

**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**



**February 9, 2017**

**SAGE**  
Management Consultants, LLC



February 9, 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**

**Via: Email**

Dear Mr. Vero:

SAGE Management Consultants, LLC (SAGE) is pleased to submit this 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. Our proposal 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.

SAGE is a national management consulting firm **focused on utility performance and regulation**. Our experience shows that there are four keys to success for an operational audit such as this: 1) a clear understanding of the situation by the audit team; 2) the effectiveness of the project approach, 3) the quality of the consulting team, and 4) a commitment to clear communication. SAGE embodies all four of these important qualities.

SAGE is exceptionally well qualified to conduct this audit. The SAGE team offers the DPS the following:

- **A Customer Benefit Analysis focused approach.** SAGE will develop comparable customer perspective performance baselines for the electric and gas services for both NYSEG and RG&E at the outset of the audits and will relate all recommendations to customer benefits and costs.
- **A small team.** We have formed the smallest team possible with subject matter experts in each audit element. With a small team, each team member has more consulting hours to efficiently and effectively pursue in-depth analyses of their assigned audit elements.
- **Cross-pollination.** Each audit element will receive our entire team's best thinking. Many audit element issues overlap each other. This approach addresses the overlapping areas effectively. It also promotes the identification of overarching, root-cause, enterprise-wide issues, such as, organization structure, management style, and corporate culture.

- **Robust communication.** The small team also allows continual communication among the team members and with the DPS staff.
- **A senior team of experts** thoroughly experienced with all aspects of electric and natural gas utilities and their service companies, holding companies, and affiliates.
- SAGE has developed **customized, detailed preliminary work plans** for each RFP specified audit sub-element. These work plans assure all DPS issues will be thoroughly addressed.
- **Keep it SAGE simple.** Complete and accurate records and a readable report format are important and SAGE procedures accomplish this. However, SAGE emphasizes report content and minimizes the administrative burden on the consulting team with simple processes, forms, and reports.
- The SAGE team has **a broad management perspective and a reputation for integrity.** As a result, we are well suited to perform highly visible, politically sensitive assignments.
- **SAGE is independent and objective.** SAGE has not worked directly for any New York utilities and we offer no engineering, information technology, training or similar services that may cloud our independence and objectivity with New York utilities.

The SAGE Primary and Secondary contacts for this proposal are:

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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

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# I. INTRODUCTION AND FIRM EXPERIENCE

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This chapter includes the following sections:

- Background Information
- Understanding of the Scope and Objectives
- Firm Experience

## A. BACKGROUND INFORMATION

This section includes relevant background information on New York State Electric & Gas Corporation (NYSEG), Rochester Gas and Electric Corporation (RG&E) and their parent company Avangrid, Inc. (Avangrid). Also contained in this section is a discussion of the regulatory issues and environment in which the utilities operate.

### BACKGROUND

#### **New York State Electric & Gas Corporation**

NYSEG is headquartered in Binghamton, New York and has 884,000 electric and 264,000 natural gas customers across 40% of upstate New York. NYSEG owns 435 substations, and its electric distribution system consists of 4,463 miles of transmission lines, 32,319 pole miles of overhead distribution lines, and 2,702 miles of underground lines. Total electricity delivered in 2015 was 15,711,000 megawatt hours. NYSEG's natural gas system consists of 20 miles of transmission pipeline and 8,151 miles of distribution pipeline. The total natural gas delivered during 2015 was 56,533,000 dekatherms.

NYSEG traces its history back to 1852, when its predecessor company was incorporated as the Ithaca Gas Light Company. Throughout the latter half of the nineteenth century and the earlier portion of the twentieth century, the corporation participated in a series of mergers and acquisitions which consolidated roughly 200 local utility companies. This company became Ithaca Gas & Electric in 1916, New York State Gas and Electric in 1918, New York Electric Corporation in 1928, and then the New York State Electric & Gas Corporation (NYSEG) in 1929. By 1937, it had reached its present service area size. Following the passing of the Public Utilities Holding Company Act in 1935 and World War II, NYSEG's parent holding company sold all 880,000 shares of company stock to the public, making NYSEG an independent, investor-owned utility in 1949. NYSEG was acquired by Energy East Corporation (Energy East) in 1998.

In 2008, Iberdrola USA purchased Energy East and renamed the company Iberdrola USA in 2009. In 2015, Iberdrola USA acquired UIL Holdings Corporation and created a new company, Avangrid, which is now the parent of NYSEG. NYSEG borrows from Avangrid, through intercompany revolving credit agreements, which provide access to supplemental liquidity. In this \$1.5 billion credit agreement, NYSEG's sublimit is \$250 million. Avangrid and its affiliates provide administrative and management services to NYSEG, pursuant to service agreements. The charge for services provided to NYSEG by Avangrid and its affiliates was approximately \$75 million for 2015 and \$90 million for 2014 and charges for services provided by NYSEG to Avangrid and its subsidiaries

were approximately \$16 million for 2015 and \$12 million for 2014. At the end of 2016, NYSEG's long-term debt was approximately \$1.3 billion, consisting of senior notes and pollution control notes.

### **Rochester Gas and Electric Corporation**

RG&E is headquartered in Rochester, New York, and has 374,000 electric customers and 309,000 natural gas customers in a nine-county region centered on Rochester, New York, consisting of approximately 2,700 square miles. RG&E owns 153 substations, and its electric distribution system consists of 1,025 miles of transmission lines, 6,091 pole miles of overhead distribution lines, and 2,834 miles of underground lines. Total electricity delivered in 2015 was 7,110,000 megawatt hours. RG&E's natural gas system consists of 105 miles of transmission pipeline and 10,592 miles of distribution pipeline. Total natural gas delivered in 2015 was 51,498,000 dekatherms.

RG&E traces its history to the Rochester Gas Light Company in the 1830's, and the Rochester Electric Light Company and the Edison Electric Company in 1880. All three were consolidated in 1892 to form the Rochester Gas and Electric Company and in 1919 to the Rochester Gas and Electric Corporation (RG&E), controlled by corporations based in New York City and Philadelphia. Thirty years later, in 1949, deregulation enabled the company to revert to local control and become independent. In 2002, RG&E became a subsidiary of Energy East through a merger of holding companies.

When Iberdrola USA acquired Energy East in 2008 it also acquired RG&E. The parent of RG&E is now Avangrid, created by Iberdrola in 2015. RG&E borrows from Avangrid, through intercompany revolving credit agreements, which provide access to supplemental liquidity. In this \$1.5 billion credit agreement, RG&E's sublimit is \$250 million. Avangrid and its affiliates provide administrative and management services to RG&E, pursuant to service agreements. The charge for services provided to RG&E by Avangrid and its affiliates was approximately \$47 million for 2015 and \$51 million for 2014 and charges for services provided by RG&E to Avangrid and its subsidiaries were approximately \$7 million for 2015 and \$12 million for 2014. At the end of 2016, NYSEG's long-term debt was approximately \$ 662 million, consisting of first mortgage notes and pollution control notes.

### **Avangrid**

In late 2015, Avangrid, Inc., formerly Iberdrola USA, Inc., was reorganized to become the parent company of Avangrid Networks, Inc., formerly Iberdrola USA Networks. Avangrid, Inc. is a wholly-owned subsidiary of Iberdrola S.A. (Iberdrola), a corporation organized under the laws of the Kingdom of Spain. As a result of the reorganization, Avangrid Networks, Inc. holds, through direct ownership, 100% of the voting stock of RGS Energy Group, Inc., the immediate parent of NYSEG and RG&E.

Iberdrola S.A., headquartered in Bilbao, Spain, is the fifth largest electric utility in the world in terms of market capitalization with over 32 million electricity and gas customers and sub-holding companies located in five countries: USA (Avangrid), Spain (Iberdrola Espana, S.A.), Mexico (Iberdrola Mexico, S.A. of C.V.), Brasil (Iberdrola Brasil, S.A.) and the United Kingdom (Scottish Power LTD.). Iberdrola S.A. has over 28 million employees worldwide.

## **REGULATORY ISSUES AND ENVIRONMENT**

### **New York's Reforming the Energy Vision**

The New York Public Service Commission (Commission) initiated the Reforming the Energy Vision (REV) proceeding in 2014. In addition, there are several REV-related proceedings that are underway and NYSEG's and RG&E's plans and implementation actions deriving from those proceedings are important to understand as part of the management audit. The REV-related components include: Clean Energy Fund, NY Green Bank, Large Scale Renewables, Community Choice Aggregation, Community Net Metering, Distributed Energy Resources Oversight, Dynamic Load Management, Net Metering, Low Income Affordability, Utility Energy Efficiency Programs, Retail Access Business Rules, Value of Distributed Energy Resources (DER), and the recent rate cases.

SAGE understands that the Commission's long-term comprehensive REV strategy is predicated on "building a clean, resilient, and more affordable energy system for all New Yorkers." The REV 2030 goals include: (1) 40% reduction in greenhouse gas emissions from 1990 levels, (2) 50% of New York's electricity to be generated from renewable sources, and (3) 23% reduction in energy consumption of buildings from 2012 levels.

We have highlighted a few of the proceedings that are designed to implement aspects of REV, with specific focus on NYSEG and RG&E, which are discussed below. The proceedings are impacting: infrastructure design, investment decisions, capital and O&M costs, relationships with customers, and revenue requirements and rate design. The management audit will need to examine the utilities' management, operations, and performance in the context of REV strategies and related cases, in response to the specific RFP requirements and consistent with good management practices.

### **Advanced Metering Infrastructure**

In December 2016, NYSEG and RG&E petitioned the Commission for authorization for full-scale deployment of Advanced Metering Infrastructure (AMI) and to establish a surcharge. The 2016 Joint Proposal indicated that implementation of full-scale AMI beyond the AMI implemented as part of the utilities' demonstration project in the REV proceeding would be the subject of a separate collaborative process. The utilities noted that the petition was consistent with the AMI portion of the Distributed System Implementation Plan (DSIP) filed on June 30, 2016 in the REV proceeding. The petition described the AMI as the centerpiece of the Foundational Platform Technology that NYSEG and RG&E need to serve as the Distributed System Platform Provider (DSPP) and support the core Distributed System Platform (DSP) functions.

### **Energy Affordability for Low Income Utility Customers**

In September 2016, the utilities filed their implementation plan pursuant to the order adopting low income program modifications. The plan includes implementation of tiered bill discounts and enrollment of all eligible low income program participants into budget billing. The plan describes details associated with eligibility requirements, benefit levels, budget billing procedures, program budgets, cost recovery, arrears forgiveness, reconnection waivers, educational and outreach efforts, and program reporting and evaluation.



## **Distributed Energy Resources**

In February 2015, the Commission directed Staff to develop proposed rules for Commission oversight of distributed energy resource suppliers (DERS) in consultation with stakeholders. It found that some supervision over DER providers will be necessary to ensure both consumer protection and fair competition. The Commission also directed development of a dispute resolution mechanism that expedites review and action on disputes between DERS and utilities. Comments were filed by parties and two technical conferences were convened. The process is underway.

## **NYSEG and RG&E Rate Cases**

The Commission issued electric and gas rate plans for NYSEG and RG&E in June of 2016, establishing a three-year plan for both utilities for the period July 1, 2016 through April 30, 2019. The plans included investments in new technology and systems to improve reliability and continued investment in electric distribution system automation equipment. The plans were deemed in compliance with New York's Energy Affordability Policy, seeking to limit energy costs at no more than six percent of household income. Funding will increase during the plan for the low-income discount programs. In addition to improvements in energy efficiency, budget counseling, and similar programs through NYSERDA, the plan waived all reconnection fees for low-income customers. Funding for deployment and testing of smart meters was to begin in 2017. The Commission also found that the Joint Proposal was consistent with REV policies, including the integration of more distributed energy resources into the planning and operation of the State's electric system.

## **Codes of Conduct Related to REV**

In February 2015, the Commission issued its order for a new regulatory policy framework and implementation plan. As part of the framework, the Commission adopted the Staff proposal that the current distribution electric utilities assume the role of Distributed System Platform Provider (DSP). Additionally, the Commission determined that utility affiliates could own and operate Distributed Energy Resources (DER) in the regulated utilities' operating territories, and utilities themselves could own DER in certain, limited, circumstances. Given the potential conflicts of interest, and to expand the opportunity for the receipt of comments on codes of conduct beyond that in the REV proceeding, the Commission instructed Staff to initiate a proceeding to "address and refine utility and affiliate codes of conduct." The proceeding is continuing.

## **B. UNDERSTANDING OF THE SCOPE AND OBJECTIVES**

The following information is reprinted from the Request for Proposals to indicate SAGE Management Consultants, LLC understanding and acceptance of the scope and objectives for

*The New York State Public Service Commission (the Commission) is seeking an independent consulting firm to perform comprehensive management and operations audits of New York State Electric & Gas Corporation (NYSEG) and Rochester Gas and Electric Corporation (RG&E; jointly, utilities) -- subsidiaries of Avangrid Inc. located in New York State. The audits will be performed in accordance with New York State Public Service Law §66(19).*



*The management audit approach in New York includes, but is not limited to, a prospective investigation of the utilities' construction program planning processes, and an evaluation of the efficiency of the utilities' operations with a focus on opportunities to improve performance. The Commission expects the selected consulting firm to analyze current and historical information for the purpose of gaining an understanding of the utilities, with the ultimate goal of improving existing processes, practices, systems, and organizational structures to drive better performance. The Commission seeks proposals that set forth a framework within which Department of Public Service (the Department) staff can develop a more comprehensive understanding of the utilities' operations and explore improvement opportunities with the utilities. The consulting firm will document its review of the utilities in a Final Report. The Final Report will focus on improvement opportunities. Findings and conclusions will be tied to root causes, and will include recommendations that address the root causes and seek to improve the utilities' performance going forward.*

*The scope of the audits includes the following seven elements:*

- *Corporate Governance*
- *Electric Planning and REV Preparations*
- *Gas Planning*
- *Budgeting and Finance*
- *Project Management and Work Management*
- *Performance Management*
- *Customer Operations*

*These scope elements are critically important and highly interdependent. The utilities' performance in each element has the potential to affect, either positively or negatively, the performance of the remaining elements. SAGE recognizes this interdependency and will holistically examine the utilities performance as well as performance in each scope element.*

## **C. FIRM EXPERIENCE**

This section describes SAGE, its focus, clients and its recent, relevant experience applicable to the audits being contemplated by the Commission.

### **SAGE FOCUS**

SAGE Management Consultants, LLC (SAGE) is a national management consulting firm focused on the utility industry. This market includes electric, gas, telecommunications, water, and wastewater utilities, and the legal, financial, and regulatory entities associated with the industry. SAGE provides regulatory and litigation support services and serves both investor owned and publicly owned utilities. The firm's consultants have deep experience in all aspects of utility management consulting. SAGE's founding partners each have over thirty years of management and consulting experience with large firms that is directly relevant to this project.

## **SAGE BUSINESS MODEL**

SAGE operates under a consortium model consisting of a core of key staff members supplemented by associated independent consultants and specialty firms. The consortium members work together regularly and have long personal and professional relationships. SAGE has found that this is a highly effective and efficient model for clients. Each client receives exactly the right consulting team for its needs rather than whomever the consultancy has available at the moment.

## **CODE OF ETHICS**

SAGE subscribes to the Code of Ethics of the Institute of Management Consultants (IMC), USA. The Code can be found at <http://www.imcusa.org/?page=ethicscode>. The Code includes commitments of ethical conduct to clients, the public, and the profession. SAGE's founders, David A. Whitman and David P. Vondle, both proposed for this engagement, have met the rigorous certification requirements and have been designated Certified Management Consultants (CMCs) by the Institute.

## **SAGE CLIENTELE**

Representative clients of the firm's founders are shown below.

