Theodore Wong — Project Manager

Experience Highlights

- Current Project Manager for the AmerenUE AQCS Study for Rush Island.
- Project Manager of Owner's Engineer Project for Nova Scotia Power Inc. to review and evaluate a Biomass Cogeneration Project.
- Project Manager for the Phase I Study for the retrofit of CDSs, SCRs, and Mercury Controls on Units 3 & 4 at the NRG Indian River Power Station.
- Project Manager for the Phase I Study for the retrofit of DFGDs and Mercury Controls on Units 1 & 3, an SCR on Unit 1, SNCRs on Units 2 & 3 at the NRG Big Cajun II Power Station.
- Technical Director for the Mirant AQCS Fleet Project, which includes the retrofit of FGD systems at Mirant's Chalk Point, Dickerson, and Morgantown Stations.
- Project Manager/Engineer for a feasibility study to determine whether the use of scrubbers for SO_2 control is viable for the Mirant Canal Generating Station, Unit 1 (585 MW), Unit 2 (580 MW), oil-fired units at Sandwich, Massachusetts.
- Project Manager/Engineer for an SO_3 Mitigation Study at the Merrimack Unit 2 Power Station for Public Service of New Hampshire at Bow, New Hampshire.
- Project Manager/Engineer for a forced oxidation conversion of an FGD System on the McIntosh Unit 3 380 MW Power Plant for Lakeland Electric at Lakeland, Florida.
- Project Manager/Engineer for modifying the coal handling system at the NRG Indian River Power Station for Units 1, 2, & 3 to unload and reclaim PRB coal so that a blend of PRB and Eastern bituminous coal can be burned in the boilers.
- Project Manager/Engineer for an SO_3 Mitigation Strategy Action Plan that included an evaluation of wet electrostatic precipitators and other SO_3 mitigation technologies and a report on the comparison of the levels of mercury oxidation across "low SO_2 to SO_3 conversion" catalyst and "standard" conversion catalyst.
- Project Engineer for the 2 x 300 MW coal-fired Masinloc Power Project, procured the coal handling system and the ash handling system.
- Reviewed the coal-handling systems for Exelon Power at their Eddystone and Cromby Power Stations to burn PRB coal and to provide a report detailing the recommendations and order of magnitude cost estimates for implementing the required modifications.
- Reviewed coal handling systems for PSEG's Mercer Power Station to determine maintenance requirements for life extension and annual maintenance budgets.
- Project Engineer for Alexandria, N.H. wood-fired power plant.
- Project Engineer for Fitchburg, MA wood-fired power plant.
- General expertise on all systems and equipment for various power plants, including many different fuel types.

Education

Engineer's Degree, Mechanical Engineering. Massachusetts Institute of Technology, Cambridge, MA,

M. S., Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA

B.S., Mechanical Engineering, University of Pennsylvania, PA

Licenses and Registrations

Professional Engineer – Wisconsin, New Hampshire, Indiana, Massachusetts

Experience Summary

Mr. Wong is a registered professional engineer with over 35 years of experience in the Power Utility industry. Mr. Wong is an accomplished project engineer and has participated in numerous Power Projects. His work assignments include many major projects during which he was involved from the early stages of the projects through checkout and startup. The most recent project is the AmerenUE Rush Island FGD Project. This is a Phase I study to provide a capital cost estimate to add a WFGD System to Unit 1 & 2 for use with PRB coal. The system will be convertible to burn with Ill. No. 6 coal in the future. The conversion will include additional equipment and a SCR for each unit.

Mr. Wong was the Project Manager for the NRG AQCS Retrofit Project at the Indian River Power Station. NRG is retrofitting CDSs, SCRs, and Mercury Control Systems on Units 3 & 4.

Mr. Wong was the Project Manager for the NRG AQCS Retrofit Project at the Big Cajun II Power Station. NRG is retrofitting DFGD and Mercury Control Systems on Units 1 & 3, a SCR on Unit 1, and SNCRs on Units 2 & 3.

