SAGE MANAGEMENT CONSULTANTS, LLC

PROPOSAL TO CONDUCT COMPREHENSIVE MANAGEMENT AUDITS OF NEW YORK STATE ELECTRIC & GAS CORPORATION AND ROCHESTER GAS AND ELECTRIC CORPORATION Case 16-M-0610

FOR THE

STATE OF NEW YORK DEPARTMENT OF PUBLIC SERVICE

MODIFIED SECTION VIII – INDIVIDUAL EXPERIENCE & QUALIFICATIONS



February 21, 2017





February 21, 2017

Mr. Ronald Vero Project Manager New York State Department of Public Service Three Empire State Plaza Albany, New York 12223

Re: PROPOSAL TO CONDUCT COMPREHENSIVE MANAGEMENT AUDITS OF NEW YORK STATE ELECTRIC & GAS CORPORATION AND ROCHESTER GAS AND ELECTRIC CORPORATION, CASE 16-M-0610 – MODIFIED SECTION VIII – INDIVIDUAL EXPERIENCE & QUALIFICATIONS

Via: Email

Dear Mr. Vero:

SAGE Management Consultants, LLC (SAGE) is pleased to submit this modified Section VIII, Individual Experience & Qualifications, as recently requested by the Department of Public Service (DPS) to our proposal to conduct Comprehensive Management Audits of New York State Electric & Gas Corporation (NYSEG) and Rochester Gas and Electric Corporation (RG&E), Case 16-M-0610. This modified Section VIII is being submitted in an Adobe Portable Document Format (PDF) file through the Department of Public Service's (DPS's) Document and Matter Management (DMM) System.

Sincerely,

SAGE MANAGEMENT CONSULTANTS, LLC

David A. Whitman, CMC

Partner, Engagement Director, and Co-

Project Manager

David P. Vondle, CMC Partner and Co-Project Manager

Enclosure

VIII. INDIVIDUAL EXPERIENCE & QUALIFICATIONS

This chapter includes a resume for each member of the SAGE audit team detailing recent and relevant experience and credentials that are applicable to these audits.

DAVID A. WHITMAN, CMC – ENGAGEMENT DIRECTOR, CO-PROJECT MANAGER FOR ELECTRIC PLANNING AND REV PREPARATIONS, BUDGETING AND FINANCE, AND PLANNING AND PERFORMANCE MANAGEMENT, AND LEAD CONSULTANT FOR CORPORATE GOVERNANCE AND ELECTRIC INFRASTRUCTURE

Mr. Whitman is a highly accomplished management consultant with over 35 years of professional experience. A cofounder of SAGE Management Consultants, LLC, he is an expert in facilitating change and assisting clients in improving their business and operational performance. His main operational focus is utility operations and finance. He also has extensive experience with corporate governance and performance management. His specific areas of expertise include business planning, performance measurement, capital program planning and management, asset management, resource optimization, operational process efficiency and effectiveness.

Mr. Whitman has advised many oversight boards and commissions including the Pennsylvania Public Utility Commission, Massachusetts Office of Ratepayer Advocacy, Connecticut Public Utility Regulatory Authority, Washington State Auditor, Metropolitan District Commission (Hartford), Tacoma Public Utilities Board and the Lower Colorado River Authority Board. He has also advised numerous investor owned utilities including: Southern California Edison, Midwest Generation, FirstEnergy, CenterPoint Energy, PNM Resources and PacifiCorp, Inc. Additionally, he has served many publicly owned utilities such as: Colorado Springs Utilities, Anaheim Public Utilities, Omaha Public Power District, Long Island Power Authority, Sacramento Municipal Utility District and the Tennessee Valley Authority. Many of the assignments Mr. Whitman conducted for these clients included audits and reviews of similar scope and size as that being contemplated by the DPS and focused on the governance, operating reliability and organizational performance of these enterprises.

Prior to entering the consulting profession, Mr. Whitman was employed by the Nebraska Public Power District (NPPD), where he held several senior management positions in both the fossil and nuclear generation areas. His assignments included Station Manager of Gerald Gentleman Station, a 1350 MW central generating facility, Division Manager of Nuclear Support responsible for nuclear training, licensing, emergency preparedness, planning and budgeting associated with an 800 MW nuclear plant and several other operational and staff management positions. Before entering the utility industry, Mr. Whitman served as an officer in the U.S. Navy for over eight years in fleet and headquarters assignments.

EDUCATION AND CERTIFICATION

- Bachelor of Science, U. S. Naval Academy
- Master of Business Administration, University of Nebraska-Lincoln
- Graduate, Public Utility Executive Program, University of Michigan

- Graduate, APPA Senior Executive Program, University of Wisconsin.
- Certified Management Consultant by the Institute of Management Consulting, USA

RELEVANT CONSULTING EXPERIENCE

Mr. Whitman has relevant management consulting experience in the areas of:

- Corporate Governance
- Electric Planning
- Infrastructure Management
- Budgeting and Finance
- > Affiliate Relationships
- Planning and Performance Management

Examples of each are listed below.

Corporate Governance

Mr. Whitman has conducted numerous management audits and management consulting engagements addressing corporate governance and executive management. Examples include:

- ➤ Lead Consultant for corporate governance and executive management tasks in the 2015-16 management audit of PPL Corporation/PPL Electric Utilities. These tasks included a comprehensive review of board governance, committee structure, director independence, parent company board interface with regulated utility management, corporate policies, and regulatory affairs, as well as management and utility performance.
- Project Manager with oversight for executive management and corporate governance in the 2015 management audit of Eversource/Connecticut Light and Power. The audit included an analysis of the results of the Northeast Utilities merger with NSTAR to form Eversource.
- ➤ Lead Consultant for governance structure and process management processes, organizational effectiveness and competitive position in the 2014 Ten-Year Management Review of Tacoma Public Utilities. The audit was completed under the sponsorship of the Tacoma City Council.

Electric Planning

Mr. Whitman has an extensive power resources planning background. Some recent relevant assignments include the following:

Project Manager with oversight for the Electric Supply task in the 2015 management audit of Eversource/Connecticut Light and Power. CL&P delivers energy to some 1.2 million electric customers in communities within Connecticut. This audit task included an analysis of electric supply procurement practices, renewable resources, load forecasting, resource scheduling, financial hedging, risk management and power supply organizational management.

- ➤ Lead Consultant for development of a renewable resources audit plan for hydroelectric generating resources in 2011 for the Washington State Auditor's Office. Recently passed state legislation required large electric utilities in the state to achieve a 15 percent renewable energy standard by 2020 and vests authority in the state auditor to monitor the progress toward achievement by public power entities. To accomplish this, renewable resources audit standards and plans for wind power, solar, purchased power agreements and hydro facilities were required. Various renewable capacity adding measures claimed by utilities were analyzed to test their compliance with the legislation and facility specific audit plans were developed to guide future audits of the hydro resources.
- Project Manager in 2013 for an independent review and audit the draft integrated resource plan (IRP) developed by a Midwestern electric utility on behalf of the 22-member Nebraska Electric Generation and Transmission Cooperative. The client was the power supplier's largest wholesale customer and sought an independent review of the draft IRP to ensure accuracy of key assumptions and to validate the efficacy of the IRP results. The ultimate objective was to obtain an independent assessment of whether the power supplier had considered the optimum combination of supply and demand-side resource options to meet the forecasted demand, at an acceptable level of reliability, ensuring environmental preservation while achieving the lowest possible cost to the customer. The results of the review were produced in a study report and a presentation was delivered to the client's Board of Directors.

