy Center, Long Island, New York	48 MW LM 6000 SC	Fast-track LM6000 design. Won the <i>New York Construction News</i> "Best Project of the Year" award.
Calpine, Riverview Energy Center, Antioch, California	48 MW LM 6000 SC	BOP and installation design for a new LM 6000 located at a Georgia Pacific wallboard plant.

RELEVANT EXPERIENCE cont'd



View from the City of Redding 3D Model, 2003

Calpine, Wolfskill Energy Center, Fairfield, California	48 MW LM 6000 SC	BOP and installation design for a new LM 6000 located at a substation site in Fairfield, California.
Rolls-Royce, Bellacorick Combined Cycle Project, Ireland	60 MW 1-on-1 CC	Owner Engineer responsible for initial project definition, site development, conceptual design and permitting.
Calpine, Kennedy International 3 rd Turbine Project, New York	48 MW LM 6000 SC	BOP and installation design for addition of a third gas turbine – a simple cycle LM6000 – to an existing combined cycle plant. Plant design complete; project is on hold.
Benton County PUD, Benton Peaker, Washington	27 MW P&W FT8 SC	BOP and installation engineering for an FT-8 peaking generator for the Benton PUD system.
MMPA Chaska Peaking Plant, Chaska, Minnesota	45 MW GTX 100 SC	Engineering for power island, interconnect, SCADA and BOP systems for the U.S. debut of ALSTOM's GTX 100.
Alstom, GTX 100 Two-On-One Reference Plant Design	126 MW GTX 100 2-on-1 CC	Reference plant design developed for ALSTOM Power for the U.S. two-unit reference plant design.

RELEVANT EXPERIENCE cont'd



The Buzurgan LM6000 Project, Iraq, 2004.



The Afton 7FA unit at sunset, 2003.

Rolls-Royce Trent Reference Design, Peaking Plant	58 MW Trent SC	Reference plant design developed for the U.S. peaking plant application of R-R's new high-efficiency Trent gas turbine.
Calpine, Pajaro and Herndon Plant Development, California	Two LM 6000 SC	Project development support and siting consultation for two California LM6000 peakers developed by Calpine for the Cal Iso peaking RFP.
Enron North America, Columbia Plant OE Engineering	2-on-1 LM6000 CC	Owner Engineering including cycle design, heat balance preparation and BOP conceptual design for the Columbia combined cycle.
NEPCO, LM 6000 Peaking Plant Siting Reviews	LM 6000 peaker sites	Evaluated and screened potential peaking installation sites in the West and Northwest for Enron LM 6000s.
Caithness, Combined Cycle Plant OE Support, Colorado	2-on-1 CC	Owner's Engineering including design review, technical support for turbine negotiations and BOP for a new combined cycle plant.
Caithness, Expansion Options Review, Nevada Peakers	220 MW SC Plant	Modeling and evaluation of expansion options at the Sun Peak peaking plant in Nevada.
Idaho Power Peaking Resource Development, Idaho	100-200 MW Peaking Supply RFP	Owner Engineering for development of the RFP and evaluation of EPC bids, as well as permitting and PUC support.

RELEVANT EXPERIENCE cont'd

Client: Large US Contractor, Persian Gulf

DEMAR LTD.

Project Description: Marine Terminals Upgrades - Demar provided an assessment, plan and improvements to living conditions for personnel on 2 marine terminals. Upgrades included conex style berthing units, RO unit, power generation, and storage containers for dry storage, drinking water and MRE's; improvements to the base camp for existing loads and the addition of ballistic shielding for gun positions, new berthing, kitchen and other service containers; new fender systems, ladders and stairways and 4,000 Lb capacity deck cranes to off load supplies; support features were added including communication towers and related equipment

EXECUTIVE ADVISORY GROUP

Isaac (Ike) Gibson, Veteran, USAF. CEO. A highly successful Systems Engineering Executive with extensive experience in domestic and international security and utility industry. He is knowledgeable in all facets of military and government markets. Mr. Gibson is the founder and owner of Wintara, Inc. a privately held systems integration, veteran owned business established in 2001.

Tom Arnsmeier, Vice President & Chief Operating Officer. Mr. Arnsmeier brings his over 20 years experience in the global engineering sector. He has Extensive senior level experience in running large operating units and management of major programs, in the public and private sector. He joins Wintara after his most recent role as Vice President of the Homeland Security Solutions Business Unit at Raytheon Technical Services Company.

Daniel James III, Lieutenant General USAF (Ret.) He is a seasoned military officer with a career spanning over 30 years as a military officer. General James III rose up through the military ranks beginning his career as a Second Lieutenant in 1968 until his retirement in 2006 as Lt. General of the United States Air Force Director of the Air National Guard. Gen. James III has had a distinguished military career having been the recipient of numerous military and civilian awards. He has over 4,000 hours of flight hours in a variety of aircraft including the F-16. The general is responsible for formulating, developing and coordinating policies, procedures and programs of over 168,000 National Guardsmen in more than 88 flying units and 200 geographically separated units from the United States to the Pacific and the Caribbean. He holds a Bachelors degree in Psychology from the University of Arizona, Tucson and degrees from the Air Command and Staff College and National Security Course.