Mr. Wong was the Technical Director on the Mirant AQCS Fleet Project that is retrofitting FGD Systems at Mirant's Chalk Point, Dickerson, and Morgantown Stations. As Technical Director, he was in charge of maintaining consistency in the engineering and design between the three stations.

Mr. Wong had managed the feasibility study to determine whether the use of Scrubbers for SO_2 Control is viable for the Mirant Canal Generating Station. These projects involved not only the steam and power aspects, but also pollution control equipment such as SO_2 scrubbing, SO_3 mitigation, precipitators, ash disposal, and waste conversion systems. Mr. Wong's background also includes experience with water treatment equipment, material handling equipment, and system design.

Mr. Wong has managed the forced oxidation conversion project of a B&W FGD System at Lakeland Electric's McIntosh Power Plant Unit 3; managed the feasibility study of retrofitting FGD Systems, both wet and dry, at the PSEG Mercer Station Units 1&2; and managed a SO_3 Mitigation Study for the Merrimack Unit 2 Power Plant for the Public Service of New Hampshire.

Mr. Wong has also supervised the following material handling projects: Limestone and Gypsum Handling Systems for Dominion Energy's Chesterfield Station and Coal Handling System Modifications to burn PRB coal at NRG's Indian River Station. Other material handling projects include the review of the coal handling systems at PSEG's Mercer, the review of coal handling systems at Exelon's Eddystone and Cromby Stations, an EPC contract of a coal handling system at the Masinloc Power Station in the Philippines, and the EPC of an extension of the coal handling system and modifications to the limestone handling system at Indianapolis Power and Light's Petersburg Station.

Mr. Wong's projects have involved many different fuel types including coal, oil, natural gas, bark, waste wood, wood chips, and kraft liquor. He understands the various components that are needed to utilize the various fuels in the most efficient and economical manner, as well as meet environmental standards.

Mr. Wong's project assignments involved the execution and contract administration of numerous lump-sum/fixed priced and fast track contracts for various clients, including two fixed priced lump sum international projects. The work included writing the specifications, preparing the bid documents, evaluating the bids, approval of contractor submittals, and administration of the contract extras. The international projects included extended Site visits to assist Construction. His attention to project details was an important factor in the successful completion of those projects.

Selected Project Experience

AmerenUE, AQCS Study for Rush Island

Project Manager for the AmerenUE AQCS Study for Rush Island, a two-unit, 1250 MW emissions control study, which will compare various AQCS technologies to determine the optimum solution, and develop detailed cost estimates and schedules for the selected technology package.

Nova Scotia Power Inc. Biomass Cogeneration Project

Project Manager for the NSPI Biomass Cogeneration Project. Shaw is the owner's engineer for the review and evaluation of the acquisition of this biomass project. This project included using an existing wood-fired boiler to power a new condensing steam turbine with extraction steam being exported to an existing paper mill. Shaw's scope is to do a condition assessment of the existing equipment and to assist NSPI in determining the projected cost of the project.

Alexandria Wood-Fired Power Plant, Alexandria Power Associates

As Project Engineer/Lead Mechanical Engineer, Mr. Wong coordinated the engineering, design, and schedule of the engineering effort on this 15 MW wood-fired power plant.

Fitchburg, MA Wood-Fired Power Plant

As Project Engineer/Lead Mechanical Engineer, Mr. Wong coordinated the engineering, design, and schedule of the engineering effort on this 15 MW wood-fired power plant.

NRG Energy, Inc., Indian River AQCS Retrofit Project, DE

Project Manager for the Indian River AQCS Retrofit Project. Mr. Wong managed the Phase 1 study for adding CDSs, SCRs, and Mercury Control Systems to Unit 3 & 4. This project included the integration of the Alstom CDS equipment, the Babcock Power SCR Equipment, and the BOP systems; the preparation of engineering studies including FGD Technology Selection; and the preparation of a detailed cost estimate. (600 MW total).