Infrastructure Management

Mr. Whitman has conducted numerous engagements associated with asset management, maintenance management, capital project planning and implementation. Some examples include:

- Mr. Whitman led a review of transmission and distribution infrastructure aging and its implications for the client's asset management and capital investment programs. The client was a metropolitan public power district serving over 350,000 accounts. The effort included a comprehensive review of all of the district's T&D assets and an evaluation of the replacement actions to be taken to maintain reliable service in the face of aging, deteriorated assets.
- ➤ In 2011, Mr. Whitman led a team of consultants in a rapid assessment of the capital investment program for DC Water, a large metropolitan water and wastewater enterprise. The client's capital program is comprised of several major projects that total \$5 billion and the completion of which extend into 2020's. The assessment included a review of program planning, finance, design and construction processes associated with the capital program. Key areas of focus included project justification, change order authorization and control, the use of contractor design engineering and construction services and the training required for client personnel.
- In 2011, Mr. Whitman led a team of consultants retained to identify the cost and schedule risks associated with an Extended Power Uprate (EPU) of the client's nuclear plant. With an estimated cost in excess of \$190 million, the EPU project

involved over 30 complex modifications, extensive licensing analysis, comprehensive supply chain activities and intensive planning for the uprate. All relevant project risks were identified, quantified and analyzed for cost and schedule impacts. A complex stochastic risk model was then developed to determine the overall impact of the identified risks on the EPU project. A risk-informed prediction of the likely cost and schedule requirements was developed along with a mitigation plan address unacceptable project risks.

Budgeting and Finance

Mr. Whitman has conducted numerous engagements addressing finance, budgeting and accounting issues, including designing finance and budget processes, analyzing financial risk and compliance issues. Some examples include:

- Project Manager for the finance and accounting task in the 2015-16 management audit of PPL Corporation/PPL Electric Utilities. This task included a comprehensive examination of corporate planning, budgeting, finance, accounting, tax accounting, cash management and risk management as well as internal controls, investor relations and numerous other finance and accounting functions.
- Project Manager for a 2009 labor cost and staffing analysis sponsored by the Chief Nuclear Officer of a two-unit nuclear plant as part of a sustained performance improvement and cost reduction initiative. Led a four-consultant team seeking to optimize plant staffing levels over the next five years in a methodical, non-disruptive manner. Improving operational and regulatory performance while reducing costs were primary objectives.
- ▶ Project Manager for a 2009 finance liquidity study on behalf of a large Midwest electric utility to determine the appropriate liquidity level needed to meet both known and unknown (emergent) cash requirements. This included identifying cash reserves required for expected outlays as well as the cash reserves needed for contingent events. The liquidity analysis included a stochastic (risk-based) determination of the impact of identified risks on cash requirements. This analysis was undertaken to assure retention of the client's "AA" S&P bond rating in an increasingly uncertain capital market.

Affiliate Relations and Transactions

- Project Manager for the affiliate relations task in the 2015-16 management audit of PPL Corporation/PPL Electric Utilities. This task included a comprehensive examination of the regulated utility's affiliate relationships, affiliate governance, affiliate transactions, service level agreements with affiliates, standards of integrity, pricing of affiliate transactions, value of affiliate relationships, ring fencing, indirect affiliate transactions and internal audits.
- Project Manager for the affiliate transactions task in the 2015 management audit of Eversource/Connecticut Light and Power. This included a thorough review of direct costs, various allocated costs and allocation methodologies as well as measures in place to assure affiliate relations and transactions compliance within the jurisdictions the regulated utility operates.

Planning and Performance Management

Mr. Whitman has extensive experience with planning and performance management. This includes designing utility planning and project evaluation processes, corporate performance programs, operational and financial performance metrics, performance reporting protocols, and comparative analysis as well as assessing performance trends and causation. Some examples follow:

- ➤ Lead Consultant for a 2011 consulting assignment that entailed development of a set of comprehensive key performance indicators for the company. The assignment involved assisting the client in the selection of performance indicators, the analysis of comparative data from other entities in the region and the effective presentation of comparative data in a report that would objectively portray the client's performance. The assignment also included evaluating the results and developing reasonable conclusions in order to initiate appropriate organizational actions to respond to performance deficiencies and improvement opportunities.
- ➤ Project Manager for a consulting team retained in 2010 to assist management with the improvement of the utility's strategic planning and financial planning processes. Key processes were redesigned to improve the alignment of the client's strategic priorities and expenditure of capital and O&M resources. A series of recommendations and an implementation plan for achieving the future state were provided to support prompt implementation by the client.
- ➤ In conjunction with an industry performance metrics program, assisted in the review of the reliability performance data and reporting of a large multi-state investor owned electric utility. The review, performed in 2011, focused on reliability, safety, operations dispatch, and outage management data as well as vegetation management, fleet, materials, and staffing data.

DAVID P. VONDLE, CMC, PROJECT MANAGER FOR CORPORATE GOVERNANCE AND ELECTRIC INFRASTRUCTURE, GAS PLANNING, PROJECT, WORK, AND EMERGENCY MANAGEMENT, AND CUSTOMER OPERATIONS AND LEAD CONSULTANT FOR PLANNING AND PERFORMANCE MANAGEMENT AND GAS INFRASTRUCTURE

Mr. Vondle has over twenty-five years of management consulting experience with special emphasis on conducting management audits of electric, natural gas, telecommunications, and water utilities for state regulatory commissions. Mr. Vondle has also led many consulting engagements with utilities in the areas of corporate performance management, affiliate relationships and transactions, corporate governance and executive management, organization and staffing, power and gas supply, human resources, workforce planning, professional and technical work management, contracting and contractor management, succession planning, and performance measurement and reporting. He has directly relevant experience in all of the scope areas for this management audit.

Mr. Vondle has played a key role in over thirty state regulatory commission sponsored management audits and studies. Electric and gas management audit or other regulatory proceeding subjects have included: National Grid/Niagara Mohawk, PPL

Electric Utilities, Eversource/Connecticut Light and Power, National Fuel Gas, United Illuminating, Southern Connecticut Gas, Southern California Gas, El Paso Electric, Central Illinois Light Company Gas Division, FirstEnergy/JCP&L and the three Pennsylvania LDCs, Pacific Gas & Electric Company, NiSource/Bay State Gas, Los Angeles Department of Water and Power, Peoples Gas, Central Vermont Public Service Company, NSTAR Electric and Gas, Eon/Louisville Gas & Electric and Kentucky Utilities, and AEP/Kentucky Power.

In addition, much of Mr. Vondle's management consulting experience is with electric and gas utilities, including New Jersey Natural Gas, PHI/Atlantic City Electric, Vectren/Indiana Gas Company, Southern California Edison, Sempra, Anaheim Electric Utility, Public Service Company of North Carolina (Gas LDC), Xcel/Southwestern Public Service, Public Service Company of New Mexico, Gas Company of New Mexico, Florida Power & Light, and CenterPoint Energy. These assignments were prior to 2010.

Mr. Vondle worked as an outside plant engineer (similar to electric and gas distribution engineering) and supervisor for the Ohio Bell Telephone Company before entering management consulting. His book, Service Management Systems: How to Create Competitive Advantages through Integrated Work Management, Materials Management, Facilities Management, and Cost Management Systems, was published by McGraw-Hill.

EDUCATION AND CERTIFICATION

- Bachelor of Science, Industrial Management, University of Akron
- ➤ Master of Business Administration, Southern Methodist University
- > Certified Management Consultant by the Institute of Management Consultants

RELEVANT CONSULTING EXPERIENCE

Mr. Vondle has relevant management consulting experience in the areas of:

- Corporate Governance
- Affiliate Relationships
- Gas Planning
- Procurement and Contracting
- Electric and Gas Infrastructure and Project, Work, and Emergency Management
- Planning and Performance Management
- Customer Operations

Examples of each are listed below.