### **Representative Clients of the SAGE Founders**

#### **State Public Utility Commissions**

- Alaska
- California
- Connecticut
- Florida
- Georgia
- Guam
- Illinois
- Kentucky
- Maryland
- Missouri
- New Jersey
- New Mexico
- New York
- Pennsylvania
- Texas
- Vermont

#### **Boards and Oversight Agencies**

- Colorado Springs City Council and Utilities Board
- Delaware River Port Authority Inspector General
- Los Angeles City Comptroller
- Lower Colorado River Authority Board
- Metropolitan District Commission
- Tacoma City Council
- Washington State Auditor

#### **Legal**

- Alaska Attorney General
- Bachus & Schanker (Law Firm)
- CenterPoint Energy Law Department
- Colorado Springs City Attorney
- Florida Office of Public Counsel
- Fraser Stryker (Law Firm)
- Halloran & Sage (Law Firm)
- Kasowitz Benson (Law Firm)
- Lamson, Dugan & Murray (Law Firm)
- Maine Office of Public Advocate
- Massachusetts Attorney General
- New Mexico Attorney General
- Nixon Peabody (Law Firm)
- Nova Scotia Consumer Advocate
- Southern California Edison Law Department

### **Investor Owned Utility Subjects of Commission Ordered Audits or Proceedings**

- Avangrid/Central Maine Power
- Central Illinois Electric Company Gas Division
- Connecticut Light & Power Company
- El Paso Electric Company
- Emera/Bangor Hydro Electric/Maine Public Service Company
- Eon/Louisville Gas & Electric
- FirstEnergy/Jersey Central Power & Light
- Iberdrola/Energy East/Southern Connecticut Gas
- National Fuel Gas
- National Grid/Niagara Mohawk
- NextEra/Florida Power & Light
- NiSource/Bay State Gas
- Northeast Utilities/Connecticut Light and Power
- NSTAR Gas
- Pacific Gas & Electric
- PPL Electric Utilities Corporation
- Peoples Gas Company
- Southern California Gas
- The Energy Network/Connecticut Natural Gas
- United Illuminating

### **Investor Owned Utility Clients**

- Integrys/Peoples Gas
- PacifiCorp, Inc.
- PHI/Atlantic City Electric
- Public Service Company of NC
- PNM/Gas Company of New Mexico
- Southern California Edison
- United Cities Gas
- Vectren/SIGECO/Indiana Gas Company
- Verizon New York
- Xcel/Southwestern Public Service

### **Publicly Owned Enterprises**

- Philadelphia Gas Works
- Los Angeles Department of Water and Power
- Nebraska Electric G&T Cooperative
- Nebraska Public Power District
- New York City Water and Wastewater
- Omaha Public Power District

### **RECENT, RELEVANT EXPERIENCE**

Examples of our recent previous experience relevant to this assignment are provided in the following table.

### Recent, Relevant SAGE Experience

Date(s)	Name and Location of Client	Description
2015–2016	<p style="text-align: center;">Pennsylvania Public Utility Commission Harrisburg, PA</p>	<p><b>Stratified Management and Operations Audit of PPL Electric Utilities Corporation.</b> Serving under Vondle &amp; Associates, Inc., SAGE consultants including Messrs. Vondle, Whitman, Rosenkoetter, Stein, and Collins performed all three phases of this comprehensive management audit that included 15 task areas:</p> <ul style="list-style-type: none"> <li>▪ Financial/Operating Statistics</li> <li>▪ Executive Management</li> <li>▪ Customer Services</li> <li>▪ Human Resources</li> <li>▪ Transmission &amp; Distribution</li> <li>▪ Finance &amp; Accounting</li> <li>▪ Information Technology</li> <li>▪ Governance</li> <li>▪ Affiliate Relationships</li> <li>▪ Customer Assistance Programs</li> <li>▪ Executive Compensation</li> <li>▪ Emergency Response</li> <li>▪ Diversity/EEO</li> <li>▪ Staffing Planning Process</li> <li>▪ Merger Synergies</li> </ul>
2015–2016	<p style="text-align: center;">Connecticut Public Utility Regulatory Authority, New Britain, CT</p>	<p><b>Comprehensive Management Audit of Connecticut Light and Power Co.</b> Messrs. Whitman, Vondle, Rosenkoetter, Stein, Evans, and Collins played key roles in this management audit that included the following six task areas:</p> <ul style="list-style-type: none"> <li>▪ Executive Management, External Relations, and Affiliate Relationships</li> <li>▪ Electric Supply</li> <li>▪ System Operations</li> <li>▪ Finance and Affiliate Transactions</li> <li>▪ Human Resources</li> <li>▪ Customer Services</li> </ul> <p>Within these task areas there were 39 areas of focus, three interest areas, and 17 special topics.</p>

Date(s)	Name and Location of Client	Description
2011–2016	Maine Office of Public Advocate Augusta, ME	<b>Three Cases involving Avangrid/Energy East/Central Maine Power.</b> Messrs. Vondle and Rosenkoetter have provided regulatory support services including expert testimony on three different proceedings involving Avangrid/Energy East/Central Maine Power: Request for Approval of Customer Relationship Management and Billing System, Request for a Certificate of Public Convenience and Necessity, and Credit and Collection Policies, and Standard Offer Uncollectible Balances.
2014–2015	Tacoma Public Utilities	<b>Ten-Year Management Review and other Studies.</b> Messrs. Vondle, Whitman, and Rosenkoetter conducted a ten-year management review of this combination utility (electric, water, broadband, and railroad). Areas of emphasis included reliability, emergency response, safety, customer service, costs, and workforce strategy. SAGE’s Project Manager, Mr. Vondle, has conducted three prior management reviews (one with Mr. Whitman) One was a 2013–2014 in-depth review of the performance of the electric transmission and distribution system functions including system reliability and workforce strategy.
2013	Connecticut Public Utility Regulatory Authority, New Britain, CT	<b>Storm Cost Recovery Petition.</b> Messrs. Vondle, Whitman, and Rosenkoetter recently completed a SAGE extension of Prosecutorial Staff assignment for the PURA in a Connecticut Light and Power application for recovery of \$462 million in storm costs for five storms over a two-year period. The SAGE team evaluated all of the case filings and submitted expert testimony on five topics including T&D reliability and maintenance practices prior to the storms.

Date(s)	Name and Location of Client	Description
2012–2013	Connecticut Public Utility Regulatory Authority, New Britain, CT	<b>Emergency Recovery Telecommunications Standards.</b> Mr. Vondle and Mr. Whitman led a SAGE team that served as an extension of PURA staff in support of PURA Docket No. 12-06-10, Establishment of Industry Performance Standards for Telecommunications Companies in response to Section 5 of CT Public Act No. 12-148, An Act Enhancing Emergency Preparedness and Response. The team developed a set of draft standards on behalf of the PURA for comment by affected telecommunications companies, evaluated those comments and formulated a draft decision and standards for approval and publication by the Authority commissioners.
2008–2013	Colorado Springs Utilities, Colorado Springs, CO	<b>Multiple Electric &amp; Gas Utility Assignments.</b> Messrs. Whitman and/or Vondle have completed multiple consulting engagements for this electric generation, transmission and distribution, natural gas, and water and wastewater utility. These projects have included a Comprehensive Management Audit; Labor Resource Optimization Program; and Functional Management Reviews of Environmental Services, Legal, Fleet Management, and Warehousing.



<p>2012</p>	<p>Connecticut Public Utility Regulatory Authority, New Britain, CT</p>	<p><b>Emergency Outage Claims Reimbursement Program Study.</b> Messrs. Whitman, Vondle, and Stein formed a SAGE team that served as an extension of the PURA staff in development of a draft decision in support of Docket #12-06-12, PURA Investigation of the Feasibility of the Establishment of a Program to Reimburse Residential Customers for Spoilage Loss of Food Items or Refrigerated Medications Caused by a Lack of Refrigeration During Electric Service Outages, in response to recent state legislation. The team was responsible for conducting research, developing interrogatory questions, and writing the draft decision for review by the PURA staff and consideration by the PURA Directors. The efforts included quantification of proposed program costs, customer impacts, and benefits.</p>
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## II. SCOPE AND OBJECTIVES

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This chapter includes three sections:

- A. Understanding of the Audit Elements
- B. Task Area Assignments
- C. Preliminary Work Plans

### A. UNDERSTANDING OF THE AUDIT ELEMENTS

In accordance with the Commission's Request for Proposals (RFP), the scope of the audits includes the following seven elements:

1. Corporate Governance
2. Electric Planning and REV Preparations
3. Gas Planning
4. Budgeting and Finance
5. Project Management and Work Management
6. Performance Management
7. Customer Operations

Our understanding of each of these audit elements is described below.

#### CORPORATE GOVERNANCE

The Corporate Governance audit element is heavily focused on the utilities' planning, progress toward and achievement of the REV-related initiatives and proceedings from a governance standpoint. This is in addition to other more common governance audit topics such as Board interaction with management; influence of parent company Board on regulated utility policy and practices; Board budget and financial policy setting; affiliate relations; the structure, function, and interrelationships of operating companies' Boards; and the oversight provided by the Boards to the operating companies.

Other parts of this audit element will deal with synergies gained by the regulated utilities from the formation of Avangrid and from its parent Iberdrola; how change management activities are working to internalize both the REV initiatives and the Avangrid formation; and the effectiveness of the utilities' strategic planning and enterprise risk management programs. The decision-making, support for regulated utilities and full utilization of the Global SAP Enterprise Resource Planning system will also be examined.

This audit element will explore how effectively the Boards identify opportunities and problems and bring sufficient resources to bear on these issues. Overall, this audit element will be examined within the context of whether or not parent company influence, decision-making, policies, and practices are prioritized and carried out in the best interests of New York ratepayers.

#### ELECTRIC PLANNING AND REV PREPARATIONS

This audit element focuses heavily on actions being taken to achieve REV objectives, particularly as they relate to the current and expected expansion of Distributed Energy

Resources (DER). This includes utilities' DER planning, procurement, construction, maintenance, and modernization policies and practices as well as distributed energy service offerings. The utilities' collection and use of DER information disaggregated load data for measurement and performance monitoring will be examined.

The Commission's benefit/cost framework for system planning and project prioritization will be examined and assessed as will utility information system support for short and long-term REV objectives. Electric integrated resource planning and load forecasting, including the effect of DER expansion on load forecasting and procurement processes and practices, will also be examined and evaluated. This will include the sufficiency of utility electric planning staffing, considering new policy initiatives.

The adequacy of utility electric planning techniques will be assessed in light of the uncertainties introduced by new policies and the introduction of DERs, including the need for probabilistic (risk based) planning techniques. All aspects of electric supply portfolio management, including hedging practices as well as the use of provisions in wholesale market transmission congestion contracts, will be analyzed and evaluated as part of this audit element.

Other areas of focus in this audit element include an assessment of utility outage management planning and response measures, determination and utilization of supplemental workforces, crew movement, and mutual assistance arrangements. Event escalation processes, including the involvement of county and local liaisons, will be examined and assessed along with the training of these resources.

## **GAS PLANNING**

The Gas Planning audit element will focus on gas planning and forecasting activities as well as certain gas infrastructure management topics. The gas planning and forecasting audit will include the organization and staffing for gas forecasting, procurement and planning, the modeling and inputs for short- and long-term gas forecasting and backcasting, gas procurement strategies, policies and practices, as well as gas hedging practices.

Gas infrastructure management activities will include an examination and assessment of gas distribution system design to achieve optimum balance between safety, delivery, and upgrades; repair versus replace decision-making for construction planning; and an assessment of gas system readiness for meeting increasing natural gas demand, long-term projects, and new technologies. An assessment of asset management decision-making and inputs will also be performed. Finally, an evaluation of gas and electric planning communication and coordination is included in this audit element.

## **BUDGETING AND FINANCE**

This audit element will examine all aspects of the utilities' capital budgeting processes, capital investment prioritization, authorization, appropriation, and status and variance reporting. The fidelity between approved capital projects and actual construction project results will be examined and evaluated. The adequacy of capital and operations and maintenance (O&M) budget policies, procedures, and practices will be assessed along with the use of zero-based or other budgeting techniques along with the impact of regional and centralized planning and budgeting.

Management and control of capital budgeting will be evaluated, to include program and project capital costs, determination of total expenditure adequacy, and the controls in place to ensure that plan deviations are justifiable and appropriately approved. This audit element also includes an evaluation of the cost effectiveness of utility procurement processes and the effectiveness of internal controls for direct charges and cost allocations among the holding company and the regulated utilities (affiliate transactions). The utilities' pension and other post-employment benefits plan strategies will also be evaluated, including risk levels, utilities' ability to meet plan obligations, and diversification of plan funds.

## **PROJECT MANAGEMENT AND WORK MANAGEMENT**

This audit element includes an examination of the utilities' project and program management, work management, and certain gas infrastructure topics not otherwise covered in the Gas Planning element. The project and program management topics include examination of the design, estimating, engineering, scheduling, procurement, execution, oversight, and review processes as well as quality control and quality assurance programs. Day-to-day management of project and program schedules will also be audited.

Additionally, this element requires assessing project management processes for forecasting and tracking project costs, work units, unit costs, and work quality. Comparisons of estimated project costs to actual project costs and to costs projected in rate cases will also be made. Utility measures to assure that contracts are evaluated and awarded impartially and transparently will be examined.

Additionally, as part of its evaluation of the project management topics in this audit element, SAGE will identify, select, and assess a representative sample of construction programs and projects that are completed and/or in-progress, for the purpose of identifying opportunities to improve performance and reduce unnecessary costs. SAGE expects to select a sampling of small, medium, and large programs and projects that are both in progress and completed for both Companies and for both electric and gas services.

Work management topics include evaluation of systems used to monitor workforce productivity, management of capital projects and maintenance work, and their ability to provide reporting, planning, and performance information.

Gas infrastructure aspects of this audit element include evaluation of leak prone pipe replacement programs, flood zone management, and general management of main replacement programs and their effectiveness and impact on total system leaks. Utilities' gas incident investigation processes will be evaluated for compliance with applicable pipeline safety regulations and industry best practices to include gas leaks, carbon monoxide, facility or equipment failure, explosions, and testing of pipeline and equipment investigation for analysis of any failure or accident to determine its cause and to minimize the possibility of recurrence.

## **PERFORMANCE MANAGEMENT**

The Performance Management element of this audit will focus on the adequacy and effectiveness of the utilities' performance management processes and performance

metrics, including measures associated with REV objectives attainment. The roles and responsibilities of the Boards of the regulated utilities and the parent companies in performance management activities will be assessed, as well as management's accountability for performance and the inclusion of cascading goals and objectives through lower organizational levels. Additionally, NYSEG's and RG&E's use of performance benchmarking with comparable utilities will be examined.

The alignment of management compensation and incentive compensation programs with Commission goals and objectives will also be assessed within the regulated utilities, Avangrid and Iberdrola. The extent to which internal corporate incentives within the regulated utilities, Avangrid and Iberdrola appropriately align with New York's regulated utility operations will be identified and assessed.

## **CUSTOMER OPERATIONS**

The Customer Operations audit element will examine the regulated utilities' customer service performance and compliance with certain related laws, specifically the Home Energy Fair Practices Act and Energy Consumer Protection Act (16 NYCRR Part 11) and the Rules Governing the Provision of Service by Gas, Electric and Steam Corporations to Nonresidential Customers (16 NYCRR Part 13). The utilities' Part 11 compliance and practices relating to internal controls in place and the use of good practices, national utility benchmarking, and customer feedback to improve residential customer service performance will be examined along with the adequacy and effectiveness of each utility's measures to identify and implement corrective actions, process improvements, and related employee training and development.

A similar examination of utility compliance and practices associated with Part 13 for non-residential customers will be conducted. This audit element will also examine the effectiveness and efficiency of the regulated utilities' budget billing process relating to customer overpayment and underpayment under this billing process. Additionally, the effectiveness and efficiency of scheduling routine field work (meter reading) to assure that service quality and customer satisfaction are achieved will be examined.

## **B. TASK AREA ASSIGNMENTS**

### **TASK AREAS**

SAGE has distributed the specified audit sub-elements among nine task areas to ensure each sub-element is addressed by an appropriate subject matter expert. In general, the SAGE task areas reflect the RFP audit elements. However there are a few modifications, including:

- The electric and gas infrastructure related sub-elements have been broken out of the Electric Planning, Gas Planning, and Performance Management elements and have been assigned to two new task areas as they have different expertise requirements than electric and gas planning.
- The boards of directors sub-element from the Performance Management element has been consolidated with the other boards of directors related sub-elements in the Governance Task Area for field work efficiency.

- The strategic planning sub-element has been assigned to the Planning and Performance Management Task Area to relate actual results to planned results.
- The affiliate relationships and transactions sub-element has been consolidated with the Budgeting and Finance Task Area for synergies and to take advantage of the Lead Consultant’s expertise in that area.
- All emergency planning and execution related sub-elements have been consolidated in the Project, Work, and Emergency Management Task Area because of their relationship to workforce planning, work management, and contracting.
- Procurement and contracting related elements have been assigned to the Project, Work, and Emergency Management Task Area because of their importance to project, work, and emergency management and to take advantage of the supply chain management expertise of the Lead Consultant.

Further, the project management responsibilities have been divided in a manner to group like task areas, promote field work and report writing efficiency, and to take advantage of the individual experience and expertise of the two SAGE Partners who will serve as Project Managers.