NRG Energy, Inc., Big Cajun II AQCS Retrofit Project, LA

Project Manager for the Big Cajun II AQCS Retrofit Project. Mr. Wong managed the Phase 1 study for adding DFGD and Mercury Control Systems to Unit 1 & 3, SCR for Unit 1 and SNCRs for Units 2 & 3. This project included the integration of the B&W OEM equipment and the BOP systems; the preparation of engineering studies evaluating the various options such as urea versus aqueous ammonia for the SCR and SNCRs, cost of providing a new landfill for the DFGD recycle solids, and costs for stiffening the ESPs to meet the new ID booster fan design pressures; and the preparation of a detailed cost estimate. (3x600 MW total).

Mirant Corporation, Fleet FGD Retrofit Project, Maryland

Technical Director for the Mirant Fleet FGD Retrofit Project. In this role, Mr. Wong was responsible for ensuring design consistency and implementation of best practices across the Mirant Fleet. The project consists of engineering, design, procurement, permitting, construction, and startup for the wet FGD LSFO system producing wallboard-grade gypsum. The Fleet comprises Chalk Point Units 1&2 (700 MW total) Morgantown Station Units 1&2 (1200 MW total), and Dickerson Station Units 1, 2, & 3 (600 MW total).

PSEG, Mercer Station Units 1&2, Back End Technology Project, NJ

Project Manager/Engineering Manager for the preparation of studies for the retrofit of FGD systems, both wet and dry, at PSEG's Mercer Station Units 1&2. Mr. Wong oversaw completion of the Phase 1 studies and estimating for the project, which has progressed to the EPC phase, including engineering, procurement, installation, and commissioning of two complete dry flue gas desulfurization (FGD) systems, including a spray dryer absorber (SDA) for each unit, a common lime storage, lime handling, and slurry preparation facility, and a pulse jet fabric filter (PJFF).

Mirant Canal, LLC, Canal Generating Station, Sandwich, MA

As the Project Manager/Engineer, Mr. Wong is responsible for evaluating the existing Unit 1 (585 MW) and Unit 2 (580 MW) in order to determine if scrubbers are a feasible option for SO_3 Control. Dry Scrubbers and LSFO Scrubbers were evaluated for constructability and FGD OEM Vendors were interviewed to determine the applicability of the various technologies for controlling SO_2 at the Canal Generating Station. An indicative cost estimate was completed for both the Dry and LSFO Scrubbers and this was presented as a report to Mirant Canal, LLC. Once the economic evaluation is complete, an EPC specification will be prepared to have the project implemented.

Public Service of New Hampshire, Merrimack Unit No. 2, Bow, NH

As the Project Manager/Engineer, Mr. Wong was responsible for performing a SO_3 Mitigation Study at the Merrimack Unit 2 Power Plant. The study has two tasks, one that evaluated the replacement of the B&W tubular air heaters with a regenerative type air heater and to discuss the projected SO_3 reduction and the second one to review the existing MgO injection system and to recommend any modifications to optimize its effectiveness to reduce SO_3 emissions.

Lakeland Electric, McIntosh Power Plant Unit No. 3, Lakeland, Florida

As the Project Manager/Engineer, Mr. Wong is responsible for evaluating the existing B&W FGD System and Balance of Plant Equipment in order to determine if a conversion to a forced oxidation FGD System can be economically justified. Revised Process Flow Diagrams, Station Water Balances, and a Cost Estimate will be prepared as part of the project. The project is evaluating either wallboard grade or cement grade gypsum and the effect on the stations process waste treatment system and the reuse of the existing CSI sludge stabilization system. Once the economic evaluation is complete, an EPC specification will be prepared to have the project implemented.