Corporate Governance

Mr. Vondle has conducted numerous management audits and management consulting engagements addressing corporate governance and executive management. Examples include:

Lead consultant for executive management and corporate governance in the 2015 management audit of Eversource/Connecticut Light and Power. The audit

- included an analysis of the results of the Northeast Utilities merger with NSTAR to form Eversource.
- Project manager for executive management and corporate governance in the 2015-16 management audit of PPL Corporation/PPL Electric Utilities.
- Assisted a regulated transmission and distribution utility prepare for a management audit. Topics included executive management and governance, affiliate relationships and transactions, and performance management
- > Strategic planning for the consolidation of all corporate support services of a large telecommunications company. The consolidation reduced costs, improved service, increased competitiveness, and sharpened internal customer focus. Also developed the transfer pricing policy (chargeback system).

Affiliate Relationships

Mr. Vondle has appeared as an expert witness on affiliate relationships and transactions issues in the following jurisdictions:

- Alaska Public Utility Commission Contel rate case
- California Public Utility Commission PG&E financial crisis
- California Senate Energy Committee PG&E financial crisis
- Connecticut Public Utility Commission Southern Connecticut Gas affiliated interest proceeding
- ➤ Connecticut District Court State of Connecticut lawsuit against a district energy supplier owned by an investor owned utility
- > Florida Public Service Commission Florida Power & Light Company rate case
- ➤ Maine Public Utilities Commission Emera/Maine Public Service merger and Emera/Algonquin Public Utilities/First Wind affiliate issues
- ➤ New Mexico Public Service Commission Public Service Company of New Mexico's acquisition of the Gas Company of New Mexico
- ➤ Nova Scotia Utilities and Review Board Efficiency Nova Scotia, Maritime Link, and Nova Scotia Power Inc. affiliate codes
- ➤ Tennessee Public Service Commission United Cities Gas rate case
- > Texas Public Utility Commission Southwestern Public Service Company rate case
- ➤ U.S. District Court for the District of Columbia AT&T anti-trust trial

Mr. Vondle also has extensive consulting experience relevant to affiliate relationships, including:

- Project manager and lead consultant for affiliate relationships and transactions in a management audit of PPL Corporation/PPL Electric Utilities for the Pennsylvania Public Utilities Commission in 2015-16
- Lead consultant for affiliate interests in a management audit of the three FirstEnergy Pennsylvania operating companies for the Pennsylvania Public Utilities Commission

- ➤ Lead consultant in an analysis of the relationship between Energy East and its subsidiaries, The Energy Network and Connecticut Natural Gas, for a law firm in connection with litigation
- ➤ Lead consultant in an affiliated interest audit of SBC/Southern New England Telephone Company for the Connecticut Department of Public Utility Control
- ➤ Lead consultant in the areas of affiliate relationships and incentive compensation in an analysis of Louisville Gas & Electric's and Kentucky Utilities' earnings sharing mechanism for the Kentucky Public Service Commission
- ➤ Lead consultant for the areas of corporate payments/affiliated interests and income taxes in the review of Pacific Gas and Electric's financial condition in connection with the California energy crisis for the California Public Utility Commission.
- ➤ Lead consultant in the management audit of affiliate relations of Southern Connecticut Gas for the Connecticut Department of Public Utility Control
- ➤ Lead consultant for affiliate relations in a management audit of United Illuminating on behalf of the Connecticut Department of Public Utility Control
- ➤ Lead consultant in the areas of best practices, merger costs and savings, merger integration team analysis, and cost and savings quantification in the analysis of the SBC/Ameritech merger for the Illinois Commerce Commission
- Led a team for a large Western combination utility that examined all of its shared support services and recommended a new management process that will improve internal client satisfaction and reduce costs. The new management process includes clear definition of roles, defined quality and service requirements, accurate costing, clear pricing and billing, and integrated business planning and performance appraisal.
- ➤ Lead consultant in the areas of affiliate interests and jurisdictional cost allocations in the Missouri Public Service Commission sponsored management audit of Utilicorp United

Procurement and Contracting

- ➤ Lead Consultant in the areas of inter-company contracting and contract services management with former affiliates for a major private energy company in 2004. The project included contracts for power procurement, administrative and general services, and energy management services.
- Directed the overhaul and modernization of the services contracting process for a large energy utility. The effort included the company's contracting philosophy, contracting economics, contractor qualifications, labor relations issues, bid packaging, bidding and selection procedures, contract pricing, contract documents, internal controls, and audit requirements
- Project manager for an engagement to develop and install a state-of-the-art, comprehensive integrated procurement management system for an electric utility with annual materials and services expenditures in excess of \$500 million. The project resulted in superior management information and control, reduced clerical

- burden on purchasing agents, and substantially increased emphasis on service to users and purchased material cost reduction.
- Project manager for an engagement with a large Southeastern electric utility to modernize its purchasing department. This effort covered the organization structure, staffing levels, information systems, procedures, and performance measurements. The result was a more cost efficient operation that provided substantially better internal client service.
- ➤ Led an analysis of terminal leasing and operations alternatives for the Los Angeles World Airports (LAWA). The study was in support of LAWA's efforts to determine the optimal balance of privatization and internal operations. The full spectrum of alternatives was considered, from full lease/privatization of terminals to internal operation of terminals with airlines as tenants.
- ➤ Lead Consultant for a project for a major southwestern energy company's law department in the examination of a series of contracts with affiliates and former affiliates. The contracts covered outsourced power purchases, transmission, pipeline operations, administrative services, fuel purchases and dispatch. The engagement identified multiple opportunities for improvement in contracting and contractor management.
- ➤ Lead Consultant in the areas of inter-company contracting and contract services management with former affiliates for a major energy company. The project included contracts for outsourced power procurement, administrative and general services, and energy management services. Many problems were identified and solutions were developed.

Gas Planning

Mr. Vondle has conducted multiple engagements addressing natural gas supply issues, both regarding local distribution company provision of default service and electric generation procurement of large scale gas supplies. Examples of this experience follow.

- ➤ Lead consultant for gas supply planning and gas portfolio management for the Pennsylvania Public Utility Commission's sponsored management audit of the Philadelphia Gas Works. The study included the organization and staffing for gas supply, gas supply information systems, the gas supply planning process, the gas supply portfolio, and hedging activity.
- ➤ Lead consultant for gas supply in the management audit of National Fuel Gas' Pennsylvania operations for the Pennsylvania Public Utility Commission.
- Lead consultant for gas supply in the management audit of the Central Illinois Light Company gas utility for the Illinois Commerce Commission.
- ➤ Lead consultant in the review and analysis of Los Angeles Department of Water and Power's gas procurement and wholesale power trading risk management activities as part of the Department's Ten-Year Strategic, Industrial, and Economic Survey.
- ➤ Lead consultant in the review and analysis of Pacific Gas & Electric's gas supply portfolio in conjunction with the California Public Utility Commission's sponsored

- study during the California energy crisis. Examined the gas supply portfolio and related storage and peaking facilities in the context of the cash crisis to assure continued reliable gas supply for the remainder of the winter. The study also examined PG&E's financial hedging activities.
- Project manager, lead consultant, and expert witness in a case to assist the State of Connecticut in a lawsuit against Energy East's Hartford district energy subsidiary, an affiliate of Connecticut Natural Gas. The project included an analysis of the price of gas included in the pricing of district energy services.
- ➤ Lead consultant on a project for a major western energy company's law department to audit a multi-year power purchase agreement worth one billion dollars per year. The study included an analysis of the gas procurement pricing that was the basis of the power procurement price.
- Reviewed an "All Requirements" electric power supply contract in connection with a management audit of an investor owned transmission and distribution utility.
- ➤ Lead Consultant in a project for a major Midwestern IOU in the development of a strategy for the acquisition of provider of last resort (POLR) power. The engagement considered all major power procurement contracting methodologies, including auctions and bilateral power purchase agreements.