The following table summarizes the task areas and the assigned Project Manager and Lead Consultant for each

#### Task Areas

Task Area	Project Manager	Lead Consultant
1. Corporate Governance	Vondle	Whitman
2. Electric Planning and REV Preparations	Whitman	Evans
3. Electric Infrastructure	Vondle	Whitman
4. Gas Planning	Vondle	Garcia
5. Gas Infrastructure	Whitman	Vondle
6. Budgeting and Finance	Whitman	Rosenkoetter
7. Project, Work, and Emergency Management	Vondle	Ayers
8. Planning and Performance Management	Whitman	Vondle
9. Customer Operations	Vondle	Stein

### D. PRELIMINARY WORK PLANS

The SAGE Four Phase Approach is detailed in the next chapter. Each task area follows its work plan using the same four phases. Further, the specific tasks and activities are the same for each task area (with the addition of the program and project sampling in the Project, Work, and Emergency Management Task Area). Each Lead Consultant, in conjunction with the assigned Project Manager, will issue document requests, conduct interviews and site visits, analyze the information collected, form findings and recommendations, and write task reports detailing the background, findings, recommendations, and Customer Benefit Analyses for the task area.



The SAGE preliminary work plans for each task area provide example good practice evaluative criteria and the initial document requests for each sub-element. Associating the initial document requests with their respective sub-elements and evaluative criteria provides context to the responding individuals in the Companies to improve the quality of their responses. The responders can see why the specific information is being requested and what evaluative criteria the responses are expected to meet. We will work with the Companies' Project Coordinators to encourage ensuring that the document request responses address the evaluative criteria.

The responses to the initial information requests will be utilized to assemble the SAGE Customer Perspective Performance Baseline that provides an early view of the Companies' performance trends and serves as the foundation for the Customer Benefit Analyses.

The following tables lay out the preliminary work plan for each RFP audit sub-element within its assigned task area. These work plans will be revised during the initial project phase based on additional information obtained from the Companies and in consultation with the DPS Project Manager.

**TASK AREA: CORPORATE GOVERNANCE – LEAD CONSULTANT – WHITMAN**

**Note: Each initial document request applies to Iberdrola, Avangrid, NYSEG, and RG&E. Also, the organization charts requested are for the complete organization structures covering all employees in each company and will be relevant to the other task areas. Individual organization charts are therefore not requested in the other task areas.**

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>1.1 Describe and assess how the utilities' corporate governance, organizational structure, and internal working relationships demonstrate commitment to the objectives of REV, including in planning, operations, promoting a culture of innovation, and facilitating relationships with Distributed Energy Resources (DER) developers. Identify changes which will increase the likelihood of success in achieving REV objectives.</p>	<ul style="list-style-type: none"> <li>▪ The objectives of the REV are organizationally internalized, clearly understood, and addressed within corporate policies and procedures, external relationships, and the general organizational culture</li> </ul>	<ul style="list-style-type: none"> <li>▪ Full sets of organization charts to include all employee positions in each entity with the position title, cost center number, employee name and number or "vacant," and assigned location (which office or work center)</li> <li>▪ Board policy documents</li> <li>▪ Corporate policy documents</li> <li>▪ Existing Board guidance to management relating to REV</li> <li>▪ Management reports to Boards pertaining to REV goal achievement</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>1.2 Describe and evaluate how the objectives of REV have been reflected in changes in corporate governance as well as the utilities' planning and operations.</p>	<ul style="list-style-type: none"> <li>▪ The objectives of the REV have been effectively integrated into Board and Corporate policies.</li> <li>▪ The Board has clearly communicated its expectations for the utilities' achievement of REV objectives to management</li> <li>▪ Utility planning and operations groups have incorporated REV objectives into plans and practices</li> <li>▪ Utility planning and operations groups are achieving or effectively progressing to planned REV milestones</li> </ul>	<ul style="list-style-type: none"> <li>▪ Board policy documents</li> <li>▪ Corporate policy documents</li> <li>▪ Existing Board guidance to management relating to REV</li> <li>▪ Board Meeting minutes since 2014</li> <li>▪ Reports to the Board relating to REV goal attainment since 2014</li> </ul>
<p>1.3 Examine and evaluate how internal reporting mechanisms and employee performance standards are being used to monitor the implementation of REV objectives and flag areas requiring corrective action or re-direction.</p>	<ul style="list-style-type: none"> <li>▪ Corporate policies and practices, including employee performance standards and appraisal systems, monitor and assess implementation of REV objectives and provide appropriate feedback, as warranted</li> </ul>	<ul style="list-style-type: none"> <li>▪ Regular corporate performance reports since January 2014</li> <li>▪ Employee appraisal procedures and guidance documents</li> </ul>
<p>1.4 Describe and assess the extent to which the utilities' change management processes and resources (e.g., training, communications, transition management) have been designed to accomplish the objectives of REV.</p>	<ul style="list-style-type: none"> <li>▪ Change management processes and techniques have been used effectively to organizationally internalize and advance REV objectives</li> </ul>	<ul style="list-style-type: none"> <li>▪ Existing training curricula pertaining to REV</li> <li>▪ Existing change management training lesson plans relating to REV</li> <li>▪ Consultant (internal or external) engagement reports dealing with REV objectives, planning or objectives attainment.</li> <li>▪ Communication disseminated internally by management regarding REV objectives and plans</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
1.5 Examine and assess how the interests of New York’s regulated operations are reflected in upstream management decision making concerning budgeting and resource allocation. Are the interests of New York’s regulated utility operations appropriately prioritized by Avangrid and Iberdrola?	<ul style="list-style-type: none"> <li>▪ The interests and requirements of NYSEG and RG&amp;E are considered and effectively supported in parent company planning, budget, and resource allocation activities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Annual Board budgeting and resource allocation guidelines promulgated to the organization since 2012</li> <li>▪ Annual Budget organization budget development guidelines promulgated to the organization since 2012</li> </ul>
1.6 Examine and assess how New York’s regulated utilities take advantage of knowledge and expertise of Avangrid and Iberdrola.	<ul style="list-style-type: none"> <li>▪ Informational forums, workshops and/or similar means to share good practices and policies exist among NYSEG, RG&amp;E, Avangrid, and Iberdrola</li> </ul>	<ul style="list-style-type: none"> <li>▪ Available documentation of the results of forums, workshops, or other means describing how good practices are shared among Avangrid, Iberdrola, NYSEG, and RG&amp;E and the results achieved</li> </ul>
1.7 Assess the internal controls regarding non-financial risk areas. (e.g., What is the review cycle to ensure adequacy of the controls in place?)	<ul style="list-style-type: none"> <li>▪ Internal controls and review cycles are adequate to ensure compliance with policies, procedures, and practices connected to non-financial risk areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description and documentation of all internal controls relevant to non-financial risk areas.</li> </ul>
1.8 Examine and assess the extent to which upstream management decisions, including at Avangrid and Iberdrola, ensure that New York’s regulated utility operations are able to achieve REV objectives.	<ul style="list-style-type: none"> <li>▪ Parent company Board and management understand and support NYSEG and RG&amp;E efforts to achieve REV objectives</li> </ul>	<ul style="list-style-type: none"> <li>▪ Parent company Boards policy documents on REV</li> <li>▪ Management reports to Parent company Boards regarding REV objective achievement</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>1.9 Examine the roles of the Iberdrola, Avangrid, NYSEG, and RG&amp;E Boards of Directors in developing, reviewing, and approving capital and operating budgets.</p>	<ul style="list-style-type: none"> <li>▪ The Board(s) are well informed by senior management of operating and capital program priorities and the funding required to support system reliability and safety goals</li> <li>▪ The Board(s) are sufficiently advised of system performance and resource needs to provide informed direction to senior management to sustain utility performance over the long-term planning horizon</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of the capital and O&amp;M budget preparation processes, budgeting guidelines, analyses, and budget approvals</li> <li>▪ Copies of senior management budget presentations and related Board minutes for the last five years</li> </ul>
<p>1.10 Examine how the Board of Directors monitors and reacts to actual spending and variances during the year.</p>	<ul style="list-style-type: none"> <li>▪ The Board of Directors receives regular reports on actual financial outlays versus approved budgets in sufficient detail to reach informed conclusions on budget performance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Capital and O&amp;M budget variance reports and explanations routinely provided to the Board</li> </ul>
<p>1.12 Assess the utilities' Enterprise Risk Management program.</p>	<ul style="list-style-type: none"> <li>▪ Enterprise Risk Management (ERM) processes effectively assure that risks are periodically identified, assessed, and ranked by both probability of occurrence and consequences (cost impacts, etc.) over a sufficient planning horizon, and then mitigated, as appropriate</li> <li>▪ The ERM Program has support from the Board, senior management and the organization</li> <li>▪ Business Continuity Plans have been developed to assure effective continuation of activities under emergency conditions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Current ERM Plan and Procedures</li> <li>▪ ERM reports, mitigation implementation plans, and status reports for the last five years, and any related Board minutes</li> <li>▪ Internal and external auditor assessments of the ERM program for the last five years and any related Board minutes</li> <li>▪ Current listing of major risks</li> <li>▪ Current risk mitigation plans</li> <li>▪ Current Business Continuity Plans for all functions</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
6.2 Assess the roles and responsibilities of the Iberdrola, Avangrid, NYSEG, and RG&E Boards of Directors in the performance management process.	<ul style="list-style-type: none"> <li>Performance management should be clearly defined and understood, and be a key focus of the Boards</li> </ul>	<ul style="list-style-type: none"> <li>Description of the roles and responsibilities of the overall Boards and their respective committees for understanding utility performance</li> <li>Board actions as a result of this information, including related senior management presentations and reports to the Board, and related board minutes, for the last five years</li> </ul>

**TASK AREA: ELECTRIC PLANNING AND REV PREPARATIONS – LEAD CONSULTANT – EVANS**

**Note: Electric Planning initial document requests apply to both NYSEG and RG&E**

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
2.1 Describe and assess how the utilities' corporate governance, organizational structure, and internal working relationships demonstrate commitment to the objectives of REV, including in planning, operations, promoting a culture of innovation, and facilitating relationships with DER developers. Identify changes which will increase the likelihood of success in achieving REV objectives.	<ul style="list-style-type: none"> <li>Efficient organizational structures with clear goals and incentives to meet the requirements of REV</li> </ul>	<ul style="list-style-type: none"> <li>All recent changes made to corporate governance, organizational structures, and working relationships to meet the objectives of REV</li> </ul>
2.2 Determine and describe how Distributed Energy Resources (DER) are included as part of the utilities' electric planning process.	<ul style="list-style-type: none"> <li>DERs evaluated on a level playing field against all other resources, considering all advantages of DERs</li> </ul>	<ul style="list-style-type: none"> <li>All planning documents and modeling results that concern DERs</li> </ul>
2.3 Assess and describe efforts to procure DER to meet forecasted needs. Describe and assess the effectiveness of market enabling activities that are designed to facilitate DER provider and customer engagement.	<ul style="list-style-type: none"> <li>Comprehensive and effective efforts to encourage procurement of DERs</li> </ul>	<ul style="list-style-type: none"> <li>All marketing documents, advertisements and survey results related to DER procurement</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
2.4 Describe and assess the measurement processes used to collect and report information regarding the performance of DERs against system planning expectations. Identify areas of discrepancy and needed improvements.	<ul style="list-style-type: none"> <li>▪ Detailed and comprehensive collection and reporting of performance data</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning the measurement processes used to collect &amp; report performance data for DERs and</li> <li>▪ All DER performance data collected</li> </ul>
2.7 Determine and describe how the utilities are developing new Distributed System Platform (DSP) service offerings that will generate utility revenue.	<ul style="list-style-type: none"> <li>▪ Rapid development of new offerings with clear goals and incentives</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning the development of new DSP platform service offerings and all responses to these offerings</li> </ul>
2.8 Determine and describe the utilities' efforts to develop more granular cost of service estimates for planning valuation and DER valuation purposes.	<ul style="list-style-type: none"> <li>▪ Clear and concise efforts with clear accountability</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning efforts to develop more granular cost of service estimates and results of these efforts</li> </ul>
2.10 Determine, describe, and evaluate the utilities' means and methods for collecting disaggregated load data (disaggregated by time and location).	<ul style="list-style-type: none"> <li>▪ Clearly defined methods utilizing all means possible</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning means and methods for collecting disaggregated load data and the data collected</li> </ul>
2.11 Describe how the utilities use the Commission's benefit/cost framework in electric system planning and prioritization, and assess whether the utilities' analysis fully complies with the Commission's framework.	<ul style="list-style-type: none"> <li>▪ Full compliance with the Commission's benefit/cost framework</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents that concern use of the Commission's benefit/cost framework in electric system planning &amp; prioritization, and all system planning modeling reports and results</li> </ul>
2.12 Determine and describe how the various components of the utilities' information systems either will or won't support short- and long-term REV objectives (e.g., REV DSIP related plans for granular substation forecasts).	<ul style="list-style-type: none"> <li>▪ Full support of short and long-term REV objectives</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning how the utilities' information systems support or do not support REV objectives</li> </ul>



RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>2.13 Identify, describe, and evaluate changes to the utilities' electric load forecasting process, including organization and staffing, since the previous management audit, taking into consideration policy initiatives that could have significant impact on load and energy requirements.</p>	<ul style="list-style-type: none"> <li>▪ A robust and reliable electric load forecasting process that supports REV objectives</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning changes to the load forecasting process since the previous management audit</li> </ul>
<p>2.14 Determine, describe, and evaluate how the utilities' forecasting and procurement processes are affected by substantial increases in distributed energy resources (demand response, distributed generation, etc.), energy efficiency, and migration of retail customers to competitive suppliers.</p>	<ul style="list-style-type: none"> <li>▪ Full flexibility of forecasting and procurement in response to DER, EE, and migration</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning the impact of increases in DER, EE, and migration on forecasting and procurement</li> </ul>
<p>2.15 Determine, describe, and evaluate the extent to which load forecasts are and will be derived (e.g., performing a top-down analysis of a company-wide peak forecast and/or bottom-up aggregation of substation level peak demand forecasts). Assess the accuracy of those forecasts, both at the system wide and substation level, including how accuracy could be improved by combined and synchronized use of both methodologies. Describe how significantly increased DER penetration will impact existing load forecast processes and assess the adequacy and timeliness of the planned methodological changes required to ensure robust and accurate forecasts.</p>	<ul style="list-style-type: none"> <li>▪ A robust and reliable electric load forecasting process that supports REV objectives</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning derivation of electric load forecasts, the methodology used, the accuracy of previous forecasts system wide and at the substation level, and how accuracy will be improved to support REV objectives</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>2.16 Determine, describe, and evaluate how total system-wide and substation-specific load forecasting are incorporated into the utilities' electric system planning process. As DER penetration levels increase, and as the sources and magnitudes of uncertainties increase, examine the value in incorporating probabilistic approaches into the planning process.</p>	<ul style="list-style-type: none"> <li>▪ A load forecasting process that provides a basis for a full probabilistic assessment in the planning process</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents that concern the incorporation of load forecasting into the planning process, and how uncertainties in future load are considered in the planning process</li> </ul>
<p>2.17 Identify, describe, and evaluate the utilities' electric supply portfolio principles, objectives, policies, processes, oversight, and risk management strategies.</p>	<ul style="list-style-type: none"> <li>▪ Electric supply portfolio principles that fully consider the value of all potential resources on a level playing field while considering the impacts of risk management</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning the utilities' electric supply portfolio principles, objectives, policies, processes, oversight, and risk management</li> </ul>
<p>2.18 Determine, describe, and evaluate the utilities' financial and physical hedging practices as they relate to electric supply, including an examination of the role and use of transmission congestion contracts and rights used in the New York Independent System Operator's (NYISO) wholesale market.</p>	<ul style="list-style-type: none"> <li>▪ Financial and physical hedging practices that minimize risk while providing financial and operational advantages</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents that concern financial and physical hedging practices, policies and recent results, including the use of transmission congestion contracts</li> </ul>
<p>3.8 Evaluate the coordination between the gas planning and electric planning functions. (With Mr. Garcia)</p>	<ul style="list-style-type: none"> <li>▪ Structure that allows full coordination between the gas planning and electric planning functions</li> </ul>	<ul style="list-style-type: none"> <li>▪ All documents concerning the coordination practices and policies between the gas planning and electric planning functions</li> </ul>

**TASK AREA: ELECTRIC INFRASTRUCTURE – LEAD CONSULTANT – WHITMAN**

**Note: Electric Infrastructure initial document requests apply to both NYSEG and RG&E**

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
2.5 Determine and describe how the utilities are aligning their maintenance and modernization efforts with their DSP/Distributed System Implementation Plan (DSIP) efforts.	<ul style="list-style-type: none"> <li>▪ Maintenance and capital additions plans and practices reflect the implementation of DSP/DSIP initiatives and systems</li> </ul>	<ul style="list-style-type: none"> <li>▪ Current DSIP</li> <li>▪ Current system maintenance plan</li> <li>▪ Current capital plan</li> <li>▪ Capital program prioritization scheme</li> <li>▪ Asset management plan</li> </ul>
2.6 Determine and describe how the utilities plan to change their construction programs, planning practices, and equipment procurement practices as more DER are connected to the electric system.	<ul style="list-style-type: none"> <li>▪ Construction programs, planning and procurement practices reflect the transition to installation and operation of DER as part of the energy supply</li> </ul>	<ul style="list-style-type: none"> <li>▪ Current construction manual/procedures</li> <li>▪ Current planning manual/procedures</li> <li>▪ Current procurement manual/procedures</li> </ul>
2.9 Determine and describe how the utilities are planning to collect and manage system asset management data and how they will make the data available to DER providers.	<ul style="list-style-type: none"> <li>▪ Relevant asset management data is collected, effectively managed and made available to DER providers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Asset management plan</li> <li>▪ Example utility agreements/memoranda of understanding with DER providers</li> </ul>