Exelon Power, Eddystone Station Units 1 and 2, Cromby Station Unit 1

As a technical specialist, Mr. Wong studied the modifications required to the coal handling systems at the Exelon Eddystone and Cromby Power Stations to burn PRB coal. The study provided recommendations for modifications to the coal handling systems to burn PRB coal and an order of magnitude estimate for implementing the recommendations will be prepared.

Dominion Generation, Chesterfield FGD Project

As a technical specialist, Mr. Wong provided technical assistance to the Dominion Generation, Chesterfield FGD Project reviewing the limestone and gypsum handling systems and FGD Specification preparation.

Confidential Client, Columbus, Ohio, SO_3 Mitigation Strategy Action Plan Project

As the Project Manager/Engineer, Mr. Wong was responsible for a detailed order of magnitude evaluation of Wet Electrostatic Precipitators (WESPs) looking at the major equipment suppliers and their technologies, preparing cost estimates for installing a WESP concurrently with a wet FGD system at three sites, preparing cost estimates for retrofitting a WESP after a wet FGD system was installed at three sites and the costs of WESP pre-retrofit work that was cost effective to do during the installation of the wet FGD system in order to minimize the cost of the WESP and minimize the required outage.

Also included in the project was an evaluation of the other SO_3 mitigation technologies and a report on the SO_3 plume visibility dynamics.

A report on the comparison of the levels of mercury oxidation across "low SO_2 to SO_3 conversion" catalyst and "standard" conversion catalyst was prepared for the client. A survey of catalyst suppliers and a literature search was done to understand the current state of the industry with respect to predicted mercury oxidation, the available of documented test results of mercury oxidation and what guarantees for mercury oxidation are available from the catalyst suppliers.

PSEG, Mercer, Bergen, and Bridgeport Harbor Stations

Member of PSEG's "Think 20" Condition Assessment Project, reviewed coal-handling systems and made recommendations for a 20-year life extension and establishing annual maintenance budgets.

NRG, Indian River Generating Power Station, Delaware

Responsible for the assessment of the station's coal-handling systems and provided recommendations for modifications to receive, blend and reclaim Powder River Basin Coal to the station's boilers. Prepared cost estimate for NRG's use establishing its capital budgets for 2005.

Prepared an EPC Bid Specification for the Coal Handling Modifications to allow the Indian River Station to burn PRB coal and is now overseeing the technical review of the EPC Vendors submittals.

Entergy, NTEC Power Project, Harrison County, Texas

As the Project Engineer, Mr. Wong was responsible for the Engineering and Design necessary to support the permitting, site development, design, construction and commissioning of a 300 MW Combined Cycle Power Plant. The power plant has two sources of natural gas and used GE Combustion and Steam Turbine Generators, ABB HRSGs and a closed-loop cooling tower.

AES, Wolf Hollow Power Project, Wolf Hollow, Texas

As the Project Engineer, Mr. Wong was responsible for the Engineering and Design necessary to support the permitting, site development, design, construction and commissioning of a 800 MW Combined Cycle Power Plant. The power plant was natural gas fired and used Mitsubishi Combustion and Steam Turbines, Mitsubishi HRSG's and a closed-loop cooling tower.

FPL/Entergy, Combined Cycle Standard Power Plant

As the Project Engineer, Mr. Wong was responsible for the Engineering and Design necessary to support the permitting, site development, design, construction and commissioning of a 300 MW Combined Cycle Standard Power Plant. The Power Block Equipment, which is common to most power plants, was optimized for the Client's design standards and economic factors. Various site-specific equipment was studied and design parameters established.

Shaw Combined Cycle Reference Power Plant

As the Project Engineer, Mr. Wong was responsible for the Engineering and Design necessary to support the permitting, site development, design, construction and commissioning of a 300 MW Combined Cycle Power Plant. The Power Block Equipment, which is common to most power plants, was optimized for the Client's design standards and economic factors. Various site-specific equipment was studied and design parameters established.