Electric and Gas Infrastructure and Project, Work, and Emergency Management

- ➤ Lead Consultant for transmission and distribution in a management audit of the FirstEnergy Jersey Power & Light Company for the New Jersey Board of Public Utilities. The scope of work included asset management, program management, project management, contracting and contractor management, work management and emergency planning and management.
- ➤ Lead consultant on an engagement for an electric and gas combination utility to develop a labor resource optimization program. The program included a review of enterprise metrics and targets and leveraging the performance management process to achieve the program objectives of reducing employee staffing by ten percent through attrition.
- ➤ Lead consultant on an engagement to provide management consulting services to assist a Texas electric and water authority unit in determining the effectiveness of its management and business processes, internal project controls, and capital planning program.
- ➤ Lead consultant for gas system operations in a management audit of Southern Connecticut Gas for the Connecticut Department of Public Utility Control. The audit scope included system planning, asset management, program and project management, work management, and incident response.
- ➤ Lead consultant on the management audit of Peoples Gas Light/North Shore Gas for the Illinois Commerce Commission in the areas of technology use, systems betterment, maintenance programs, and system mapping and records. Examined the economics of the utility cast iron replacement program and the adequacy of the cathodic protection program.

- ➤ Team Leader in the areas of distribution operations and measurement in the California Public Utility Commission's ordered management audit of Southern California Gas.
- ➤ Directed a process improvement program for a major southeastern gas utility. Areas included were system integrity (leak survey, leak repair, valve maintenance, right of way maintenance, patrols and inspections, cathodic protection, and pipe replacement program) and pressure management (compressor stations, SCADA, metering, regulation, measurement, city gate stations, LNG plant, farm taps, odorization, and the gas operations center).
- ➤ Directed a project to achieve cost reductions and customer service improvements through organization, work management policy, and facility changes for a large gas company. Areas covered included engineering, customer service, construction, maintenance, warehousing, and business offices.
- ➤ The audit scope included gas system safety performance and pipeline safety regulations compliance programs.

Planning and Performance Management

- ➤ Lead consultant for planning and performance management on a management audit of National Grid/Niagara Mohawk for the New York Department of Public Service.
- ➤ Lead consultant on a Corporate Performance Management Organization and Process Improvement program for a Midwest investor owned combination utility. The program included the mission statement, strategic planning, business planning, issues management, performance metrics, individual performance planning and evaluation and incentive compensation.
- Conducted a detailed review and improvement program for a large electric and gas combination utility's performance management program. Topics included key performance indicators, benchmarking and target setting, gap analysis, improvement initiatives, and integration with the planning and budgeting process.
- ➤ Conducted a review and analysis of an electric utility's and its affiliates' benchmarking and performance management programs in connection with a rate case. The effort resulted in testimony to establish "good performance" by the utility and its affiliates.
- Conducted best practices studies for individual clients or small groups of electric and natural gas utility clients on topics including engineering, maintenance management, damage prevention, dispatching, and customer service.
- Project manager on an engagement to develop a balanced scorecard of key performance indicators for a large Midwestern energy utility. The indicators were developed to guide the business planning process and for self-evaluation.
- ➤ Initiated, developed, and directed the AUC Management Consultants International Best Practices Consortium for utilities. Over its seven years of operation, the Consortium had thirty utility participants from seven countries. The Consortium included a balanced scorecard of benchmarked performance

measures covering all aspects of company operations and customer service and examined innovative best practices from around the world.

Customer Operations

- Project manager for a management audit of PPL Electric Utilities customer services operations
- Lead consultant for customer services in a management audit of FirstEnergy's three Pennsylvania companies for the Pennsylvania Public Utility Commission.
- ➤ Lead Consultant for customer services in a management audit of Southern Connecticut Gas for the Connecticut Department of Public Utility Control.
- Lead Consultant for customer services in a management audit of United Illuminating for the Connecticut Department of Public Utility Control.
- ➤ Conducted a meter to cash improvement program for a large municipal combination utility. Particular areas of emphasis included meter operations and the billing interface.
- ➤ Directed a project to analyze and improve the service, quality, and cost performance levels for the customer service representatives and service technicians for a major mid-western gas utility.

GEORGE W. EVANS – LEAD CONSULTANT – ELECTRIC PLANNING AND REV PREPARATIONS

Mr. Evans is a highly accomplished electric planning consultant with over 35 years of professional experience. He has appeared as an expert witness in 52 proceedings before state public service commissions, in federal court, in state court and before the FERC. He is an expert in integrated system planning for electric utilities, electric system operations, load forecasting, demand-side management, distributed energy resources, and the integration of wind and solar resources. His main operational focus is long-term utility planning and the optimal utilization of diverse resources. His specific areas of expertise include asset planning, capital program planning, the optimal scheduling of planned maintenance and the evaluation of emerging technologies.

Mr. Evans has advised many oversight boards and commissions including the Connecticut Public Utility Regulatory Authority, the South Carolina State Energy Office, the state commissions of Alabama, Arizona, Arkansas, Colorado, Delaware, Georgia, Michigan, Mississippi, Nevada, Oklahoma, Pennsylvania, South Carolina, South Dakota, and Utah. He has also advised numerous publicly owned utilities such as Golden Spread Electric Cooperative, Nebraska Electric Generation & Transmission Cooperative, the Central Virginia Electric Cooperative and the City of Grand Island, Nebraska. Many of the assignments Mr. Evans conducted for these clients included operations reviews of similar scope and size as that being contemplated by the DPS and focused on integrated system planning, load forecasting and distributed energy resources.

Prior to entering the consulting profession, Mr. Evans was employed by Energy Management Associates, Inc., where he advised and assisted representatives of fifty

major investor-owned electric utilities in the areas of integrated system planning, thermal maintenance scheduling, system operations and related activities.

EDUCATION AND CERTIFICATION

- > Bachelor of Science, Applied Mathematics, Georgia Institute of Technology
- Master of Science, Applied Mathematics, Georgia Institute of Technology

RELEVANT CONSULTING EXPERIENCE

Mr. Evans has relevant management consulting experience in the areas of:

- Electric System Planning
- Electric Supply

Examples of each are listed below.

Electric System Planning

Mr. Evans has evaluated and analyzed the cost-effectiveness of the long-term system plans (or IRPs) of many electric utilities, as well as numerous related activities, including:

- ➤ In 2013, Mr. Evans evaluated the IRPs of Georgia Power Company on behalf of the Staff of the Georgia Public Service Commission and other parties, has presented recommended changes to the IRPs, and also evaluated the competitive process used by Georgia Power to acquire new generating resources.
- ➤ In 2016-17, on behalf of the South Carolina Office of Regulatory Staff, Mr. Evans performed the annual evaluation of the demand-side programs and the rate rider for DSM programs of the three major electric utilities in South Carolina. Evaluated the costs, benefits and impact analyses of a wide range of demand-side programs. Served as the project manager.
- > Mr. Evans was instrumental in the development of the rules for the acquisition of new generating resources in Georgia.
- ➤ In 2013, on behalf of the Nebraska G&T Cooperative, Mr. Evans evaluated and recommended changes to the process utilized by its power supplier to develop its long range plans. He presented his recommendations to the G&T Cooperative Board and to the power supplier's executive team.
- ➤ In 2012 and again in 2014, for the Staff of the Arizona Corporation Commission, Mr. Evans led a team to evaluate and analyze the long-term plans of the Arizona electric utilities, including Arizona Public Service, Tucson Electric, UNS Electric and Arizona Electric Cooperative. His recommendations were adopted by the Commission.
- ➤ In 2011, on behalf of the South Dakota Public Utility Commission, Mr. Evans assessed the Integrated Resource Plan of Otter Tail Power Company, specifically the Company's request to move into rates the cost of a wind generator. Served as project manager.