**TASK AREA: GAS INFRASTRUCTURE – LEAD CONSULTANT - VONDLÉ**

**Note: Gas Infrastructure initial document requests apply to both NYSEG and RG&E**

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>3.6 Evaluate whether gas distribution systems are designed to ensure an optimal balance of results in the areas of delivery, safety, and upgrades.</p>	<ul style="list-style-type: none"> <li>▪ A current and comprehensive gas system plan exists</li> <li>▪ A well-developed gas system planning process is utilized</li> <li>▪ Appropriate measurements of gas system reliability and safety are tracked</li> <li>▪ Gas system upgrades are carefully selected to improve reliability and safety</li> </ul>	<ul style="list-style-type: none"> <li>▪ Current gas system plans</li> <li>▪ Description of the gas system planning process</li> <li>▪ Copies of current construction standards and material standards</li> <li>▪ Five year and year to date trends of all gas system reliability and safety metrics tracked at the lowest level of granularity and as rolled up for management reporting</li> <li>▪ Description of the gas system upgrade planning process and prioritization scheme</li> <li>▪ Any evaluations of the effectiveness of the upgrade process in improving reliability and safety over the last five years</li> </ul>
<p>3.7 Review the decision-making process regarding replace versus repair and evaluate the impact on the overall construction program planning process.</p>	<ul style="list-style-type: none"> <li>▪ The repair versus replace decision making process is well-developed and is consistently utilized</li> <li>▪ The construction program planning process appropriately incorporates the repair versus replace decision making process</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of the repair versus replace decision making process</li> <li>▪ Description of each system and tool used to conduct repair versus replace analyses</li> <li>▪ Three recent examples of repair versus replace analyses and decisions</li> <li>▪ Description of how the repair versus replace decision making process is incorporated into the construction program planning process</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>3.10 Evaluate the process for plant/infrastructure asset management decisions including factors such as asset condition, age, obsolescence, preventative maintenance, etc.</p>	<ul style="list-style-type: none"> <li>▪ A well-developed asset management program has been implemented</li> <li>▪ The asset management program tracks appropriate asset information (installation date, size, materials, pressure, current condition, preventive maintenance performed, repair maintenance performed, etc.) for each asset class</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of the gas asset management program</li> <li>▪ Description of each asset management system and tool utilized</li> <li>▪ Delineation of the asset information tracked for each asset class (city gates, transmission mains, regulator stations, distribution mains, services, etc.)</li> <li>▪ Explanation of the how the asset management system is used in plant/infrastructure asset management decisions</li> </ul>
<p>5.6 Assess the leak prone pipe replacement programs, including flood zone management, risk models and other factors used to determine mains to be replaced, verification that high risk pipes are replaced, and the program's impact on total system leaks.</p>	<ul style="list-style-type: none"> <li>▪ A well-developed leak prone pipe replacement program is in place</li> <li>▪ The pipe replacement program is reducing leak rates in proportion to its costs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of the leak prone pipe replacement process</li> <li>▪ Delineation of the factors considered, including flood zone management, risk models, leak history, etc.</li> <li>▪ Description of each system, model, or tool used in the pipe replacement program</li> <li>▪ Ten year and year to date trends in main leaks by type and by type of main (cast iron, wrought iron, protected steel, bare steel, plastic, etc.)</li> <li>▪ Ten year and year to date trends in service leaks by type and by type of service (cast iron, wrought iron, protected steel, bare steel, plastic, etc.)</li> <li>▪ Ten year and year to date trends in main</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
		replacements by type <ul style="list-style-type: none"> <li>▪ Ten year and year to date trends in service replacements by type</li> <li>▪ Ten year and year to date trends in main replacement costs by type</li> <li>▪ Ten year and year to date service replacement costs by type</li> </ul>
5.7 Assess and evaluate the utilities' Incident Investigation processes' compliance with Pipeline Safety Regulations and Best Practices for gas leaks, carbon monoxide, facility or equipment failure, explosions, testing of pipeline and equipment investigation for analysis of any failure or accident to determine its cause and to minimize the possibility of recurrence, etc.	<ul style="list-style-type: none"> <li>▪ The company is in compliance with all Pipeline Safety Regulations and Best Practices</li> <li>▪ A well-developed Incident Investigation process exists that is fully compliant with Pipeline Safety Regulations</li> <li>▪ A lessons learned process is in place that adjusts policies, procedures, standards, training, and the construction program to prevent similar problems in the future</li> </ul>	<ul style="list-style-type: none"> <li>▪ Copies of each pipeline safety violation report for the last five years and year to date</li> <li>▪ Incident Investigation process description including roles and responsibilities</li> <li>▪ Copies of each incident investigation report for the last five years and year to date</li> <li>▪ Copies of all gas system related accident reports for the last five years and year to date</li> <li>▪ Description of the lessons learned process and the resulting changes implemented over the last five years and year to date</li> </ul>

**TASK AREA: BUDGETING AND FINANCE – LEAD CONSULTANT – ROSENKOETTER**

**Note: Budgeting and Finance initial document requests apply to both NYSEG and RG&E**

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>1.11 Examine the appropriateness of the processes and controls governing affiliate relationships and transactions between: (1) Iberdrola, its operating companies, and Avangrid; and (2) NYSEG &amp; RG&amp;E, and evaluate whether they provide sufficient protections to NYS ratepayers. Determine the adequacy of NYSEG and RG&amp;E’s policies, procedures, and training programs related to affiliate relations and the separation of regulated and unregulated activities.</p>	<ul style="list-style-type: none"> <li>▪ Every affiliate relationship is identified</li> <li>▪ Each affiliate relationship is at arm’s-length</li> <li>▪ Each affiliate relationship is well-defined (services or products provided, pricing, service levels, etc.)</li> <li>▪ Affiliate transactions follow NARUC Guidelines and are costed appropriately using fully allocated costs and preferred cost allocation methodologies</li> <li>▪ Accounting for affiliate transactions is accurate and transparent</li> <li>▪ Positive employee time reporting (rather than exception or fixed allocation) is utilized</li> <li>▪ Affiliate procurements are competitive or clearly advantageous to the utility</li> <li>▪ Asymmetric pricing is utilized</li> <li>▪ Affiliate relationships do not harm market competitiveness</li> <li>▪ The regulated utility is adequately compensated for the use of its name or reputation</li> <li>▪ Affiliate relationships do not increase utility company risk</li> <li>▪ Utility operating company is not disadvantaged by employee transfers with affiliates</li> <li>▪ All affiliate relationship and transaction policies,</li> </ul>	<ul style="list-style-type: none"> <li>▪ Entity organization chart (tax chart) showing all Iberdrola legal entities and ownership amounts and relationships</li> <li>▪ List of all affiliate relationships</li> <li>▪ Identification of any overlap of personnel among affiliates (dual or multiple entity positions for a single employee)</li> <li>▪ Contracts (Service Agreements/Service Level Agreements) with each affiliate with signatures</li> <li>▪ Five year detailed trends of transactions with each affiliate by type of service and product</li> <li>▪ Cost Allocation Manual for the utility operating company and each affiliate</li> <li>▪ Detailed explanation of all general allocation formulas</li> <li>▪ Relevant accounting policies, procedures and practices including any affiliate cost true-up processes</li> <li>▪ Relevant Sarbanes Oxley documentation</li> <li>▪ Time reporting procedures for each employee involved in an affiliate cost</li> <li>▪ Documentation of each affiliate relationship and transaction that is based upon competitive (not sole source) procurement</li> <li>▪ Documentation of each affiliate sole source</li> </ul>



RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
	<p>procedures and practices are followed</p> <ul style="list-style-type: none"> <li>▪ Employees are aware of affiliate relationship and transaction policies, procedures and practices</li> <li>▪ Internal controls are adequate to assure compliance with affiliate relationship and transaction policies, procedures and practices</li> <li>▪ Benchmarking is utilized to validate affiliate relationships and transactions</li> <li>▪ Asset transfers are priced asymmetrically and do not disadvantage the utility</li> <li>▪ Dividend and royalty payments are reasonable</li> </ul>	<p>procurement demonstrating the advantage to the utility operating company</p> <ul style="list-style-type: none"> <li>▪ Documentation for each utility affiliate purchase showing that the price is the lower of fully allocated cost or market price</li> <li>▪ Documentation for each utility affiliate sale showing that the price is the higher of fully allocated cost or market price</li> <li>▪ Explanation of how each affiliate relationship operating in the same market do not harm market competitiveness</li> <li>▪ Explanation of how the regulated utility is compensated for any advantage gained by each unregulated affiliate based upon its affiliation with the regulated utility</li> <li>▪ Explanations of how each affiliate relationship does not increase utility company risk</li> <li>▪ Bond covenants relevant to affiliates</li> <li>▪ Explanation and documentation of all ring fencing initiatives in place</li> <li>▪ Listing of all employee transfers among affiliates for the last ten years and an explanation of how each one did not disadvantage the utility operating company</li> <li>▪ Copies of all internal and external audit reports for the last five years relevant to affiliate relationships and transactions</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
		<ul style="list-style-type: none"> <li>▪ Affiliate Relationship and Transaction Code of Conduct</li> <li>▪ Affiliate Relationship and Transaction Code of Conduct training program documentation</li> <li>▪ Procedure for verifying each relevant employee has been trained in the affiliate relationship and transaction policies, procedures, and practices</li> <li>▪ Description and documentation of all internal controls not previously documented relevant to affiliate relationships and transactions</li> <li>▪ Copies of all benchmarking or other studies in the last five years relevant to the use of affiliate relationships and transactions</li> <li>▪ List of all affiliate asset transfers for the last five years</li> <li>▪ Contract for each asset transfer</li> <li>▪ Pricing documentation for each asset transfer</li> <li>▪ Rationalization for each asset transfer</li> <li>▪ Five year trends of each affiliate dividend and royalty payment</li> <li>▪ Relevant dividend and royalty policies and documentation</li> </ul>
<p>1.14 The utilities upgraded their existing US financial SAP system to a new Global SAP Enterprise Resource Planning system, effective January 1, 2015. Evaluate (1) the basis for the upgrade and how the</p>	<ul style="list-style-type: none"> <li>▪ Needs assessments for NYSEG and RG&amp;E were developed and approved prior to the implementation of the new Global SAP Enterprise Resource Planning (ERP) system</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of the new Global SAP Enterprise Resource Planning System (ERP) serving NYSEG and RG&amp;E</li> <li>▪ Flow chart of the ERP, showing all interfaces with</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>upgrade was planned and effectuated; (2) the extent to which the new system adequately supports NYSEG and RG&amp;E's management and technical business needs and processes including interfaces with other systems and compliance with state laws, regulations and PSC Orders (including FERC and PSC reporting); and (3) if a post-implementation gap analysis study has been done to assess if the system is being used to its full potential, employee training needs and how gaps in the new system are being addressed.</p>	<ul style="list-style-type: none"> <li>▪ The functions identified in the needs assessments have been documented to be needed by the NYSEG and RG&amp;E ratepayers and/or regulators</li> <li>▪ Functional system requirements were developed based on needs assessments</li> <li>▪ Alternative solutions, including cost/benefit analysis, were evaluated by appropriate management personnel</li> <li>▪ The rationale and justification for selecting the SAP Global SAP ERP was approved at the appropriate management level</li> <li>▪ The needs assessments, functional requirements, alternative solutions, and the rationale and justification for selecting the chosen ERP are well documented</li> <li>▪ The solution that was optimal and most cost effective for ratepayers and NYSEG and RG&amp;E was selected</li> <li>▪ RFPs were issued for vendor and system integrator</li> <li>▪ Implementation was effectively planned and monitored to minimize cost, interruptions, and time required</li> <li>▪ Resulting ERP meets NYSEG's and RGE's management and technical business needs</li> <li>▪ Interfaces with other NYSEG and RG&amp;E systems is effective and efficient</li> </ul>	<p>all systems, functions, and departments</p> <ul style="list-style-type: none"> <li>▪ Organization chart for the ERP, including interfaces with NYSEG and RG&amp;E organizations</li> <li>▪ Needs assessment documentation for new ERP</li> <li>▪ Functional requirements documentation for new ERP</li> <li>▪ Schedule of all ERP systems evaluated in selecting current ERP</li> <li>▪ Evaluation of all ERP systems considered</li> <li>▪ RFP issued for software and system integrator</li> <li>▪ Any gap analysis conducted before system was selected and implemented and after system was implemented</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
	<ul style="list-style-type: none"> <li>▪ New ERP complies with, and provides output that complies with, all necessary state laws, regulations, and PSC Orders (including FERC and PSC reporting)</li> <li>▪ Post-implementation gap analysis has been conducted to determine if the potential of the ERP is being realized, if employee needs are being met, and what system, process, or function gaps remain to be addressed</li> </ul>	
<p>4.1 Evaluate the utilities' capital budgeting processes, including capital priority setting and forecasting, project authorization and appropriation, and status and variance reporting.</p>	<ul style="list-style-type: none"> <li>▪ Capital projects are evaluated and prioritized based on appropriate cost/benefit analysis and need justifications</li> <li>▪ Capital projects are ranked using an appropriate and uniform methodology</li> <li>▪ Prioritization and evaluative ranking activities include review of results of prior comparable projects</li> <li>▪ Capital projects receive adequate prior authorization and budget appropriation</li> <li>▪ Capital budget is linked to the needs and plans described in long-range plans and financial forecasts</li> <li>▪ The status of each project and variances from budgets are reported and reviewed on an appropriate periodic basis</li> <li>▪ Variances from budget are explained by appropriate personnel and at sufficient levels of detail</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of capital budget development process</li> <li>▪ Flow chart of capital budgeting process</li> <li>▪ Identification of departments and personnel responsible for developing, operating, and monitoring the capital budgeting process</li> <li>▪ Description of capital project priority setting process, including documentation used to develop, evaluate, and review proposed projects</li> <li>▪ Description of capital budget monitoring function, including variance reporting</li> <li>▪ Sample monthly budget to actual variance report with detail and explanation of variances and management comments and/or action items</li> </ul>
<p>4.2 Determine the extent to which actual construction projects implemented are</p>	<ul style="list-style-type: none"> <li>▪ All construction projects are identified, managed, and controlled as part of the</li> </ul>	<ul style="list-style-type: none"> <li>▪ List of all construction projects completed or implemented in the past five</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
consistent with company approved projects.	<p>capital budgeting process</p> <ul style="list-style-type: none"> <li>▪ Documentation of construction projects is uniform and consistent</li> <li>▪ Construction projects comply with company guidelines and regulations</li> <li>▪ Completed projects are subject to a post-audit to determine consistency and compliance with capital budget plans</li> </ul>	<p>years and year to date with amount, date begun, date completed, budget year(s) authorized, justification for project, project manager, responsible department or position</p> <ul style="list-style-type: none"> <li>▪ Policies, procedures, and guidelines governing construction projects</li> <li>▪ List of all post-implementation audits conducted for construction projects closed in the past five years (2012–2016) and year to date</li> </ul>
4.3 Determine the adequacy of capital and operations and maintenance budgeting guidelines, procedures, and the use of zero-based or similar budgeting approaches.	<ul style="list-style-type: none"> <li>▪ Capital and O&amp;M budgeting guidelines, procedures, and policies are complete, documented, and maintained in a current fashion</li> <li>▪ Guidelines and procedures are straight forward, easy to use, and well-understood by the appropriate budget and operations personnel</li> <li>▪ Guidelines and procedures are disseminated to the appropriate organizations and level of personnel</li> <li>▪ O&amp;M budgeting process includes the concept or features of zero-based or performance-based budgeting where appropriate</li> <li>▪ The O&amp;M budget review process incorporates zero-based or performance based budget analysis and evaluation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Capital and O&amp;M budgets for the past five years and year to date</li> <li>▪ Capital and O&amp;M budgeting guidelines, procedures, and policies</li> <li>▪ Flow chart of the O&amp;M budgeting process for</li> <li>▪ List of any training programs conducted for capital and O&amp;M budgeting in 2016 with list of attendees and departments</li> <li>▪ Distribution list for capital and O&amp;M budget guidelines, procedures, and policies</li> <li>▪ Description of any zero-based budgeting concepts utilized in the development of the O&amp;M budgets over the past five years and year to date</li> <li>▪ Description of the analysis and evaluation process that applies for O&amp;M budget submissions</li> <li>▪ Capital and O&amp;M budget calendars for 2016</li> </ul>