Sithe Energies, Inc., Owner's Engineer Work, Mystic Betterment Project, Charlestown, MA

As the Project Engineer, Mr. Wong was responsible for the Engineering and Design necessary to prepare the Mystic Site so that Raytheon could mobilize for the Redevelopment Project (a new 1600 MW Combined Cycle Station). This involved the relocation of the existing Units 4, 5, 6 and 7 utilities to outside of the Raytheon Battery Limits. This in general required the construction of new Fire Protection/Service Water Tanks, a new Fire Pump House, a new Wastewater Storage System (3 tanks and pump house), a new Ignition Oil System, new Fuel Oil Transfer Pumps and Piping and associated work, such as electrical, civil, and instrumentation and controls. Existing structures had to be modified/ reinforced to accept the pipe support loads and runs of cable trays and conduits. The Betterment Project also included coordination of the remediation of the contaminated soil with the construction schedule.

Sithe Energies, Inc., Fore River Project, Weymouth, MA

As the Project Engineer, Mr. Wong was responsible for the Engineering and Design of the water supply line, a fuel oil supply line and a wastewater line for use by Raytheon on the Fore River Redevelopment Project (a new 750 MW Combined Cycle Station). These pipelines are run in the submarine tunnel between Quincy and Weymouth.

Sithe Energies, Inc. – West Medway Expansion Station, Medway, MA

As the Project Engineer, Mr. Wong assisted Sithe in the preparation of drawings necessary to support the permitting effort. These drawings include Site Arrangement Drawings that show the physical layout of the new Station with respect to the existing Power Station, Civil details of the new roads, parking lots and sidewalks. The new Station includes three simple cycle combustion turbines and ancillary equipment.

Sithe Energies, Inc. – Goreway Station & Southdown Station, Toronto, Canada

As the Project Engineer, Mr. Wong coordinated the transfer of information from Shaw's Boston Office to the Toronto Office in order to support the Sithe Energy Goreway Station and Southdown Station Projects. Shaw assisted Sithe in the permitting for these two stations and for the feasibility studies necessary to determine the commercial costs for the projects. Shaw had a large database of information used for the other Sithe U.S. Projects and for consistency; Sithe required that Shaw use the information. In addition, Shaw performed the heat balances, emission

studies. Mr. Wong scheduled and expedited the workflow between the two offices for these projects.

Jorf Larsfar Thermal Plant, Units 3 and 4, Jorf Larsfar, Morocco

As the Project Engineer, Mr. Wong directed the Engineering and Design Work associated with providing the Balance of Plant Scope for the ABB/CE Boiler Islands for Units 3 and 4 of the Jorf Larsfar Power Station. These are two 300 MW coal fired units built by an ABB international consortium. Our Client, ABB/CE, was responsible for the Boiler Island and subcontracted the Boiler Island Balance of Plant Scope of Work to Shaw on a lump sum basis. The BOP Scope of Work included the mechanical, electrical, instrumentation and controls and the building siding. The challenge of the work was the coordination of interface information with the other ABB consortium members, who were responsible for the Civil, Mechanical, Electrical and I&C work for the other Work Islands, such as the Turbine-Generator, Structural Steel and Power and Control Wiring.

Masinloc Coal-Fired Power Project, Republic of the Philippines

Mr. Wong served as the Project Engineer from early 1998 to April 1999.

As the Lead Mechanical Engineer, Mr. Wong procured the coal handling system and the ash handling system for the two-unit, 300 MW each, coal-fired Masinloc Power Project. This work involved an international procurement cycle, which qualified international bidders, solicited proposals for the systems, evaluated the proposals, and recommended the purchase of the lowest evaluated qualified bidder.

The Coal Handling System included two continuous ship unloaders, two stackers/reclaimers, the coal conveyor system, the screening and crushing equipment, the coal gallery tripper equipment, the associated electrical equipment, and the associated control and instrumentation.