- Mr. Evans evaluated and analyzed the long-term resource plans of Black Hills Power & Light and Otter Tail Power for the Staff of the South Dakota Public Service Commission. His recommendations were accepted by the Commission.
- On behalf of the South Carolina Energy Office, Mr. Evans led a team to evaluate and compare the IRPs of the electric utilities in South Carolina, including Duke Power, Carolina Power & Light, Santee Cooper and others.
- Mr. Evans analyzed the long-term plan of South Carolina Electric & Gas for the South Carolina Office of Regulatory Staff. His recommendations were adopted by the Commission.

Electric Supply

Mr. Evans has extensive experience related to electric supply issues including energy and capacity procurement, supply contracting, cost assessments, fuel supply, generation maintenance and numerous other topics. Examples follow:

- Mr. Evans served as a Lead Consultant for the electric supply and task area for the 2015 comprehensive management audit of the Eversource/Connecticut Light and Power Company. This audit task included an analysis of electric supply procurement practices, renewable resources, load forecasting, resource scheduling, financial hedging, risk management and power supply organizational management.
- ➤ In 2012, Mr. Evans evaluated the projected net power costs of Rocky Mountain Power Company for the Staff of the Utah Public Service Commission in three general rate cases.
- ➤ For the Colorado Public Utilities Commission Staff, Mr. Evans performed a review of the electric commodity trading operations of the Public Service Company of Colorado.
- ➤ In 2016, Mr. Evans testified for the Michigan Environmental Council regarding an audit of fuel and purchased power expenses of Consumers Power.
- ➤ In 2016, Mr. Evans performed a detailed review for the Utah Division of Public Utilities of the thermal maintenance practices and procedures of PacifiCorp and PacifiCorp's operating company Rocky Mountain Power. The project included interviews with plant staff and an assessment of the success of the company's thermal maintenance practices and procedures and capital expenditure practices. Served as project manager.
- Mr. Evans authored an article in the Fortnightly entitled Backcasting A New Computer Application Can Determine Historical Truth for Utilities That Must Refute Damage Claims, October 1, 1993.

PAUL G. GARCIA - LEAD CONSULTANT - GAS PLANNING

Mr. Garcia provides consulting services in the areas of gas supply portfolio analysis, cost of service, rate design, and tariff development. He also develops power supply analysis, for coal, hydro, and natural gas utilities. He gives presentations to regulatory commissions regarding best practices for Local Distribution Company's (LDC's), natural gas purchasing programs, and electric distribution power supply options.

Mr. Garcia also assists utility clients with regulatory policy and strategy, project management support for utilities that are involved in complex regulatory proceedings, state and federal regulatory filing development, the development of innovative rates to achieve strategic objectives, unbundling of rates and the development of menus of rate alternatives, and economic development rates and performance-based rate development.

EDUCATION AND CERTIFICATION

- ➤ Bachelor of Science, Degree in Business Administration with concentrations in Accounting and Economics, minor in earth sciences and geology, from Indiana University (Bloomington)
- Graduate, Institute of Public Utilities, Michigan State University

UTILITY EXPERIENCE

Prior to entering the consulting profession in 2000, Mr. Garcia was employed by Louisville Gas and Electric (LG&E) and Kentucky Utilities (KU). He began his employment with LG&E in 1983 and the two companies merged in 1998. LG&E serves 322,000 natural gas and 403,000 electric customers in Louisville and 16 surrounding counties. KU serves 546,000 customers in 77 Kentucky counties and five counties in Virginia. Mr. Garcia held a number of different positions in the company including Accounting Analyst, Gas Supply Coordinator, and Rates and Regulatory Coordinator.

While employed at LG&E/KU, Mr. Garcia was responsible for natural gas supply planning and analysis including evaluation of service and supply alternatives and development of gas supply purchasing plans. His responsibilities included issuance of gas supply and service RFPs, evaluation of proposals, and negotiation of supply and service agreements. He purchased gas on the spot market and on a long-term basis as well as developed and reviewed the natural gas hedging programs. Mr. Garcia administered an annual budget for natural gas supply of \$200+ million. He completed a viability analysis of connecting to multiple Interstate natural gas pipelines. He was assigned to study production fields, including trips to offshore platforms in the Gulf of Mexico. He has a working knowledge of gas storage fields. He implemented and customized the initial LG&E SENDOUT® gas supply model. He was responsible for gas supply and storage forecasting as well as end user (retail) usage forecasts. He also responded to several gas supply Management Audits conducted by regulatory agencies.

Mr. Garcia was also a member of the internal company teams that ultimately acquired Natural Gas Clearinghouse (NGC) of Houston, Texas; Hadson Corporation of Dallas, Texas; and Gas Natural BAN, S.A. (GasBAN). GasBAN was a natural gas distribution company serving 1.1 million customers in the northern part of the province of Buenos Aires, Argentina.

Mr. Garcia was a member of the wholesale energy marketing team responsible for fuels. He was responsible for operational implementation of FERC Orders 436, 500, 636 and 888/889. Further, he served as fuels and transmission liaison in the LG&E and KU merger.

Mr. Garcia has also written and reviewed expert witness testimony in regulatory and legal proceedings. He developed natural gas firm transportation service tariffs as well as modifications to the Company's gas supply clauses and fuel adjustment clauses.

RELEVANT CONSULTING EXPERIENCE

Mr. Garcia's relevant gas planning consulting experience includes the following:

- Mr. Garcia developed study that was used to justify a shift from coal to biomass fuel for Richmond Power & Light in 2013.
- ▶ Mr. Garcia was extensively involved in the merger of gas related systems for Indiana Gas, Southern Indiana Gas, and Electric and Dayton Power and Light into Vectren Corporation. The merger of Indiana Gas and Southern Indiana Gas and Electric formed Vectren in 2000. Vectren purchased the gas assets of Dayton Power and Light in 2006. Mr. Garcia was responsible for integrating property accounting and major accounts billing into a single system. He simultaneously reviewed the gas supply plan for the combined Indiana Gas and Southern Indiana Gas and Electric systems. These two systems had several synergies, as their service territories were partly contiguous.
- ➤ For the Dayton Power and Light portion of the Vectren merger, Mr. Garcia reviewed the customer choice program in Ohio and helped integrate this into gas supply planning.
- ➤ In 2014, Mr. Garcia performed a cost of service analysis and rate design for Thermal (Steam) operations for Citizens Energy Group (Citizens Thermal) as well as developing load forecasts.
- Mr. Garcia refined the natural gas storage model for Delta Natural Gas Company in 2013. Other activities included preparation of pro-forma adjustments and class cost of service analyses.
- ➤ In 2015, Mr. Garcia reviewed gas supply purchasing procedures for Public Gas Company. Other activities involved preparation of revenue requirements, proforma adjustments, and rates for non-recurring charges.
- ➤ For the City of West Liberty (KY), in 2014, Mr. Garcia created a gas supplypurchasing program, developed natural gas revenue requirement and rates, and assisted with purchase of distribution system.
- ➤ In 2016, on behalf of Paris (KY) Combined Utilities, Mr. Garcia developed electric, water and wastewater cost of service and rates. Additionally, he created wholesale power cost adjustment and prepared a wholesale purchased power analysis incorporating gas fired peaking units.
- ➤ In 2016, for the Berea (KY) Municipal Utilities, Mr. Garcia prepared water, sewer and electric cost of service studies. Additionally, he performed feasibility analysis of hydroelectric project and completed a power supply analysis.
- Mr. Garcia developed a gas supply-purchasing program for the City of Olive Branch (MS).