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<p>4.4 Determine the impact of regional and centralized planning on capital and O&amp;M budgeting.</p>	<ul style="list-style-type: none"> <li>▪ Capital and O&amp;M budgets represent the needs and plans of individual budget units</li> <li>▪ Capital and O&amp;M budgets reflect ratepayer, safety, and customer service requirements</li> <li>▪ Capital and O&amp;M budgets adequately support strategic and long-term goals of higher level or parent organizations</li> <li>▪ Capital and O&amp;M budgeting processes are adequately linked to strategic and long-term goals and forecasts for the utilities and their parent organization</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of the involvement in planning, development, approval, and monitoring of the NYSEG and RG&amp;E capital and O&amp;M budgets by boards of directors and management of Avangrid, NYSEG, and RG&amp;E</li> <li>▪ Strategic plans, long-range forecasts, and financial forecasts for the past five years and year to date</li> </ul>
<p>4.5 Evaluate the utilities management and control of capital budgeting, including a review of the methodologies used to control and manage program and project capital costs, the process for determining whether total expenditures are adequate, and controls to ensure that deviations from plans are justified and appropriately approved.</p>	<ul style="list-style-type: none"> <li>▪ The capital budgeting process is complete, well-defined, and includes adequate controls</li> <li>▪ The capital budgeting process requires management to adequately plan, monitor, and report on the progress of capital projects in a timely and efficient manner</li> <li>▪ Deviations from plans or variances from budget are required to be explained and approved by appropriate management</li> <li>▪ Past accuracy of the capital budgets of NYSEG and RG&amp;E are reasonable</li> </ul>	<ul style="list-style-type: none"> <li>▪ Year-end capital budget to actual variance reports for the past five years and year to date</li> <li>▪ Month-end capital budget to actual variance reports for each month in 2016, including documentation of justification and explanation of variances</li> <li>▪ Description of the periodic variance analysis and evaluation conducted for capital budget items</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>4.7 Evaluate the effectiveness of internal control procedures to ensure that direct charges and cost allocations are appropriately billed among the holding company and its affiliates.</p>	<ul style="list-style-type: none"> <li>▪ Internal controls over capital and O&amp;M budgets concerning direct charges and cost allocations are sufficient to allow management to identify, assess, and effectively manage transactions between the holding company and its affiliates</li> <li>▪ Internal controls ensure that transactions among affiliates are cost efficient and effective</li> <li>▪ Personnel involved in capital and O&amp;M budgeting processes have received appropriate training concerning direct charge and cost allocation transactions among affiliated entities</li> <li>▪ Internal controls over the capital and O&amp;M budgeting processes are examined by appropriate internal and external auditors to assure compliance with stated procedures</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of procedures in place concerning direct charges and cost allocations among Iberdrola S.A., Avangrid, NYSEG, RG&amp;E, and their affiliated companies</li> <li>▪ SOX controls in place at NYSEG and RG&amp;E concerning direct charges and cost allocations</li> <li>▪ List of internal audits conducted over the past five years and year to date concerning cost allocations and direct charges to or from NYSEG and RG&amp;E, their parent organizations, and affiliated companies</li> <li>▪ List of internal audits conducted over the past five years and year to date regarding NYSEG and RG&amp;E capital and O&amp;M budget processes and controls</li> <li>▪ Any training given to NYSEG and RG&amp;E budget development and management personnel regarding direct charges and cost allocations among holding companies and affiliates</li> </ul>
<p>4.8 Evaluate each utility's Pension &amp; Other Post-Employment Benefits plan asset investment strategy, including an assessment of the level of risk, the utility's ability to meet its plan obligations, and the appropriateness of the diversification of funds.</p>	<ul style="list-style-type: none"> <li>▪ Appropriate assumptions are made regarding valuation of benefit obligations and performance of plan assets, including: discount rate, expected return on plan assets, health care cost trend rate, mortality assumptions and demographic assumptions</li> <li>▪ Estimation techniques are applied consistently</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policies and procedures governing NYSEG's and RG&amp;E's pension and OPEB programs</li> <li>▪ Identification of all departments and positions responsible for pension and OPEB program</li> <li>▪ List of officers overseeing NYSEG's and RG&amp;E's pension and OPEB plans</li> <li>▪ List of all assumptions used in valuing benefit</li> </ul>



RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
	<ul style="list-style-type: none"> <li>▪ Cash flows closely match expected payments to participants</li> <li>▪ Current and future benefit obligations are adequately funded</li> <li>▪ Volatility is commensurate with risk tolerance</li> <li>▪ Investments are diversified sufficiently to avoid significant concentration of risk in any one area of the securities market</li> <li>▪ Asset allocation policy is designed to maximize returns while minimizing risk</li> <li>▪ Multiple asset managers are utilized, and broad exposure is provided to different segments of the equity, fixed income, and alternative investment markets</li> </ul>	<p>obligations and asset performance</p> <ul style="list-style-type: none"> <li>▪ Audited financial statements of NYSEG's and RG&amp;E's pension and OPEB plans for the past five years (2012–2016)</li> <li>▪ Schedule of all pension and OPEB investments for the past five years (2012–2016)</li> <li>▪ List of all asset managers or firms responsible for NYSEG's and RG&amp;E's pension and OPEB investments</li> <li>▪ Schedule of investment plan strategies followed for the past five years (2012–2016)</li> </ul>

**TASK AREA: PROJECT, WORK, AND EMERGENCY MANAGEMENT – LEAD CONSULTANT – AYERS**

**Note: Project, Work, and Emergency Management initial document requests apply to both NYSEG and RG&E**

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>2.19 Examine and assess NYSEG and RG&amp;E's processes for supplementing local workforces during outage events under both local ICS and Area Command Planning activation. Include assessment of crew movement as well as trigger points for change from local Incident Command to Area Command. Assess overall mutual assistance levels requested and the timing of such requests.</p>	<ul style="list-style-type: none"> <li>▪ Adequate workforces for timely and safe storm restoration</li> <li>▪ Good balance between timely and safe restoration and restoration crew utilization (little under or over resource commitment)</li> <li>▪ Appropriate changes from local Incident Command to Area Command</li> <li>▪ Lessons learned from each event are incorporated into written policies, procedures, and workforce training</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policies, procedures, processes, tools, and systems for identifying resource needs during storm preparation at each emergency level</li> <li>▪ Copies of all mutual aid agreements and contractor agreements for storm restoration</li> <li>▪ Lessons learned reports from the last five major storms including crew utilization analyses and changes from local Incident Command to Area Command</li> </ul>
<p>2.20 Examine and assess how NYSEG and RG&amp;E's transition from an event that requires local Division resources (Class I &amp; Class II) to a Class III outage event.</p>	<ul style="list-style-type: none"> <li>▪ Pre-positioned storm response and restoration resources are appropriate for the expected level of the outage event</li> <li>▪ Storm response and restoration resources are adjusted if the actual outage event is different than the expected outage event (worse or not as bad)</li> <li>▪ Lessons learned from each event are incorporated into written policies, procedures, and workforce training</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policies, procedures, processes, tools, and systems for planning for and pre-positioning resources for each class of expected outage</li> <li>▪ Policies, procedures, processes, tools, and systems for adjusting resources as the outage class evolves during an outage event</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>2.21 Examine and assess how NYSEG and RG&amp;E train county and local liaisons to assist in responding to outage events.</p>	<ul style="list-style-type: none"> <li>▪ All appropriate county and local liaison personnel have been identified and trained</li> <li>▪ The county and local liaison personnel perform as expected during outage events</li> <li>▪ Training is reinforced by simulated event drills</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policies, procedures, processes, tools, and systems for identifying and training county and local liaisons to assist in responding to outage events</li> <li>▪ Lessons learned analyses on the effectiveness efficiency of county and local liaisons for the last five major storms</li> </ul>
<p>2.22 Examine and assess how NYSEG and RG&amp;E determine and meet their resource needs during Class I, II and III outage events.</p>	<ul style="list-style-type: none"> <li>▪ Resource needs are accurately forecasted and obtained for each expected class of outage events</li> <li>▪ Outside supplementary resources are identified and incorporated into plans including the conditions warranting their support</li> <li>▪ Resources are appropriately adjusted during each outage event depending on the circumstances</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policies, procedures, processes, tools, and systems for planning for resource needs for each class of outage event</li> <li>▪ Policies, procedures, processes, tools, and systems for adjusting the resources during each outage event</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>4.6 Evaluate whether the utilities are utilizing the most cost effective means to procure goods and services.</p>	<ul style="list-style-type: none"> <li>▪ Recommended good practices from the Council of Supply Chain Management professionals, the Institute of Supply Management, and the American Production and Inventory Control Society are followed, as appropriate</li> <li>▪ The total “value” of goods and services are considered, not just purchase prices;</li> <li>▪ Total value is considered in evaluating vendor and contractor performance</li> <li>▪ Procurement and contracting approaches are tailored to user needs for categories of goods and service and the type of goods and services considering factors such as the use, the urgency, and the value provided by the good or service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policies, procedures, processes, tools, and systems for the procurement of goods</li> <li>▪ Policies, procedures, processes, tools, and systems for contracting for services</li> <li>▪ Last five years and year to date procurement and contracting metrics</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>5.1 Evaluate the management of projects and programs, including the design, estimating, engineering, scheduling, procurement, execution, oversight, and review processes.</p>	<ul style="list-style-type: none"> <li>▪ Recommended good practices from the Project Management Institute (PMI) are followed, including recognition of PMI program and project levels (portfolio, program, and project)</li> <li>▪ Personnel are trained in the written practices</li> <li>▪ Conformance is evidenced by automated check sheets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policies, procedures, processes, tools, and systems for program management</li> <li>▪ Policies, procedures, processes, tools, and systems for project management</li> <li>▪ Policies, procedures, processes, tools, and systems for work management</li> <li>▪ Detailed description of the training for each program and project management professional and each work manager</li> <li>▪ Last five years and year to date program, project, and work management metrics</li> <li>▪ Listing of all employees (name, title, company, and department) who are certified as a Project Management Professional by the Project Management Institute</li> </ul>
<p>5.2 Assess the effectiveness of quality control and quality assurance programs.</p>	<ul style="list-style-type: none"> <li>▪ Quality assurance and quality control programs are well developed and implemented for program, project, and work management</li> <li>▪ Quality assurance and quality control activities are effective in identifying non-complying conditions and minimizing major change orders.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identification and detailed description of each quality assurance and quality control program</li> <li>▪ Policies, procedures, processes, tools, and systems for each quality assurance and quality control program</li> <li>▪ Last five years and year to date quality assurance and quality control metrics for each program</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>5.3 Assess the utilities' processes for forecasting and tracking total project costs, work units, unit costs, and work quality for specific programs and projects and compare the accuracy of forecasted costs to observed actual costs and costs projected in rate cases.</p>	<ul style="list-style-type: none"> <li>▪ Forecasting and tracking programs for program and project costs, work units, unit costs, and work quality are well developed and effectively implemented</li> <li>▪ Forecasted costs are reasonably accurate when compared with actual costs, particularly when compared to rate case projected costs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identification and detailed description of each forecasting and tracking program for program and project costs, work units, unit costs, and work quality</li> <li>▪ Policies, procedures, processes, tools, and systems for forecasting and tracking program for program and project costs, work units, unit costs, and work quality</li> <li>▪ Last five years and year to date summary management reports for each forecasting and tracking program for program and project costs, work units, unit costs, and work quality</li> <li>▪ Detailed comparison of rate case projected costs and actual costs for the last five years and year to date</li> </ul>
<p>5.4 Assess how variances are incorporated, as appropriate, into the estimating process.</p>	<ul style="list-style-type: none"> <li>▪ Variance analysis is incorporated, as appropriate, into each estimating process</li> <li>▪ Estimating standards are adjusted, as appropriate, in reaction to variance analyses</li> <li>▪ Regular lessons learned analysis is exercised upon conclusion of major projects to determine what went right and what went wrong</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identification and detailed description of each estimating function</li> <li>▪ Policies, procedures, processes, tools, and systems for each estimating program including how variance analyses are used to update the estimating standards</li> <li>▪ Last five years and year to date summary management reports related to each estimating program</li> <li>▪ Last five years and year to date metrics for each program, project, and work management variance tracked (budget or planned versus actual)</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>5.5 Evaluate measures or practices used to ensure contracts are evaluated and awarded on an impartial basis (related to the Transparency of Bidding Process).</p>	<ul style="list-style-type: none"> <li>▪ Contracts are evaluated and awarded on an impartial basis consistent with transparency of bidding standards</li> <li>▪ Contracting processes are defined for different contract environments including type of goods or service, contract value, urgency, user needs, and other factors.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identification and detailed description of each contracting function</li> <li>▪ Policies, procedures, processes, tools, and systems for contracting for each function</li> <li>▪ Last five years and year to date summary management reports for each contracting function</li> <li>▪ Last five years and year to date metrics for each contracting function</li> </ul>
<p>5.8 Assess the work management systems and how the utilities use the systems to monitor workforce productivity, manage capital projects and maintenance work, and the systems' effectiveness for reporting, planning, and performance management purposes.</p>	<ul style="list-style-type: none"> <li>▪ Work management systems are well developed and implemented effectively</li> <li>▪ Work management systems are effective for reporting, planning and performance management purposes</li> <li>▪ Work management systems are consistent with the Provider Service Model (employed by SAGE that includes 17 factors covering inputs, provider resources, outputs, and feedback/controls.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identification and detailed description of each work management system</li> <li>▪ Policies, procedures, processes, tools, and systems for each work management system</li> <li>▪ Last five years and year to date summary management reports related to each work management system</li> <li>▪ Last five years and year to date metrics for each work management system</li> </ul>



RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>5.9 Evaluate the day-to-day management of program and project schedules.</p>	<ul style="list-style-type: none"> <li>▪ Project Management Institute (PMI) standards are followed for both programs and projects</li> <li>▪ Planning and day-to-day management of program and project schedules is effective and efficient</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identification and detailed description of each program and project management function</li> <li>▪ Policies, procedures, processes, tools, and systems for program and project management function</li> <li>▪ Last five years and year to date summary management reports for each program and project management function</li> <li>▪ Last five years and year to date metrics on program and project schedule variances for each program and project management function</li> </ul>

**TASK AREA: PLANNING AND PERFORMANCE MANAGEMENT – LEAD CONSULTANT – VONDLE**

**Notes: Each initial document request applies to Iberdrola, Avangrid, NYSEG, and RG&E. The Customer Perspective Performance Baseline will be primarily assembled from the document request responses in this task area.**