The Ash Handling System included the bottom ash collection system (excluding the submerged drag chain conveyor), the pyrites collection system, and the dense phase dry ash system which transports the economizer, the air heater, and the precipitator dry ash to the yard fly ash silos.

Mr. Wong coordinated the Design and Engineering for the Coal and Ash Handling Systems with NAPOCOR (the Owner), MHI (the Client) and the Vendors. Numerous meetings were scheduled at NAPOCOR's Offices in Manila, at MHI's Offices in Nagasaki, at the Vendor's Offices (Waukegan, Wisconsin; Bjuv, Sweden; and Genoa and Padova, Italy), as well at S&W's Boston Office. Mr. Wong assisted in the mechanical completion of the Coal and Ash Handling Systems at the Masinloc Site; witnessed the Unit 1 Performance Tests for the Ash and Coal Handling Systems at the Masinloc Site; assisted MHI in completion of punch lists for the Ash and Coal Handling Systems at the Masinloc Site; and participated in the Operator Training/Orientation program at the Masinloc Site.

Paiton Units 7 and 8, Paiton, Indonesia

As the Lead Mechanical Engineer on the proposal, Mr. Wong provided the technical and estimating input for numerous power plant configurations for the two 660 MW coal-fired power plants. Working in support of Toyo Engineering, Order of Magnitude cost estimates were generated for the total project.

These estimates were then modified to various Toyo Engineering formats and many anticipated scope of work splits. Plant descriptions were then generated for the individual plant areas.

Once Toyo Engineering was awarded a portion of the project, Stone & Webster prepared detailed engineering proposals and scopes of work to perform the work as Toyo's subcontractor.

Boston Thermal Minot Street, Boston, MA – Steam Station Relocation Estimate

As the Lead Mechanical Engineer, Mr. Wong assessed the existing Minot Steam Station and prepared engineering estimates to provide a replacement steam plant at four selected locations within Boston. The project included determining the economic thermal cycle for the replacement station; evaluated the cost differences between the four selected sites; estimated the linkage costs for the replacement plant; and determined the environmental impact/requirements for the replacement plant.

The plant configurations analyzed were low-pressure boilers, high-pressure boilers with backpressure turbines, and a combustion turbine with a waste heat steam generator. Natural Gas and No. 6 fuel oil were the fuels utilized. The linkage costs included the interconnection to the Boston Gas Company, the Boston Edison Company, the Boston Water and Sewer Department (including the MWRA), the Boston Fire Department, the infrastructure constraints, and the Boston Thermal Steam Distribution System.

MIT Cogeneration Combustion Turbine Generator and Power Plant Controls Upgrade Cambridge, MA

As the Project Engineer, Mr. Wong directed the technical and estimating activities necessary to bid the lump sum engineering and construction management for the project. The project was a cogeneration combustion turbine-generator, which produced electrical power for the campus and steam for running the steam-driven chiller plant and for building heating. The project also included upgrading the existing boilers with modern controls and instrumentation; adding a distributed control system for the boiler upgrades, chiller plant, and new cogeneration combustion turbine generator; creating a new central control room; modifying MIT's primary power distribution system; and replacing the existing No. 6 fuel oil tanks with new double walled tanks.

The project was to be integrated within the existing power complex and involved extensive demolition. The project included procuring a new ABB dual fueled combustion turbine generator, an HRSG, new No. 6 fuel oil tanks, a new PCS System, and new primary power equipment.

Prospect Street Cogeneration Project, Indianapolis Power & Light and the Citizens Gas Company Indianapolis, IN

As the Project Engineer, Mr. Wong directed the technical and estimating activities required to submit a lump sum turnkey bid for the cogeneration project. This project was a cogeneration project that burned coke oven gas to produce approximately 30 MW of electricity and process steam for the coke generation facility.

The plant was situated at the Citizens Gas Company's Prospect Street coke producing facility on a restricted parcel of land. The plant's equipment included a dual fuel-fired boiler, an extraction steam turbine generator, four feedwater heaters, a condenser, and a cooling tower.