Professional Associations

American Gas Association

- Indiana Energy Association
- Kentucky Gas Association
- Southern Gas Association
- American Public Power Association
- Kentucky Municipal Utility Association
- Kentucky Rural Water Association

ROBERT L. ROSENKOETTER, CPA – LEAD CONSULTANT – FINANCE AND BUDGET

Mr. Rosenkoetter has over thirty years of experience as a management consultant. He has been a project manager and functional expert on consulting and auditing engagements in the utility, extractive, and service industries, and has provided consulting advice and assistance to national, state, and local governments. He has designed, directed and participated in numerous management audits of electric, gas, and water utility and telecommunications companies, government agencies, and public and private entities. He has analyzed and evaluated financial organizations and their staffing levels; reviewed transactions, cost allocations formulas, and shared costs among affiliated companies and subsidiary organizations; designed and implemented financial reporting, accounting and information systems; and performed numerous analytical and financial reviews to reduce costs and improve effectiveness and efficiency.

Mr. Rosenkoetter has served as lead or senior consultant on over 40 management audits or assessments of public and investor-owned utilities, focusing on O&M and capital budgeting, financial operations, accounting and financial policies, pension and other post-employment benefits, affiliate transactions, cost allocations, shared services, and financial forecasting. He has been involved in focused cost verification audits, prudency reviews of fuel and purchased power adjustment clauses, and audits of energy efficiency programs and contract compliance.

He has participated in management consulting engagements with the following public power and investor-owned electric and gas utilities: Colorado Springs Utilities, Commonwealth Edison, Connecticut Power & Light, Dayton Power & Light, Duke Energy Indiana, Duke Energy Kentucky, Duke Energy Indiana, El Paso Electric, Equitable Gas Company, FirstEnergy/Jersey Central Power & Light, Georgia Power, Florida Power, Guam Power Authority, National Fuel Gas, Nebraska Public Power District, Orange and Rockland, PECO Energy, Potomac Edison, Philadelphia Gas Works, Potomac Electric, Public Service of New Mexico, Puerto Rico Electric Power Authority, Rockland Electric, Sacramento Municipal Utility District, San Diego Gas & Electric, Southern California Gas, Tacoma Public Utilities, United Cities Gas, EVN (Electricity Vietnam), PLN (State Electricity Company of Indonesia), and the Russian Electric Power Industry.

In addition to being responsible for the review and assessment of O&M and capital budgeting in management audits of electric and gas utilities, Mr. Rosenkoetter was the project manager for a zero-based budget project for the Government of Greece, involving the training of budget analysts and the development of budgets for all

government ministries and twenty of the largest government-owned enterprises for three annual budget cycles. He was also involved in another multi-year budget project, developing a financial forecasting and budgeting system for the state-owned petrochemical company of Indonesia.

Mr. Rosenkoetter's prior professional experience includes positions as a Principal in the consulting practice of Ernst & Young, a Senior Practice Director in the National Utilities Practice for Oracle, and a financial analyst for an international petrochemical company.

EDUCATION AND CERTIFICATION

- ➤ Bachelor of Science, Business Administration, Auburn University
- Master of Business Administration (Finance), Georgia State University
- Master of Professional Accountancy, Georgia State University
- Certified Public Accountant

RELEVANT CONSULTING EXPERIENCE

Mr. Rosenkoetter has relevant management consulting experience in the areas of:

- Electric and Natural Gas Utility Management Audits
- Electric and Natural Gas Utility Management Consulting

Examples of each are listed below.

Electric and Natural Gas Utility Management Audits

Mr. Rosenkoetter has conducted management audits of electric and natural gas local distribution companies, including:

- Lead consultant in a stratified management audit of Equitable Gas Company and its relationship with its affiliates for the Pennsylvania Public Utility Commission. Specific responsibilities included evaluating financial management, O&M and capital budgeting, and affiliate interests.
- ➤ Lead consultant in assisting the New York State Department of Public Service (NYSDPS) in a comprehensive management audit of National Fuel Gas Distribution Corporation (NFGDC) in 2012-13. Responsibilities included assessing all finance and accounting functions, including O&M and capital budgeting and affiliate relations and transactions.
- ➤ Lead consultant in a management audit of Connecticut Power and Light for the Connecticut Public Utility Regulatory Authority in 2015. Responsibilities included the review and assessment of all financial functions, including O&M and capital budgeting, accounting, treasury, pension and other post-employment benefits, and affiliate transactions.
- ➤ Lead consultant in a comprehensive management audit of FirstEnergy/Jersey Central Power and Light for the New Jersey Board of Public Utilities. Specific responsibilities included an examination of O&M and capital budgeting, finance and accounting records, cash management, affiliate relationships and cost allocation methodologies, pension and other post-employment benefits, support services, and a review of actions taken by JCP&L regarding prior audits.

- ➤ Lead consultant in the 2015-16 management audit of Pennsylvania Power & Light for the Pennsylvania Public Utilities Commission, responsible for the review of all finance functions, including O&M and capital budgeting, accounting, cash management, and pension benefits.
- ➤ Lead consultant in performing a financial management audit of the Potomac Edison Company for the Maryland Public Service Commission. Responsibilities included the review of organizational units, policies, and systems relating to all accounting and finance functions, including O&M and capital budgeting.
- Lead consultant in a stratified management and operations audit of Philadelphia Gas Works for the Pennsylvania Public Utility Commission. Specific responsibilities included reviewing all financial functions and affiliate transactions, and included the evaluation of O&M and capital budgeting, treasury functions, general accounting, and pension and other post-employment benefit reporting.
- ➤ Lead consultant in a management audit of the Colorado Springs Utilities for the City of Colorado Springs. Responsibilities included reviewing all financial functions, including O&M and capital budgeting, cost allocations, and assessing the appropriateness of affiliate transactions.
- ➤ Lead consultant in performing a stratified management and operations audit of PECO Energy Company for the Pennsylvania Public Utility Commission. Responsibilities included reviewing and analyzing all financial management functions and affiliate transactions.
- ➤ Lead consultant in a comprehensive management audit of Rockland Electric for the New Jersey Board of Public Utilities. Work included reviewing and assessing accounting and finance functions, organizations, systems, and documentation, including cost allocations with affiliated organizations to determine the existence of cross-subsidization and to evaluate the efficiency and effectiveness of affiliate relationships.

Electric and Natural Gas Utility Management Consulting

Mr. Rosenkoetter has conducted consulting engagements with electric and natural gas local distribution companies, including the following projects:

- ➤ Lead consultant, providing assistance to the New Mexico Public Regulation Commission staff in a prudence review and audit of the fuel and purchased power cost adjustment clause (fuel clause) and related documentation of the electric business operations of the El Paso Electric Company.
- ➤ Lead consultant in a review of Duke Energy Kentucky for the Kentucky Public Service Commission, focusing on proper accounting of costs, appropriate cost allocation procedures, and identification of cross-subsidization.
- ➤ Lead consultant in providing fuel cost recovery rider audit co-sourcing assistance to Dayton Power and Light Company (DP&L) to prepare DP&L for its annual review and audit. Items covered in the scope of work included fuel prices, allocation between wholesale and retail, sharing of gains and losses, coal handling costs, environmental compliance, PJM-related charges, power plant performance, and utility industry perspective.