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>1.13 Assess the utilities' strategic planning processes, including the linkage of programs to strategic goals, the roles of Avangrid and Iberdrola, and the extent to which the strategic planning function is incorporated with other planning activities.</p>	<ul style="list-style-type: none"> <li>▪ Comprehensive strategic plans are current and relevant</li> <li>▪ Strategic plans cascade logically to subordinate levels</li> <li>▪ Strategic plans guide subordinate functional plans</li> <li>▪ Unambiguous mission statement</li> <li>▪ Articulated vision and values</li> <li>▪ Appropriate performance targets are set</li> <li>▪ A well-developed strategic planning process is in place with clearly defined roles and responsibilities</li> <li>▪ Formal projects are chartered to address identified risks, issues, and performance gaps</li> <li>▪ Comprehensive progress reporting on progress against the strategic plans</li> </ul>	<ul style="list-style-type: none"> <li>▪ Copies of the last three years of strategic plans</li> <li>▪ Copies of the last three years of subordinate plans for:               <ul style="list-style-type: none"> <li>▪ Electric and gas system plans</li> <li>▪ Information technology and systems plans</li> <li>▪ Workforce plans</li> <li>▪ Any other planning components</li> </ul> </li> <li>▪ Mission statement and related documents</li> <li>▪ Vision and values statements and related documents</li> <li>▪ Description of the strategic planning processes including individuals' roles and responsibilities</li> <li>▪ Strategic planning calendars</li> <li>▪ List of all change initiatives chartered to address risks, issues, and improvement identified in each strategic plan</li> <li>▪ Copies of the strategic plan progress reports for the last three years and year to date</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>6.1 Determine the adequacy of the performance management process and the performance measures used, including measures of achieving REV objectives.</p>	<ul style="list-style-type: none"> <li>▪ A well-developed Corporate Performance Management (CPM) program has been implemented</li> <li>▪ Appropriate key performance indicators (KPIs) are accurately reported</li> <li>▪ REV objectives are integral to the CPM program</li> <li>▪ Appropriate targets have been set for each KPI</li> </ul>	<ul style="list-style-type: none"> <li>▪ Detailed description of the Corporate Performance Management (CPM) including roles and responsibilities</li> <li>▪ Explanation of how REV objectives are incorporated into the CPM</li> <li>▪ KPI definitions and calculations for each function and organizational level</li> <li>▪ Explanation of the linkage between the CPM and the relevant strategic plan</li> </ul>
<p>6.3 Evaluate management accountability for performance and the inclusion of corporate and lower-level goals and objectives in management compensation programs.</p>	<ul style="list-style-type: none"> <li>▪ Employee performance is linked to corporate-level performance targets that cascade down and are within the individual's control or within the immediate work group's contribution</li> <li>▪ The employee performance planning and review process incorporates performance targets appropriate for each function and organizational level</li> <li>▪ Performance targets are appropriately included in management compensation programs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of each employee performance management program</li> <li>▪ Description of each employee compensation program</li> <li>▪ Explanation of how performance targets and other goals are incorporated into individual employee performance plans at each organizational level</li> <li>▪ Example (anonymous) employee performance plans and evaluations for each employee performance program and each organizational level</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>6.4 Assess the extent to which incentive compensation performance targets are in line with the Commission's goals and objectives (safety, reliability, environmental protection, or customer service) as opposed to financial goals.</p>	<ul style="list-style-type: none"> <li>▪ Performance targets in each function at each organizational level balance financial objectives and the Commission's goals including safety, reliability, environmental protection, and customer service</li> <li>▪ Employee performance plans are balanced between financial goals and the Commission's goals including safety, reliability, environmental protection, and customer service</li> <li>▪ Incentive programs are linked to financial goals and the Commission's goals including safety, reliability, environmental protection, and customer service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Five year and year to date trends in all metrics tracked that address reliability, public and employee safety, energy costs, customer service, capital costs, and O&amp;M costs</li> <li>▪ Description of the performance targets within each function at each organizational level with an explanations of how they relate to the strategic plan and how they cascade through the organization</li> <li>▪ Five year and year to date trends in performance against each target in each function at each organizational level</li> <li>▪ Detailed description of each incentive compensation program and to whom it applies</li> <li>▪ Explanation of how performance against targets is incorporated into each incentive compensation program</li> <li>▪ Five year and year to date payouts for each incentive compensation program for each organizational level and the calculations of each of the incentive compensation pools</li> </ul>
<p>6.5 Examine NYSEG and RG&amp;E's use of performance benchmarking with other utilities.</p>	<ul style="list-style-type: none"> <li>▪ Every function is regularly benchmarked with an appropriate comparison panel</li> <li>▪ Benchmarking is used as a factor in the setting of performance targets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Benchmarking, best practices, or other studies with other utilities or other comparison panels for each function for the last five years and year to date</li> <li>▪ Explanation of how benchmarking, best practices, or other studies have been used to set performance targets</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
6.6 Evaluate how the change in corporate structure (from Iberdrola to Avangrid) impacted the Company's Performance Management Process. List each change.	<ul style="list-style-type: none"> <li>The change in corporate structure from Iberdrola to Avangrid resulted in no negative effects on the Corporate Performance Management (CPM) process</li> </ul>	<ul style="list-style-type: none"> <li>Description of the prior CPM process under Iberdrola</li> <li>Description of the current CPM process under Avangrid</li> <li>Explanation of each change in the CPM process</li> </ul>
6.7 Determine and assess the extent to which internal corporate incentives, including in NYSEG/ RG&E, Avangrid and Iberdrola, appropriately reflect the interests of New York's regulated utility operations.	<ul style="list-style-type: none"> <li>Internal corporate incentives, including Iberdrola, Avangrid, NYSEG, and RG&amp;E appropriately reflect the interests of New York's regulated utility operations</li> </ul>	<ul style="list-style-type: none"> <li>Description of how each incentive program detailed in 6.4 above reflects the interests of New York's regulated utility operations</li> </ul>

**TASK AREA: CUSTOMER OPERATIONS – LEAD CONSULTANT – STEIN**

**Note: Initial document requests apply to both NYSEG and RG&E**

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>7.1 Examine the adequacy and effectiveness of each utility's internal controls related to the Home Energy Fair Practices Act and Energy Consumer Protection Act (16 NYCRR Part 11). [for residential customers]</p> <p>Note: SAGE understands that Part 11 and Part 12 (Consumer Complaint Procedures) pertain to Customer Operations related to residential customers, including: application for service, termination or disconnection and suspension of service, procedures for special needs customers, service to entire multiple dwellings, service to two-family dwellings, reconnection of</p>	<ul style="list-style-type: none"> <li>The utilities conduct periodic reviews/audits to evaluate their internal performance and compliance with Part 11, with respect to internal controls and good management practices</li> <li>The utilities use customer feedback, including utility customer contact center feedback, complaint analysis, and customer surveys to improve customer operations with respect to Part 11 protections and functions, compliance, and performance</li> <li>The utilities use national and regional benchmarking techniques to improve customer operations with</li> </ul>	<ul style="list-style-type: none"> <li>Provide the internal controls document(s), including flow charts, processes, and procedures relating to implementation of Part 11</li> <li>Provide internal controls audits/studies and any corrections and improvements that were implemented, for the past five years and YTD 2017</li> <li>Identify names and titles of individuals who are responsible for specifically managing Part 11-related functions</li> <li>Identify metrics and targets/goals associated with Part 11-related functions, and end-of-year performance results, for the past five years and year to date</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>service, restoration of commodity supply, conditions for ending suspension of distribution service, deferred payment agreements, budget or levelized payment plans, service deposits, meter readings and estimated bills, backbilling, late payment and other charges, notification requirements, emergency disconnections, complaints to utilities, and procedures for complaints to the Commission.</p>	<p>respect to Part 11 protections and functions, compliance, and performance</p> <ul style="list-style-type: none"> <li>▪ The utilities identify and implement corrective actions, process improvements, employee training and development that measurably demonstrate the adequacy and effectiveness of internal controls and operational performance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Describe how the utilities determine that their internal controls are adequate and effective</li> <li>▪ Benchmarking and related study reports for the last five years relevant to Part 11</li> <li>▪ Last five years and year to date of all residential Customer Operations-related metrics and targets (including KPIs, contractor service level measures, unit costs, and productivity/efficiency measures</li> <li>▪ Identify names and titles of individuals who are responsible for managing residential Customer Operations functions, including: meter reading, billing, customer contact centers, credit and collections, low income programs, complaint handling and customer feedback, energy efficiency and demand reduction programs, field services, revenue protection, training and staff development, and performance management</li> </ul>
<p>7.2 Examine the adequacy and effectiveness of each utility’s internal controls related to the Rules Governing the Provision of Service by Gas, Electric and Steam Corporations to Nonresidential Customers (16 NYCRR Part 13). [for nonresidential customers]</p> <p>Note: SAGE understands that Part 13 has many, but not all,</p>	<ul style="list-style-type: none"> <li>▪ The utilities conduct periodic reviews/audits to evaluate their internal performance and compliance with 16 NYCRR Part 13, with respect to internal controls and good management practices</li> <li>▪ The utilities use customer feedback, including utility customer contact center feedback, complaint analysis, and customer</li> </ul>	<ul style="list-style-type: none"> <li>▪ (Provide the internal controls document(s), including flow charts, processes, and procedures relating to implementation of Part 13</li> <li>▪ Provide internal controls audits/studies and any corrections and improvements that were implemented, for the past five years and YTD 2017</li> <li>▪ Identify names and titles of</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>of the same features as Part 11.</p>	<p>surveys to improve customer operations with respect to Part 13 protections and functions, compliance, and performance</p> <ul style="list-style-type: none"> <li>▪ The utilities use national and regional benchmarking techniques to improve customer operations with respect to Part 13 protections and functions, compliance, and performance</li> <li>▪ The utilities identify and implement corrective actions, process improvements, employee training and development, etc. that measurably demonstrate the adequacy and effectiveness of internal controls and operational performance</li> </ul>	<p>individuals who are responsible for specifically managing Part 13-related functions</p> <ul style="list-style-type: none"> <li>▪ Identify metrics and targets/goals associated with Part 13-related functions, and end-of-year performance results, for the past five years and year to date</li> <li>▪ Describe how the utilities determine that their internal controls are adequate and effective</li> <li>▪ Benchmarking and related study reports for the last five years relevant to Part 13</li> <li>▪ Last five years and year to date of all nonresidential Customer Operations-related metrics and targets including KPIs, contractor service level measures, unit costs, and productivity/efficiency measures</li> <li>▪ Identify names and titles of individuals who are responsible for managing nonresidential Customer Operations functions, including: meter reading, billing, customer contact centers, credit and collections, low income programs, complaint handling and customer feedback, energy efficiency and demand reduction programs, field services, revenue protection, training and staff development, and performance management</li> </ul>



RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
<p>7.3 Examination of the effectiveness and efficiency of the utilities' Budget Billing process relating to customer overpayment/underpayment of bills under the program.</p>	<ul style="list-style-type: none"> <li>▪ The Budget Billing program manager(s) should have appropriate responsibility and authority to ensure that overpayments and underpayments are minimized</li> <li>▪ The Budget Billing program manager should have sufficient employee and IT resources to achieve efficient and effective performance</li> <li>▪ There are relevant performance metrics and targets for efficiency and effectiveness associated with the Budget Billing program</li> <li>▪ Performance metrics results should drive analysis of root causes; and corrective actions and performance improvements are implemented</li> </ul>	<ul style="list-style-type: none"> <li>▪ Describe current Budget Billing processes, relating to customer overpayment and underpayment of bills under the program</li> <li>▪ Describe recent and planned changes to Budget Billing processes, relating to customer overpayment and underpayment of bills under the program, in conjunction with REV and related proceedings, including changes to the low-income program</li> <li>▪ Identify metrics and targets for effectiveness and efficiency, related to overpayment and underpayment of bills under the Budget Billing program, and end-of-year performance results, for the past five years and year to date</li> <li>▪ Identify names and titles of individuals who are responsible for managing the Budget Billing program</li> </ul>
<p>7.4 Examination of the effectiveness and efficiency of scheduling routine field work [meter reading] to ensure goals of service quality and customer satisfaction are achieved.</p>	<ul style="list-style-type: none"> <li>▪ Meter reading fieldwork scheduling procedures are consistent with regulatory requirements</li> <li>▪ Meter reading fieldwork scheduling and performance have efficiency and effectiveness metrics and targets that are consistent with regulatory reporting of service quality and customer satisfaction, as well as internal operational performance</li> <li>▪ Performance metrics are reported and analyzed for root cause problems, and corrective actions and</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide processes and procedures for scheduling of routine meter reading fieldwork</li> <li>▪ Identify metrics and targets for effectiveness and efficiency, related to scheduling of routine meter reading fieldwork, and end-of-year performance results, for the past five years and year to date</li> <li>▪ Identify names and titles of individuals who are responsible for managing the scheduling of routine metering fieldwork</li> </ul>

RFP Audit Sub-Element	Example Good Practice Evaluative Criteria	Initial Document Request
	improvement opportunities are implemented	

### III. APPROACH, METHODS, AND PROJECT MANAGEMENT

This chapter includes the following sections:

- A. Approach
- B. Program And Project Sampling
- C. Project Management

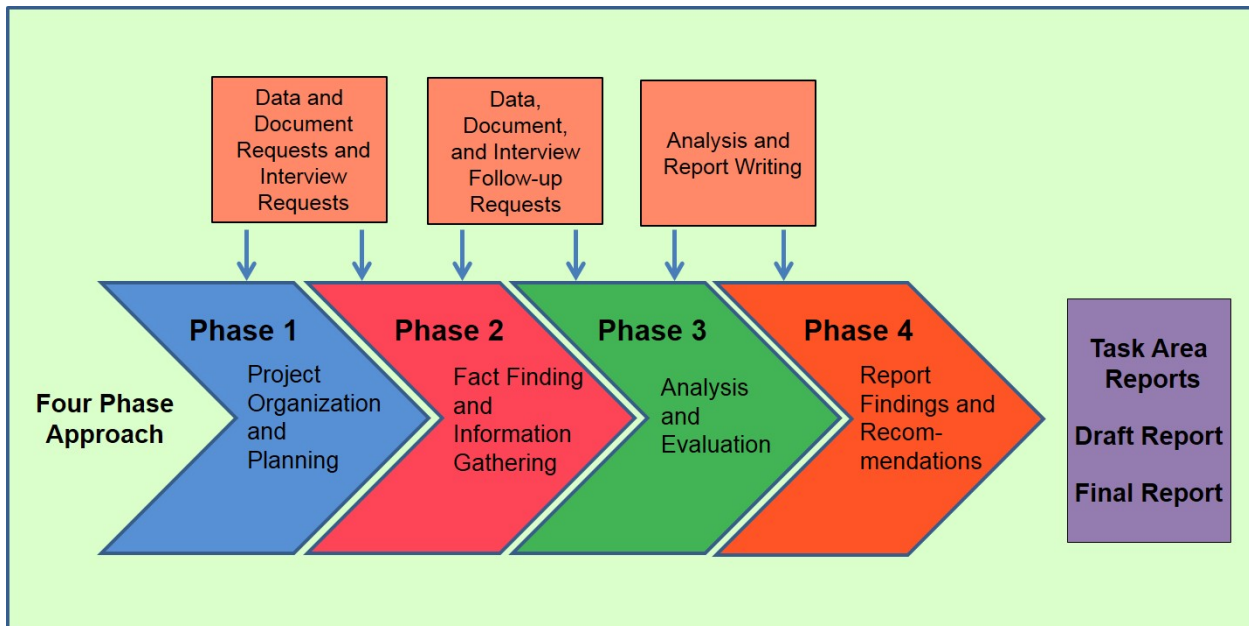
#### A. APPROACH

SAGE utilizes a well-developed Four Phase Approach that has been proven on numerous regulatory management audits and reviews. It consists of the following phases.

1. Project Organization and Planning
2. Fact Finding and Information Gathering
3. Analysis and Evaluation
4. Report Findings and Recommendations

This is illustrated in the following exhibit.

**SAGE Four Phase Approach**



Each of the four steps of the approach is described below.

#### PHASE 1 – PROJECT ORGANIZATION AND PLANNING

This initial phase of the SAGE approach consists of the following activities:

##### Orientation and Overview

SAGE’s initial visit by our audit team will include discussions first with DPS representatives and, later, with senior utility management personnel and other involved

parties to confirm the understanding of the overall scope and objectives of the audit. Assuming counterpart utility Project Coordinators have been appointed, this will be an excellent opportunity for introductions and clarification of the utility Project Coordinators' individual roles and responsibilities. A major focus of this step is to confirm specific approaches needed to optimize the outcome of the audits. Specifics regarding project logistics, key contacts, interfaces, schedules, and communications will be established during this step.

In addition, we ask that the Companies make an overview presentation to the DPS representatives and our consulting team covering the audit elements as they apply to the electric and gas services for both companies.

### **Customer Perspective Performance Baseline**

SAGE will develop baseline performance trends of both NYSEG and RG&E from the customer perspective. The trends will examine reliability, public and employee safety, energy costs, customer service, capital costs, and operations and maintenance (O&M) costs. This performance baseline will set the tone for the management audit and will be the foundation for the Customer Benefit Analyses. If the companies are found to be high performers with positive trends, the emphasis of the audit will be on strategies that will maintain good performance at low total costs. However, if either company is found to have lower performance or declining trends in one or more areas, the emphasis of the audit will be on remedial initiatives that can improve performance to acceptable levels. The Customer Benefit Analyses will highlight how implementing the SAGE recommendations will improve performance from the customer perspective.

### **Updated Work Plans**

Following the initial visit by the SAGE audit team, our consulting team, in consultation with the DPS Project Manager, will prepare updated work plans for the task areas to be covered by the audits. These updated plans will be developed and presented to Commission staff for approval. Plans will include such details as:

- Task area scope refinements based on detailed analysis of the Companies' current organization structures.
- Data and document requests
- Interview plans and schedules based on current organization charts and discussions with the Utilities Project Coordinators
- Field observations to be made
- Testing and sampling plans
- Analysis techniques to be used
- Audit deliverables and scope clarifications
- Audit schedule update

## **PHASE 2 – FACT FINDING AND INFORMATION GATHERING**

### **Data and Document Collection and Review**

This activity will be conducted jointly by the SAGE team, the DPS representatives, and utility Project Coordinators. The SAGE team will provide the utilities a listing of specific data and documents required for the assessment from the detailed work plans. The utility Project Coordinators will then assemble the available data and documents requested by the SAGE team. Once assembled, the SAGE team will carefully review this information prior to commencing field work, to the extent practical. Experience has shown that reviewing the available information, as practical, prior to interviews and site visits, substantially improves the overall efficiency and effectiveness of our field work. Additionally, we suggest locating the data and documents in a single, centralized, secure electronic data base. This will facilitate our review process, assure access to information to follow up on facts and details later in the audit, and provide a complete document and data audit trail.