Kimberly-Clark Cogeneration Energy Study, Lee, MA

As the Project Manager/Engineer, Mr. Wong directed the technical and estimating activities necessary to prepare an appropriation grade estimate for modifying Kimberly-Clark's steam distribution system so as to utilize backpressure turbine-generators to provide process steam to the paper mill's users and to generate by-product electrical power.

The appropriation grade estimate included a backpressure steam turbine generator to replace a large 600 psig to 150 psig pressure reducing control valve station and replacing electric motors on the boiler feed pumps and vacuum pumps with backpressure steam turbines, which would utilize 150 psig steam and exhaust 50 psig steam.

Also included in the project was an order of magnitude estimate for a combustion turbine with a heat recovery steam generator burning either natural gas or No. 2 fuel oil.

Chesapeake Mill Expansion, Chesapeake Paper Company, West Point, VA

As Project Engineer, Mr. Wong directed the engineering, design, scheduling, and cost estimates for the Recovery Boiler No. 5 and the E-Line Evaporator Set and their ancillary equipment, buildings, and interfaces with the existing mill systems. Mr. Wong coordinated the engineering support to the contractors on Site during the construction of the project.

Madison Paper Mill Expansion, Madison Paper Industries, Madison, ME

As Project Engineer, Mr. Wong developed the appropriation grade estimate for the steam generation portion of the project including start-up oil-fired package boilers and a cogeneration steam plant with a fluidized bed boiler.

No. 10 Boiler Precipitator Addition, Nekoosa Papers Inc. (now Georgia-Pacific Corp.), Nekoosa, WI

As Project Engineer, Mr. Wong directed for the engineering, design, scheduling, and cost estimate for the addition of an electrostatic precipitator to the No. 10 Boiler at the paper mill. This fast track project was completed within its 16-month schedule.

Petersburg Generating Station Unit 4, Indianapolis Power & Light Company

As Lead Mechanical Engineer, Mr. Wong managed the engineering, design, and costs of the entire mechanical engineering effort (including piping, mechanical equipment, waste disposal systems, and facilities). He maintained the project schedule, budget, and manpower scheduling for mechanical engineering activities. He also coordinated mechanical engineering activities with other engineering disciplines. This work included administering fixed price turnkey contracts for the SO_2 scrubber, the waste disposal system, and the cooling tower.

Petersburg Generating Station Unit 4, Indianapolis Power & Light Company

As Principal Piping Engineer, Mr. Wong prepared and administered specifications for piping - design, shop fabrication, and installation; valves, excluding control and relief; piping specialties - traps, strainers, expansion joints; insulation and heat tracing. He also prepared and maintained the valve list. He reviewed flow diagrams for compatibility of piping, valves, and piping specialties; for proper interfaces between the piping system; and for proper interfaces with manufacturers.

Conceptual Engineering, Flow Diagram Group

As Lead Flow Diagram Engineer, Mr. Wong prepared flow diagrams for the following projects. The flow diagrams described all the piping systems in a power plant. The systems were either manufacturer designed systems (such as reactor vessel-related systems or turbine-related systems) or Stone & Webster designed systems. Mr. Wong ensured that the systems functioned as designed and that they conformed to Stone & Webster Technical Guidelines, NRC Requirements, ASME III Piping Code, and ANSI B31.1 Piping Code.
His work included the following projects:

- Sundesert Nuclear Plant (PWR), San Diego Gas & Electric Company
- River Bend Station (BWR), Gulf States Utilities Company
- Fulton Generating Station (HTGR), Philadelphia Electric Company
- Wisconsin Electric Power Company (PWR)

Mr. Wong also prepared operating diagrams for Mystic Station - Units 4, 5, 6, and 7 and Kneeland Street Station, Boston Edison Company (Fossil Stations).