- ➤ Lead consultant in assisting the Public Utilities Commission of Ohio staff in a management/performance and financial audit of the fuel and purchased power and system reliability tracker riders of Duke Energy Ohio.
- ➤ Lead consultant in providing regulatory and litigation support to the Public Advocate of the State of Maine regarding Central Maine Power Company's credit and collection policies and practices.
- ➤ Lead consultant, providing assistance to the New Mexico Public Regulation Commission staff in a prudence review and audit of the fuel and purchased power cost adjustment clause (fuel clause) and related documentation of the electric business operations of Public Service Company of New Mexico.
- ➤ Lead consultant in a management review of PLN, the electric power company of Indonesia for the World Bank. Responsibilities included evaluating PLN's customer service functions.
- ➤ Lead consultant in original cost audit of Commonwealth Edison for the Illinois Commerce Commission. Responsibilities included reviewing additions to ComEd's delivery electric utility plant over a 20-year period, verifying the appropriateness of the recorded original cost and accumulated depreciation and determining that the capitalization policy, property unit catalog, and system for recording capital costs are appropriate and have been maintained and applied in a consistent manner.
- Lead consultant in an ethics oversight review of Orange and Rockland Utilities for the New Jersey Board of Public Utilities. This work included assessing the organizations, practices, and procedures governing all finance and accounting functions, as well as all transactions between affiliated entities and cost allocation transactions.

JAMES B. AYERS CMC, LEAD CONSULTANT FOR PROJECT, WORK, AND EMERGENCY MANAGEMENT INCLUDING PROCUREMENT AND CONTRACTING

Mr. Ayers has over 25 years of consulting experience. His career includes management audits of utilities as well as similar reviews of public agencies and private industry companies. His most recent management audit was the assessment of Program, Project, and Work Management for the Long Island Power Authority.

As a work management expert, Mr. Ayers has supported utilities and clients in other industries in carrying out programs to improve workforce effectiveness and efficiency. His utility work management clients include AEP/Columbus and Southern Electric, Southern California Edison, Tucson Electric, Public Service Company of New Mexico, the Los Angeles Department of Water & Power, and the Omaha Public Power District.

Mr. Ayers is also an expert in supply chain management, which includes procurement and contracting. As a consultant evaluating utility and other industry processes, Mr. Ayers applies several standard good practices used in lean process design, project management, and supply chain process management. The approach employed compares existing practices to accepted good practices.

EDUCATION AND CERTIFICATIONS

MBA Stanford University

MS Stanford University, Industrial Engineering and Economic-Systems Planning

BS (with distinction) US Naval Academy

Certified Management Consultant by the Institute of Management Consultants

Member, IMC USA Certification Committee

Member, Council of Supply Chain Management Professionals

Member, Project Management Institute

RELEVANT CONSULTING EXPERIENCE

Mr. Ayers has relevant experience in project, work, and emergency management and procurement and contracting. Examples of each follow.

Project, Work, and Emergency Management

- ➤ Lead consultant for Program, Project, and Work Management for the NY DPS management audit of the Long Island Power Authority in 2012-13.
- As the program manager, Mr. Ayers led a 20-person team in a multi-year work management program that covered all departments in Columbus and Southern Electric Company. The purpose of the program was to improve the effectiveness and efficiency of the workforce.
- ➤ Lead consultant for establishing the Business Continuity Plan for the Port of Long Beach for its emergency planning program. This plan included identifying information technology support needed, preparing process descriptions for departments responding to events, and deployment of procedures to Port tenants.
- As a project manager or member of a consulting team, Mr. Ayers has conducted public sector performance audits that address capital program efficiency and effectiveness at the San Francisco Municipal Transportation Agency, the Orange County Water District, the Delaware River Port Authority, and the Metropolitan Water District of Southern California.
- ➤ Lead consultant for a performance audit of the Los Angeles World Airports (which includes LAX). His task areas were the evaluations of the capital program management processes and the Information Technology Division.
- Practice leader and developer of methodologies for activity-based costing for justifying process changes that cross department and organization boundaries. The work was for a dozen Department of Defense contractors including Bell Helicopter, Northrop, and General Dynamics subcontractors. The program was encouraged by all three military services. Results were employed in negotiating contract incentives for capital investment. The methodology has been applied in over a dozen private and government organizations in the form of activity-based costing practices.

Procurement and Contracting

- ➤ Mr. Ayers has conducted supply chain management consulting assignments and training in the US, Canada, the UK, Germany, Israel, Turkey, Hong Kong, China, and Korea.
- As a project manager or lead consultant for supply chain improvement projects, Mr. Ayers has served investor owned clients in diverse industries. In manufacturing, these include Xerox, General Electric, Bell Helicopter, Lockheed, Northrop Grumman, Bombardier Transportation, Schlumberger, Schering Plough, Air Products & Chemicals, Chrysler, Siemens, ITT Industries, and Federal Express.

PUBLICATIONS AND EDUCATIONAL ACTIVITIES

- As a subject matter expert, conducts two-day courses in *Supply Chain Project Management*. Course content is certified compliant with the Project Management Institute's Body of Knowledge published in its PMBOK-Guide®. The course has been delivered in the U.S., Canada, the U.K., Germany, Turkey, Hong Kong, Korea, and mainland China.
- ➤ Author of *Handbook of Supply Chain Management*, 1st & 2nd Editions, published in 2000 and 2006, ranked "5 stars" on Amazon. The books document best practices in five management tasks that comprise an SCM "body of knowledge."
- ➤ Coauthor with Mary Ann Odegaard of *Retail Supply Chain Management*, published in 2008 with a second edition due in early 2017.
- ➤ Co-author of supply chain management course offered by Sinclair Community College in Dayton under the sponsorship of the Advanced Integrated Manufacturing Center funded by the National Science Foundation.
- Author of Supply Chain Project Management: A Structured Collaborative & Measurable Approach, 2003, 2010. Documents Project Management Institute best practices for managing supply chain improvement projects including supply chain-based strategies, facility layout, and management of critical plant stock. The book has been translated into Simplified Chinese by Nanking University Press in Tianjin China.
- Principal editor of the Encyclopedia of Supply Chain Management, published by Taylor & Francis

BENJAMIN STEIN, LEAD CONSULTANT FOR CUSTOMER OPERATIONS

Mr. Stein has over 40 years of utility regulatory and management consulting experience. At the New York State Public Service Commission (NYPSC), Mr. Stein served in key leadership and policymaking roles and has broad staff experience, including utility management auditing, operational auditing, regulatory compliance, process and productivity improvement, workforce management analysis, rate case testimony, large commercial and industrial customer service advocacy, natural gas utility regulation, and the development and implementation of retail competitive markets, including retail customer service complaints and resolution. As a consultant, Mr. Stein has conducted analyses of customer services functions, metrics and performance management,

assessed affiliate relationships and performed affiliate transaction testing, evaluated gas maintenance and construction operations, gas safety performance, electric construction program planning and performance, and cost analysis benchmarking.

EDUCATION

Bachelor of Science, Mechanical Engineering, Rensselaer Polytechnic Institute

NYPSC Experience

While at the NYPSC, from 1970 to 2009, Mr. Stein was both the staff project manager for consultant-conducted audits and led staff teams to conduct more than 30 management and focused operational audits at utilities including: National Fuel Gas and Brooklyn Union Gas, Con Edison, Niagara Mohawk, LILCO, Orange and Rockland Utilities, New York State Electric and Gas, Rochester Gas and Electric, and Central Hudson Gas and Electric; as well as telephone and water companies.