### **Field Work**

Field work for the audit will involve all assigned audit team members and will include the following activities:

- Interviews with members of the boards of directors, utility executives, and selected functional utility, holding company, and service company managers, supervisors, and professionals
- Operational and business process observations
- Site visits and tours of utility offices, plant facilities, work centers, and other relevant facilities
- Interviews with other stakeholders, as determined by the scope and objectives of the audit and discussions with the DPS Project Manager
- Preliminary one-line findings and conclusions

Detailed field notes of interviews, site and facility visits, and meetings/workshops will be developed by the SAGE consulting team for use during the Analysis and Evaluation phase. The interview summaries will also be stored in a centralized, secure data base and will serve as another major component of the audit trail. SAGE will provide updates to the DPS Project Manager at mutually agreed upon times and locations.

### **PHASE 3 – ANALYSIS AND EVALUATION**

This step consists of developing draft task reports for each task area covering both companies. Based on the results of the document review and field work, the SAGE team will develop working drafts of the background, findings, and recommendations for each task area. These drafts will include:

- Background describing relevant information for each task area to put the findings and recommendations in context
- Preliminary findings
- Preliminary recommendations
- Initiation of the Customer Benefit Analyses for preliminary recommendations

The content of the draft task reports will be based upon findings of fact, generally accepted industry practices, and performance standards known to the consulting team

members, as well as the judgment and experience of the SAGE audit team. The task reports will cover all material RFP scope sub-elements and additional topics identified as important by our consulting team. The task reports will focus on improvement opportunities. Findings will be tied to root causes and the report will include recommendations that address the root causes and seek to improve the utilities' performance going forward.

The task report drafts will be submitted to the DPS Project Manager for review as they are completed.

## **PHASE 4 – REPORT FINDINGS AND RECOMMENDATIONS**

This final step in the SAGE methodology consists of the following activities.

### **Draft Report Preparation**

Once the DPS review of the draft task reports is completed, the SAGE audit team will finalize the task reports and assemble them into a draft report summarizing all findings, recommendations, and CBAs.

### **Submission of Draft Report**

Upon completion of the draft report, the SAGE team will provide its draft report findings, recommendations, and CBAs to the DPS staff as directed by the DPS Project Manager.

### **Utility and DPS Review and Comment**

Once SAGE has presented the draft report to the DPS, we will provide it to the utilities at the direction of the DPS Project Manager for the utility factual reviews. The utilities, at their option, may also prepare written comments in response to the SAGE draft report. SAGE will consider these comments and incorporate into the final report those inputs that present factual information or clarification of conditions or circumstances.

### **Final Report**

Upon receiving the utilities' and DPS' inputs on the draft report, the SAGE team will incorporate the inputs into the draft report and submit the final report to the DPS Project Manager. Work papers will be made available by the SAGE team, as requested by the Project Manager. The final report will be produced by SAGE in a manner suitable for distribution as determined by DPS.

Utility designated confidential information will be redacted in the public version of the final report, if necessary. However, SAGE works hard to avoid including confidential information in the final report and, normally, only a public version of the report is prepared.

### **Post Audit Activities**

At the conclusion of the audits, SAGE will attest, in accordance with the multi-party contract, that certain sensitive and confidential utility documents, if any, have been appropriately returned or destroyed.

If testimony or other support by SAGE is requested by the Commission or Department following the conclusion of the audits, SAGE agrees to provide the requested testimony

at the same loaded rate contained in our proposal. The consultant will be reimbursed for actual, reasonable travel expenses for post-audit work.

## B. PROGRAM AND PROJECT SAMPLING

As part of its evaluation of the Project, Work, and Emergency Management Task Area, SAGE will identify, select, and assess a representative sample of construction programs and projects that are completed and/or are in-progress, for the purpose of identifying opportunities to improve performance and reduce unnecessary costs. SAGE expects to select a sampling of small, medium, and large programs and projects that are both in progress and completed, as shown in the following table.

**Program and Project Sampling Guide**

Project/Program Stage ↓  → Project/Program Size	Small Project/Program \$10K to \$100K Investment	Medium Project/Program \$100K to \$1 Million Investment	Large Project/Program > \$1 million Investment
In Progress	✓	✓	✓
Completed and In Service	✓	✓	✓

## C. PROJECT MANAGEMENT

SAGE will utilize several proven and effective project management techniques that will ensure the effective and efficient management of this assignment while enhancing communications among the consulting team members and DPS staff. This can only be accomplished through the efforts of strong project management, effective controls, and the coordinated efforts of senior personnel. SAGE's Project Managers will be responsible for ensuring that the project work is progressing on schedule and within the planned budget. In addition, our Project Managers will be responsible for the overall work quality, ensuring that the activities across all scope areas are consistently executed and well-coordinated. Key elements of SAGE's project management approach are described below.

- **Project Planning.** SAGE will use a logical and efficient plan of action for the review that is clearly understood by the project team and the DPS staff. Project planning activities will include:
  - Defining tasks to investigate thoroughly all review areas
  - Specifying task dependencies so that interdependent tasks will be completed in the appropriate sequence to ensure that the flow of work builds a cumulative body of knowledge rather than clusters of data with possible contrasting conclusions
  - Estimating consulting hours and preparing schedules to complete each task
- **Project Controls.** To monitor costs and schedule, the SAGE Project Managers will:



- Periodically, compare actual versus estimated consulting hours by staff for each phase defined in the budget
  - Working with each team member, estimate the time to complete each task, including the total elapsed time as well as the level of effort
  - Make project plan adjustments based on the project progress to date, changes in project scope, or changes in priorities in concert with the DPS Project Manager
- **Project Administration.** The SAGE Project Managers, with the assistance of the report editor, will use the following techniques to ensure the smooth execution of the review:
- Enforce standards for project documentation and work papers to ensure confidentiality, accuracy, completeness, and consistency
  - Establish a simple, workable set of administrative procedures covering:
    - Requesting, storing, and returning documentation
    - Scheduling interviews and documenting results
    - Reporting project hours and expenses
    - Reporting progress and dealing with exceptions
    - Defining protocols for interfacing with the Board representatives and utility staff

## PROJECT STANDARDS

SAGE strives for the highest quality in all our work products. Comprehensive management audits are complex projects, involving several consultants and many separate tasks. While careful planning is an important task in an audit, we believe that the experience and organization of the project team is the most important factor in determining the quality of the final product. Four distinctive features of our proposed team and approach will ensure a quality product:

- The SAGE Project Managers and Lead Consultants are experienced management consulting professionals.
- The SAGE consulting team will perform all work in a professional manner in general accordance with: the United States General Accounting Office's Standards for Audit of Government Organizations, Programs, Activities, and Functions, as applicable to this project; and the National Association of Regulatory Commissioners' Consultant Standards and Ethics for the Performance of Management Analysis. All facts will be referenced to document responses or interview summaries. Adherence to these standards will provide the project controls and reporting standards necessary to perform the audit effectively and provide sufficient justification for all recommendations.
- The SAGE project team members have a demonstrated track record for producing quality products within schedule and budget limits. Members of the proposed consulting team have successfully performed audits and similar projects in many states.

- SAGE emphasizes communication and cooperation among the consulting team members and DPS representatives, which helps identify the most important enterprise-wide issues.

Our Project Managers will ensure consistent application of the SAGE approach among the consultants, and they will review all the work products prepared by the consulting team. This review will prove useful in helping the consulting team place appropriate emphasis on issues important to the DPS.

SAGE will maintain appropriate documentation of report background, findings, and recommendations to ensure that our work is factually based; that our findings are supported by relevant data; that our professional judgment, where applied, is differentiated from analytical results; and that the results of our audit are easily traceable to specific consultant efforts. In short, SAGE will establish a clear "audit trail." SAGE consultants are familiar with the need for such an audit trail. Our consultants' involvement in numerous proceedings that have called for providing expert witnesses for public testimony has sensitized them to the need to correlate each fact in a report with the working papers and documents that support it.

In accordance with generally accepted auditing standards (GAAS), our work papers will be:

- Complete and accurate
- Clear and easily understandable
- Legible and neat
- Relevant, i.e., "restricted to matters that are materially important and relevant to the objectives of the assignment"

## **WORK PAPERS**

As part of the audit process, SAGE will prepare and obtain a number of documents, work papers, and reports that will be available during and upon completion of the project to the DPS. These include the following:

- **Interview Documentation.** The project team will use a formal interview request form or list that will be provided as a record of our request. Each interview request will be assigned a unique number that will allow us to track the status of responses and reference the specific interview summary in the final report. When possible, interviews with personnel will be requested at least five working days in advance. Upon completion of each interview, we will prepare a formal interview summary. The interview summaries will become part of our audit work papers.
- **Data and Document Requests.** Throughout the audit, we will provide written requests for documents and other information. These document requests will clearly specify the information or documents needed and, if possible, the person most likely to have access to the document or information. Each data request will be assigned a unique number that will allow us to track the status of responses and reference the specific document in the final report.

- **Data Request Log.** This log will identify documents requested and date received and will be available electronically. Documents will be kept in a secure document data base.
- **Interviews and Site Visits Log and Schedules.** A log of interviews and site visits scheduled and completed will be kept. At a minimum, this log will include the interviewee, interviewer, and dates requested and completed.
- **Interview Summaries.** At a minimum, the interview summaries will include the names of the interviewee and interviewer, the title and organization of the interviewee, documents requested, and items discussed.
- **Progress Reports.** To keep the DPS apprised of audit progress, we expect to have frequent contacts and will provide periodic oral and written reports as requested by the DPS Project Manager.
- **Task Reports.** Task reports will be developed for each of the audit review task areas. The facts in these task reports will be reviewed by the utility for factual verification and will be included in the final report. Comments provided to us regarding the verification will be documented and become part of our project work papers.
- **Draft and Final Audit Reports.** We will provide electronic copies of the full report to the DPS. The full report will describe the background, findings, and recommendations for each task area. The report will be a complete description of the results of our audit of the respective task areas. In preparing the final report, the only changes SAGE will make to the final draft reports will be in response to specific comments from the DPS or factual corrections from the utility.
- **Work Papers.** We will develop an organized set of work papers that will be the basis for our reports. The reports will be referenced to these work papers as the source of its factual statements as well as the basis for its background, findings, and recommendations. If requested, we will provide a complete set of working papers upon completion of the audit. All work papers, interview notes, statistical analyses, and other supporting documents developed or obtained during the course of the audit will be made available to staff, if requested.

## **CONFIDENTIALITY PROTECTION**

As part of its commitment to ethical behavior in all matters, SAGE rigorously protects client confidential material. In this case, our commitment extends to both the DPS and the subject utility. All consulting team members are briefed on confidentiality standards and processes and the Project Managers monitor the project process to ensure that confidentiality is respected at all times. SAGE and our team members will sign DPS approved, reasonable company non-disclosure agreements, if requested.

SAGE expects that some data and document responses and interview summaries will contain company designated confidential information. All project work papers will be stored in confidential, restricted-access, password protected data bases. We prefer to not receive hard copy confidential information. However, if this is unavoidable, the hard

copy confidential information will be stored securely and returned to the company at the completion of the audit.

SAGE endeavors to write the audit report without referencing any confidential material. If referencing confidential material is unavoidable, SAGE will first develop a confidential version with all information designated as confidential by the company noted. Any disputes about whether specific information is actually confidential will be resolved among the DPS Project Manager, SAGE Project Managers, and companies' Project Coordinators. Then, we will work with the DPS Project Manager and staff to produce a public version of the report with the confidential information properly redacted. The confidential version of the report will be protected at all times.

### **TEAM COMMUNICATION**

SAGE assigns as small a team as possible to each engagement while ensuring subject matter expertise in each scope element. SAGE emphasizes communication among the team and with the DPS representatives during each step of the project, but particularly during project planning and field work.

In addition to encouraging communication among the team members, the SAGE Project Managers will regularly poll team members on preliminary observations and concerns. For topics of general interest, the Project Managers will make sure that all interested team members are aware of factors in other areas that may influence their analyses. The SAGE Project Managers will also assign principal responsibility for resolution of each enterprise-wide issue to one of the SAGE team members.

## IV. CUSTOMER BENEFIT ANALYSES

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SAGE will begin the customer benefit analysis process from the very outset of the audit with the customer perspective performance baselines for each utility. SAGE is assigning its Co-Project Managers to focus exclusively on performance metrics and customer benefit analyses in each task area under their responsibility. These analyses will identify opportunities for better reliability and service, reduced risk, and better cost containment. The service level versus cost tradeoff and the capital cost versus operating cost tradeoff will be examined for each improvement opportunity. That is, improvements in reliability, risk reduction, or customer service that require increased expenditures will need to be justified. Likewise, capital expenditures expected to reduce O&M costs will have to have a realistic chance of success and be economically sound.

SAGE intends to evaluate both the qualitative benefits of each recommendation as well as the quantitative benefits. Certain recommendations may have personnel safety, customer relations or regulatory benefits that do not lend themselves to quantification but are important none-the-less. Such qualitative benefits will also be analyzed, evaluated, and prioritized among all benefits by SAGE.

SAGE will employ the following process in order to implement the Customer Benefit Analysis (CBA) model as part of the audit:

- Establish baseline trends of current performance metrics for NYSEG and RG&E utilizing data provided under the initial data requests and publicly available information.
- As recommendations are identified in each of the seven scope elements, available baseline cost, resource, and performance data will be collected for use in quantifying the potential costs and benefits of implementation.
- Potential benefits of implementation will be identified and related to KPIs where relevant.
- Resource and cost estimates for implementation of each recommendation will then be developed.
- During Phase 3, Analysis and Evaluation, each preliminary recommendation will be analyzed and evaluated using the Customer Benefit Analysis template shown below.
- The CBA will be used as a factor in prioritizing the recommendations.
- A brief summary of the CBA benefits, implementation effort, and cost will be included in a listing of the recommendations.
- The initial CBAs will be included in the draft report for DPS and utility review and comment.

The CBAs will be adjusted for the final report as necessary to conform to any modifications of the recommendations and to incorporate feedback received on the draft report.

### Customer Benefit Analysis Template

Recommendation Component	Recommendation Component Detail
Recommendation Number:	(From Findings and Recommendation Summary)
Recommendation Statement:	(As stated in Audit Report)
Description of Improvement:	(Narrative of actions, investment or improvement necessary to achieve the benefits of the recommendation)
Priority:	High, Medium or Low
Responsible Manager:	(Suggest most appropriate Manager or Position to be assigned responsibility for implementation)
Estimated Implementation Commencement:	Month and year
Estimated Implementation Duration:	Time in months
Cost of Improvement Implementation:	Total Capital Costs: Total O&M Costs:
Capital Cost Cash Flow:	Year 1: Year 2: Year 3: Year 4: Year 5:
O&M Cost Cash Flows:	Year 1: Year 2: Year 3: Year 4: Year 5
Qualitative Costs:	(Narrative Description, i.e. Staff morale, customer relations, community relations impacts, etc.)
Quantitative Benefits:	One Time: Annual: Total Five Year Benefits:
Qualitative Benefits:	(Narrative Description, i.e. Staff morale, customer relations, community relations impacts, etc.)
Net Present Value of Quantifiable Five Year Costs/Benefits:	Net Present Value of Benefits (using Company cost of capital)

## V. PROJECT TEAM AND RESPONSIBILITIES

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### A. SAGE TEAM LEADERSHIP

A SAGE Partner, Mr. David Whitman, will serve as the Engagement Director for this audit. In this role, he will have responsibility for all audit activities and the client's ultimate satisfaction with the audit. Mr. Whitman and another SAGE Partner, Mr. David Vondle, will serve as Co-Project Managers. As Co-Project Manager, Mr. Whitman will be responsible for overseeing the Electric Planning and REV Preparations, Gas Infrastructure, Budgeting and Finance, and Planning and Performance Management Task Areas.

Mr. Vondle, as Co-Project Manager, will be responsible for overseeing the Corporate Governance; Electric Infrastructure; Gas Planning; Project, Work, and Emergency Management; and Customer Operations Task Areas.

Further, Mr. Whitman also will be the Lead Consultant for the Governance and Electric Infrastructure Task Areas while Mr. Vondle will serve as Lead Consultant for Gas Infrastructure and Planning and Performance Management Task Areas.

Both SAGE Partners will be intimately involved with all aspects of the audit. The DPS is assured prompt response to any issue as at least one of the SAGE Partners is always available.

The SAGE Leadership Team will be assisted by Jim Collins, a disabled American veteran, who serves as the report editor, work papers manager, and billing coordinator. Having the same individual manage the work papers and edit the report provides an extra layer of assurance that all report facts will be properly documented. Jim works closely with the SAGE Leadership Team to confirm that all client commitments are completed accurately and timely.

### B. SAGE TEAM MEMBERS

A Lead Consultant will be assigned who is well-qualified to cover the scope of each task area. Each Lead Consultant is clearly responsible and accountable for following the SAGE approach and work plans for the assigned task area and completing the audit within the schedule. In addition to the task area assignments of Messrs. Whitman and Vondle described above, the additional SAGE team members and their task area assignments are as follows.