EXECUTIVE ADVISORY GROUP cont'd

Dr. C. Robert Kline Jr. professional activities span over 25 years with extensive experience in the fields of Modeling and Optimizing Energy Distribution Networks including the installation of Control Systems in power plants. He has had important roles in Fortune 100 companies and including US government agencies such as Exxon, Halliburton, Edison Electric, United States Air Force and Navy, and Department of Energy. He has delivered training curriculum training for operators of electric power generators. Dr. Kline Jr. holds a Ph.D. in Engineering from the University of North Carolina and a M.Ed from the University of North Carolina.

Lawrence E. Gillespie, Sr., Brigadier General, USA (Ret.) General Gillespie is a senior executive with over 30 years of progressive and demanding leadership in National Security, and military aviation as a General Officer in the United States Army. He is a recognized authority in many of the technical challenges and solutions associated with Homeland Security and National Defence. As a civilian, General Gillespie has held a series of increasingly important positions with the Air Transport Association, Hughes Aircraft Company, Raytheon Systems Company, NCI, Hampton University, and Eagle Force Association. BA, State University of New York. MBA, Shippensburg University.

Dr. Vivek R. Dave's professional experience in the field of engineering expands over 20 years solving complex problems involving Sensing, Data Interrogation, Process Understanding, Process Control in fields such as Manufacturing, Security and Defense applications with a specialty in Energy Infrastructure, Management of Nuclear Power and Manufacturing Engineering. The above mentioned technologies of risk reduction follow through Next Generation Data in manufacturing with National Security. Dr. Dave holds a Ph.D. in Engineering and Applied Science from Caltech and a Masters in Materials Engineering from MIT.

EXECUTIVE ADVISORY GROUP cont'd

Dr. Beverly Ann Barta has over 15 years of professional experience in the area of Environmental Engineering, Water Resources and Field Biology. She has hands on experience in the field of Ecology and involved in Disaster Assistance including Funding and Management. Her responsibilities have been both in the United States and Iraq. She was responsible for the water sector with 91 projects totaling \$522 million dollars. Dr. Barta holds a Ph.D. in Environmental Engineering and Water Resources from the University of Florida. In addition she holds a Master in Environmental Engineering from the University of Akron and a Master of Science in Environmental Studies from the University of Akron and a Bachelor's in Science in Field Biology from the University of Ohio.

Carl Bartoli, PE, Consultant Project Executive. An Engineering and Construction Business Executive with 30 years of domestic and international experience in the utility industry. Experience covers all facets of engineering and construction industry including project management, project development, senior line management and executive positions. Mr Bartoli served as Executive Vice President of Foster Wheeler International where he was responsible for directing and coordinating the activities of the Engineering and Construction Group in the development of projects in the United States, South East Asia with installed value of over \$2.8 billion dollars. Previously he served as President of Foster Wheeler USA. MSME, Columbia University. BSME, Fairleigh Dickinson University.

EXECUTIVE ADVISORY GROUP Cont'd

Dr. Ahmed Rubai has over 25 years of progressive experience in Electrical Power Generation. He has researched the development of intelligent controls for manufacturing systems. He has done extensive engineering hardware testing in laboratory. He has worked with Amtrak, US Army and NASA at their Glen Research Center. Dr. Ahmed Rubai holds a Ph.D. in Electrical Engineering from Cleveland State University He also holds a Master of Science in Electrical Engineering from Case Western Reserve University and a Bachelor of Electrical Engineering from El-Fathe University in Libya. Dr. Rubai holds the department chair as a Professor on Computer Engineering at Howard University in Washington DC.

Dr. Parthasarathy Jagannathan (JAGAN), Senior Turbine Engineer - 30 years with BHEL Ltd., India (Manuf. of GE & Siemens Turbines) Exe. Director of Corp. Engineering and Quality Development; General Manager of Engineering and R&D Tendering (for complete power plants to 200 MW); General Manager of Mechanical & Commercial in charge of all mechanical laboratories, Power plant Analysis, Diagnostics and Optimization Package (PADO) development; Head of Dynamics and Control (substation automation, design & development); 2 years as Consulting Engineer; 1 year New York University, Post Doctoral Fellow; BS, MS & Ph.D. Mechanical Engineering.

EXECUTIVE ADVISORY GROUP cont'd

Dr A. Ashraf A. Ibrahim work expands over 30 years of domestic and international experience. It includes developing strategies and guideline for new water and environmental department in municipalities in the Middle East. He has prepared tenders and RFP on Water Sewage Treatment Plants, Compact Units, Storm Water Systems, Pumping Station, Illicit Connection Elimination Program, Manual and Automatic Sampling Programs, QA/QC and Value Engineering. He completed all the technical engineering and management activities for 4 phases of Barracks 1 through 5 and JOC Buildings in Bagram Air Field in Afghanistan. His work includes Surveying Civil Site Reading and Engineering, Utility Relocation, Drainage, HVAC, Electrical and Construction Management. His responsibility has included transmitting engineering and construction submittals to the CEO responding to their comments. He was highly involved in the Water Treatment Plants in Erbil and Dukon along with the Water Distribution System. He managed the project with a cost over \$250 million dollars in the construction for the second largest Water Treatment Plant in Iraq consisting of 6000 m³/hr. In addition he was in charge of the design, procurement and construction of the plant along with the training of Iraqi engineers in design and O&M area. He rehabilitated and constructed the new sewage system, rehabilitation and construction of 12 pumping stations in Baghdad with a cost for this project of over \$50 million dollars. Dr. Ibrahim holds a Ph.D. and P.E. in Engineering, Construction Management and Geo Environmental matters.