In both the roles as staff project manager and as a staff functional specialist for the staff-conducted management audits, Mr. Stein was responsible for evaluating executive management, including Board of Directors governance, strategic and corporate planning, organizational design, and regulatory relations and compliance. He was also responsible for evaluating gas, steam, and electric system operations, including T&D planning and engineering, workload and manpower planning, system reliability performance, construction program performance and O&M productivity and cost management.

In 2007 at the NYPSC, Mr. Stein was responsible for re-instituting and redesigning the Management Audit Program and supervising and training a team of staff project managers responsible for consultant-led audits. He developed a new scope and approach, focusing on construction program planning and operational efficiency, including load forecasting, system planning, construction and O&M budgeting, construction projects and O&M programs, work management, and performance analysis and improvement. Mr. Stein applied this new audit scope and approach for the comprehensive management audits of Consolidated Edison and National Grid's New York electric business. He participated in interviews, analyzed information request responses and met frequently with the consulting team to reach conclusions, identify opportunities for improvement, and develop recommendations.

He supervised and participated in the consultant-conducted audit of Con Edison's Electric Emergency Outage Response Program, resulting in recommendations to improve electric outage planning, preparedness and response.

As part of the Management Audit Program at the NYPSC, Mr. Stein closely monitored the utilities' implementation of management audit recommendations by conducting onsite observations and senior officer interviews. For the consultant-assisted implementation of a telephone network engineering work management system, he participated in the working group of network engineers to identify and design repetitive work packages, estimate average durations, and define work assignment practices, scheduling systems, and work quality and productivity oversight.

Mr. Stein has presented management and operational auditing best practices and conducted training and workshops for government agencies, including the China State Electricity Regulatory Commission, European Regional Regulatory Administration, and Canada's National Energy Board.

Mr. Stein started his career at the NYPSC as a gas utility engineer and later served as a gas system planner, responsible for analyzing applications for the siting of new gas transmission pipelines. He helped develop a natural gas curtailment program that was used to allocate gas during shortages and administered a program to allocate gas to new industrial and manufacturing applicants with high priority end-uses.

Consulting Experience

- For the Pennsylvania PUC, Mr. Stein was the lead consultant for the Customer Services scope area of the 2015-16 Stratified Management and Operations Audit of PPL Electric Utilities Corporation. The scope included: customer contact centers, training and quality assurance, advanced metering and data operations, mandated regulatory programs, energy efficiency services, major accounts and business services, and revenue billing operations, revenue protection, and credit and collections. Mr. Stein also conducted a focused, in-depth, analysis of PPL's \$85 million Customer Assistance Program, including performance management and contract oversight of the outsourced program responsibilities of community-based organizations, program delivery effectiveness, and opportunities for improvement.
- ➤ For the Connecticut Public Utilities Regulatory Authority, Mr. Stein was the lead consultant for the Customer Services scope area of the 2015 Management Audit of The Connecticut Light and Power Company. The scope included analysis of: customer contact centers, meter reading and field operations, energy efficiency programs, strategic and national accounts, billing operations, credit and collections, and metrics management and performance effectiveness.
- Mr. Stein participated with SAGE on a project in 2012 to assist the Connecticut Public Utilities Regulatory Authority in evaluating the feasibility of developing a reimbursement program for refrigerated food and medication losses resulting from extended electric outages.
- For the Iowa Utilities Board, Mr. Stein participated in the management and affiliate relations audit of Interstate Power and Light, an Alliant Energy subsidiary, during 2011 and 2012. His responsibilities included affiliate transactions testing, natural gas pipeline safety compliance, the staffing of gas business functions, construction program planning, and cost analysis benchmarking. He was the lead consultant in an assessment of IPL's compliance with the Board's natural gas code cathodic protection requirements and the Board's inspection and auditing program for corrosion control. He evaluated the IPL's ten-year Cathodic Protection Test Point Program, the gas safety and internal auditing programs, safety management and employee training, and the effectiveness of IPL's Gas Inspection Maintenance and Management System. Based on his findings and conclusions, Mr. Stein recommended changes to IPL's regulatory reporting of

- gas pipeline safety incidents, new performance metrics for gas T&D programs and projects, and improved analysis of lost and unaccounted-for gas.
- ➤ In addition, as part of the IPL audit, Mr. Stein conducted affiliate transaction testing, including sample transactions of employee labor time and expense reporting and accounts payable. He assessed the reasonableness of the charges allocated to the regulated affiliate, taking into consideration the operational necessity of the transaction, the appropriate assignment of labor costs, the cost allocation methodologies, and ability of the regulated affiliate to optimize and control the affiliate transactions for the benefit of the ratepayers. Mr. Stein also conducted a comparative analysis of cost drivers for IPL with a peer group. This benchmarking study explored the reasons for IPL's cost differentials and was designed to facilitate IPL's efforts to improve cost management and operational effectiveness.
- ➤ For the Connecticut Office of Consumer Counsel, Mr. Stein assisted in the assessment of the 2011 Conservation and Load Management Plan filed with the Connecticut Department of Public Utility Control. He examined the energy efficiency program administration and budgeting process, submitted joint testimony, and cross-examined utility witnesses.

Customer Service Experience at NYPSC

- As part of a cross-training program, Mr. Stein handled residential complaint intake and resolution, and metering performance complaints, for downstate utility customers.
- As Manager of Business Advocacy, Mr. Stein assisted large commercial and industrial customers in negotiating special tariff service contracts with utilities, and worked with business customers to resolve complaints and disputes with gas and electric utilities.
- ➤ As the Manager of Competitive Retail Market Operations and Design, Mr. Stein led the development of Energy Service Company (ESCO) customer service standards, supervised the resolution of customer complaints against ESCOs and mediated disputes between ESCOs and utilities.

Expert Witness Experience

Mr. Stein has testified as a NYPSC staff witness in rate cases in matters of performance and productivity, construction and O&M adjustments, and in merger proceedings where he identified duplicative functions, estimated productivity and synergy savings, and recommended affiliate relations and transaction rules to protect the regulated utility from unreasonable or unneeded services and costs from affiliates.

JAMES P. COLLINS - TECHNICAL EDITOR, WORK PAPER MANAGER, AND BILLING COORDINATOR

Mr. Collins served in similar roles in SAGE's recent management audits of Eversource/Connecticut Light and Power, PPL Corporation/PPL Electric Utilities, and Tacoma Public Utilities. The reports were edited to ensure correct grammar and spelling, readability, accuracy, logical organization, and compliance with SAGE's style

guide and report content requirements. Mr. Collins also supervised the development of a complete set of working papers and audit trail for each engagement.

Mr. Collins is a highly accomplished technical communicator with over nine years of professional documentation creation and management experience. Mr. Collins has a proven record of producing documents on time and to exacting standards through excellent communication combined with analytical and writing skills. He is a wizard at translating convoluted, highly technical language into text the everyday user can easily understand. Mr. Collins has extensive experience researching and developing scientific and technical reports, publications, and other documentation. Mr. Collins is a retired Navy Master Chief and thus also has management experience working with large and small teams.

Mr. Collins is proficient with Word, Excel, Acrobat, Photoshop, PowerPoint, and other software tools.

Education

- ➤ Certificate in General Business Studies with Concentration in Technical Communications, University of California, Los Angeles, Extension
- Associate of Arts, University of Phoenix
- Presenting Data and Information seminar (Edward Tufte), San Jose, CA.

Professional Associations

- Society for Technical Communication
- International Webmaster Association