- George W. Evans, Lead Consultant for Electric Planning and REV Preparations
- Paul Garcia, Lead Consultant for Gas Planning
- Robert L. Rosenkoetter, CPA, Lead Consultant for Budgeting and Finance
- James Ayers, CMC, Lead Consultant for Project, Work, and Emergency Management
- Ben Stein, Lead Consultant for Customer Operations

The following table shows the nine task areas and the SAGE Project Manager and the Lead Consultant for each task area.



## Task Areas and Project Manager and Lead Consultant Assignments

Task Area	Project Manager	Lead Consultant
1. Corporate Governance	Vondle	Whitman
2. Electric Planning and REV Preparations	Whitman	Evans
3. Electric Infrastructure	Vondle	Whitman
4. Gas Planning	Vondle	Garcia
5. Gas Infrastructure	Whitman	Vondle
6. Budgeting and Finance	Whitman	Rosenkoetter
7. Project, Work, and Emergency Management	Vondle	Ayers
8. Planning and Performance Management	Whitman	Vondle
9. Customer Operations	Vondle	Stein

Full resumes of all SAGE team members are provided in Chapter VIII, Individual Experience and Qualifications.

The SAGE Project Managers will ensure that each Lead Consultant is fulfilling the responsibilities of the assignment. The SAGE Project Managers are also intimately involved in the content and presentation of the findings and recommendations for each task area.

### C. RIGHT SIZED, EXPERT TEAM

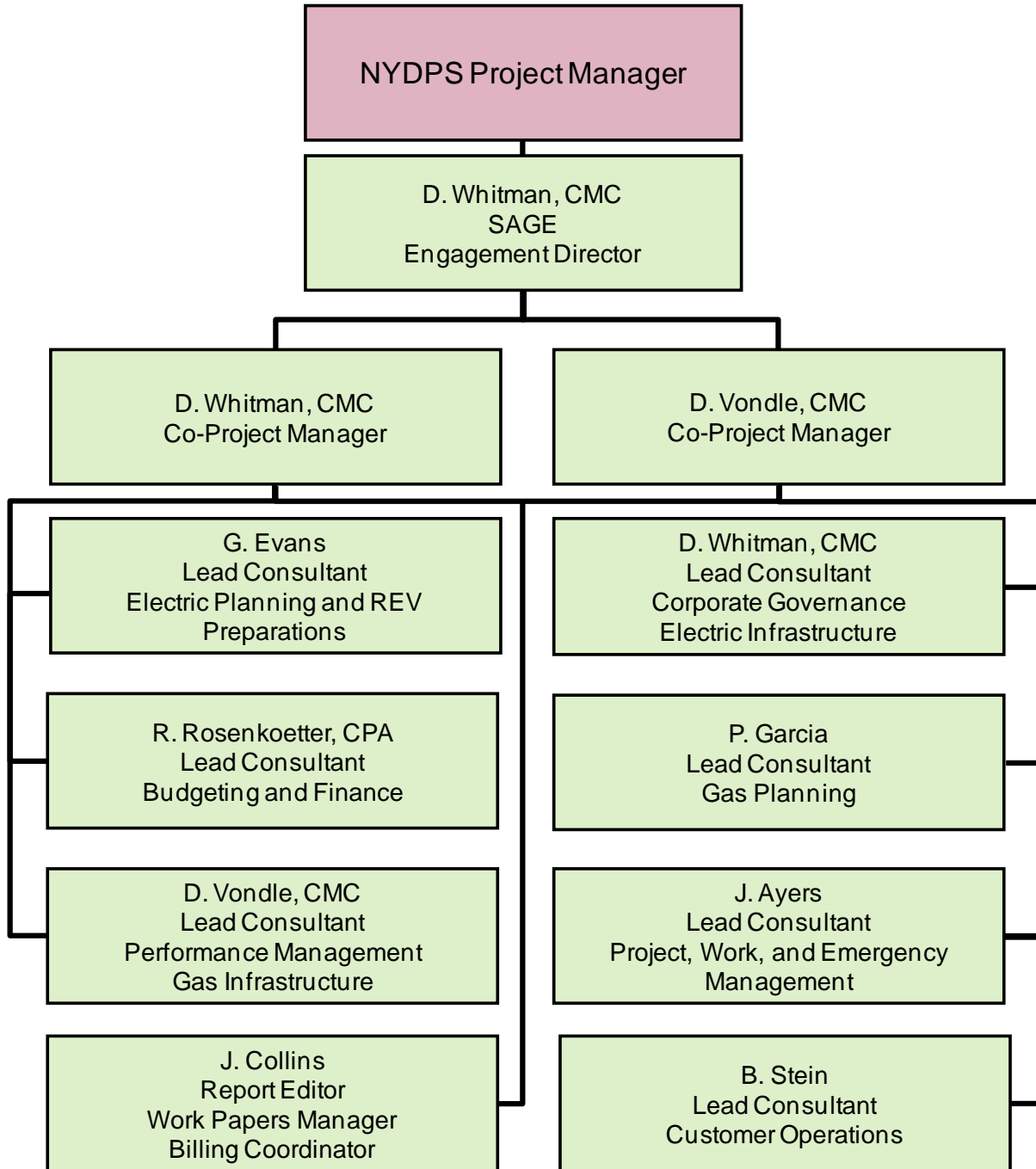
SAGE has determined that the smallest team possible with subject matter experts in each task area is the most efficient and effective audit project organization staffing model. With a small team, each team member has more consulting hours to efficiently and effectively pursue in-depth analyses of the assigned scope areas than is possible with a larger team. Our well-balanced teams are thoroughly experienced with all aspects of electric utilities, natural gas utilities, holding companies, and affiliates. This small, expert team offers the following advantages:

- **Cross-pollination.** Our team members have experience and expertise outside their assigned scope areas and each team member brings an important perspective to enterprise-wide issues. Each task area will receive our entire team's best thinking. Many audit issues overlap each other and this approach addresses the overlapping areas effectively. It also promotes the identification of overarching, root-cause, enterprise-wide issues, such as governance and strategic planning.
- **Robust communication.** The small team also allows continual communication among the team members and with the Board Staff. At the end of each field work day, we will have an informal round robin discussion of observations and issues identified in each scope area, as practical.
- The SAGE team members have **a broad management perspective and a reputation for integrity.** As a result, we are well suited to perform highly visible, politically sensitive assignments.

- **SAGE is independent and objective.** SAGE has not worked directly or indirectly for any New York utilities and we offer no engineering, information technology, training, or similar services that may cloud our independence and objectivity with the utilities.

### D. SAGE PROJECT ORGANIZATION

The SAGE organization chart for this audit is shown below.



## E. ALLOCATION OF CONSULTANT HOURS

SAGE has allocated consultant hours based on its preliminary work plans commensurate with the scope of work in each task area. The following exhibit provides consultant hours allocation for each SAGE team member.

**Consultant Hours by Task Area**

Task Area	Whitman	Vondle	Evans	Garcia	Rosenkoetter	Ayers	Stein	Collins	Total
Corporate Governance	368	56						72	496
Electric Planning and REV Preparations	72	20	472					80	644
Electric Infrastructure	176	40						64	280
Gas Planning	20	64	8	344				72	508
Gas Infrastructure	40	240						64	344
Budgeting and Finance	80	24			520			80	704
Program, Project, Work, and Emergency Management	24	88				584		88	784
Planning and Performance Management	56	360						72	488
Customer Operations	24	72					484	80	660
SAGE Project Administration	80	40						120	240
<b>Total Hours:</b>	940	1,004	480	344	520	584	484	792	<b>5,148</b>

## VII. WORK TIMELINE

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SAGE commits to the following schedule dates as specified in the RFP, assuming the contract signing in April and no more than two calendar weeks turnaround on data and document requests and one week lead times for interview schedules.

### SAGE Schedule Commitments

Task	Target Date
Orientation Meeting	May 2017
Initial Work Plan	May 2017
Draft Final Report	January 2018
Final Report	March 2018

The exhibit on the following page displays the proposed SAGE project schedule by project phase and major activity. The SAGE Project Managers will work with the DPS Project Manager and the utilities' Project Coordinators during Phase 1 of the approach to refine the schedule to meet all parties' needs.

## Project Schedule

Project Phase	Project Activities	2017								2018		
		May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	March
Phase 1: Project Organization and Planning	Orientation & Overview											
	Detailed Work Plan											
Phase 2: Fact Finding and Information Gathering	Data & Document Collection & Review											
	Field Work											
Phase 3: Analysis and Evaluation	Develop Task Reports											
Phase 4: Report Findings and Recommendations	Draft Report Preparation											
	Submit Draft Report											
	DPS Review and Comment											
	Utilities' Written Comments											
	Complete and Release Final Report*											
Milestones and Reporting	Project Milestones and <b>Midpoint Brfg</b>	◆				◆	◆	◆		◆	◆	◆
	Weekly Informal Status Updates	●	●	●	●	●	●	●	●	●	●	●
	Month-end Written Status Reports	√	√	√	√	√	√	√	√	√	√	√

\*Includes PSC Commissioner and Senior DPS staff briefings on Final Report

## VIII. INDIVIDUAL EXPERIENCE & QUALIFICATIONS

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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 for the state auditor's office. Recently passed state legislation requires 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 for an independent review and audit the draft integrated resource plan (IRP) developed by a Midwestern electric utility on behalf of a 22-member 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.
- Mr. Whitman led a team of consultants in a rapid assessment of the capital investment program for 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.
- 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 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 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 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 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 focused on reliability, safety, operations dispatch, and outage management data as well as vegetation management, fleet, materials, and staffing data.

## **DAVID P. VONDLER, 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. Vondler 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. Vondler 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. Vondler 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.

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 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 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
- 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 energy company. 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:

- 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.
- 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.
- 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.
- 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.
- 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 recently completed 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.
- 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.
- Mr. Evans testified for the Office of Attorney general regarding an audit of fuel and purchased power expenses of Consumers Power.
- 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, Mr. Garcia was employed by Louisville Gas and Electric (LG&E) and Kentucky Utilities (KU). These 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<sup>®</sup> 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.
- 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.
- 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. Other activities included preparation of pro-forma adjustments and class cost of service analyses.
- Mr. Garcia reviewed gas supply purchasing procedures for Public Gas Company. Other activities involved preparation of revenue requirements, pro forma adjustments, and rates for non-recurring charges.
- For the City of West Liberty (KY), Mr. Garcia created a gas supply-purchasing program, developed natural gas revenue requirement and rates, and assisted with purchase of distribution system.
- 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.
- 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, prudence 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 (NYS DPS) in a comprehensive management audit of National Fuel Gas Distribution Corporation (NFGDC). 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. 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 a 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 management audit of the Long Island Power Authority.
- 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, 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 on-site 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 2016 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

## **IX. CONFLICTS OF INTEREST**

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Neither SAGE Management Consultants, LLC nor any members of the proposed project team have any current or past professional, personal, or financial relationship with NYSEG, RG&E, Avangrid or their affiliates. While none of the team members hold stock in the company directly, they may hold mutual funds or exchange traded funds that hold stock in the company.

## X. REFERENCES

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Following are references for recent projects performed by SAGE Management Consultants, LLC and the consulting team proposed for this engagement.

### **Pennsylvania Public Utilities Commission**

Messrs. Vondle, Whitman, Rosenkoetter, and Stein, working under Vondle & Associates, Inc., recently completed a comprehensive management audit of PPL Corporation and PPL Electric Utilities. Messrs. Whitman and Vondle served as co-Project Managers, as proposed for this engagement. Mr. Vondle did an intensive examination of PPL's affiliate relationships and transactions; Mr. Whitman examined PPL's executive management, including governance and strategic planning; Mr. Stein analyzed PPL's customer service operations and its customer benefit programs, and Mr. Rosenkoetter audited PPL's finance and accounting functions. Reference:

Mr. Nathan Paul or Mr. Deron Henry  
Bureau of Management Audits  
Pennsylvania Public Utilities Commission  
[npaul@pa.gov](mailto:npaul@pa.gov), (717) 214-8249  
[dehenry@pa.gov](mailto:dehenry@pa.gov), (717) 772-0304

### **Connecticut Public Utilities Regulatory Authority**

SAGE has completed four engagements for the Connecticut Public Utility Regulatory Authority (PURA) since 2012. Messrs. Vondle, Whitman, Evans, Stein, and Rosenkoetter have participated in one or more of these engagements.

Messrs. Vondle, Whitman, Evans, Stein, and Rosenkoetter recently completed a comprehensive management audit of the Eversource/Connecticut Light and Power Company. This audit included a detailed examination of finance, accounting, and affiliate relationships and transactions by Mr. Rosenkoetter and a thorough review of the Eversource and Connecticut Light and Power executive management, governance and strategic planning by Mr. Vondle. Mr. Evans analyzed the Company's power supply program and Mr. Stein examined customer service operations.

Messrs. Vondle, Whitman, and Rosenkoetter completed a SAGE extension of Prosecutorial Staff assignment for the PURA in a Connecticut Light & Power application for recovery of \$462 million in storm costs for five storms over a two year period, Docket No. 13-03-23. The SAGE team evaluated all of the case filings and submitted expert testimony. The team also assisted in the preparation of the Prosecutorial Staff brief.

Messrs. Vondle and Whitman led a SAGE team that served as an extension of PURA staff in support of PURA Docket No. 12-06-10, Establishment of Industry Performance Standards for Telecommunications Companies in response to Section 5 of Connecticut Public Act No. 12-148, An Act Enhancing Emergency Preparedness and Response. The team developed a set of draft standards on behalf of the PURA for comment by affected telecommunications companies, evaluated those comments, and formulated a draft decision and standards for approval and publication by the Authority Commissioners.

Messrs. Whitman, Stein, and Vondle were members of a SAGE team that served as an extension of the PURA staff in development of a draft decision in support of Docket No.12-06-12, PURA Investigation of the Feasibility of the Establishment of a Program to Reimburse Residential Customers for Spoilage Loss of Food Items or Refrigerated Medications Caused by a Lack of Refrigeration During Electric Service Outages, in response to Section 13 of CT Public Act No. 12-148, An Act Enhancing Emergency Preparedness and Response. The team was responsible for conducting research, developing interrogatory questions, and writing the draft decision for review by the PURA staff and consideration by the PURA Commissioners. The efforts included quantification of proposed program costs, customer impacts, and benefits. Reference for all four engagements:

Mr. Tom Sholtes  
Contract Manager  
State of Connecticut  
Public Utilities Regulatory Authority  
Phone: (860) 827-2845  
[thomas.sholtes@po.state.ct.us](mailto:thomas.sholtes@po.state.ct.us)

### **Tacoma Public Utilities Ten Year Management Review**

SAGE completed a Ten Year Management Review of the Tacoma Public Utilities on behalf of the Tacoma City Council. This was a comprehensive management audit of the Utilities' Power, Water, and Rail divisions as required by the city charter. Messrs. Whitman, Vondle, Rosenkoetter, and Collins made up the SAGE team. Reference:

Jim Sant, (Project Coordinator)  
Deputy Director for Administration  
Tacoma Public Utilities  
(253) 502-8102  
[jsant@ci.tacoma.wa.us](mailto:jsant@ci.tacoma.wa.us)

### **Maine Office of Public Advocate**

Mr. Vondle has led multiple SAGE engagements for the Maine Office of Public Advocate (OPA), including: the merger of Emera and Maine Public Service, analyzing Bangor Hydro affiliate arrangements with Emera affiliates, the evaluation of the affiliate implications of a CMP request for an enterprise-wide customer information system (with Mr. Rosenkoetter), and a Central Maine Power (CMP) credit and collections case (also with Mr. Rosenkoetter). Reference:

Mr. Eric Bryant or Ms. Agnes Gormley  
Maine Office of the Public Advocate  
(207) 287-2445  
[Eric.J.Bryant@maine.gov](mailto:Eric.J.Bryant@maine.gov)  
[agnes.gormley@maine.gov](mailto:agnes.gormley@maine.gov)

### **Nova Scotia Consumer Advocate**

Mr. Vondle provided expert witness testimony and regulatory support on multiple cases involving Nova Scotia Power, the Maritime Link, and Efficiency Nova Scotia. Reference:

Bill Mahody  
Merrick, Jamieson, Sterns, Washington & Mahody  
(902) 429-3123  
[bill@mjswm.com](mailto:bill@mjswm.com)



## XI. INSURANCE ATTESTATION

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SAGE Management Consultants, LLC will secure and maintain appropriate workers' compensation and disability benefits insurance at no cost or expense to the NY DPS and provide evidence of coverage to the DPS should SAGE be selected to perform this audit.

SAGE also maintains comprehensive general liability (CGL) insurance and professional liability insurance to insure against damages and costs resulting from, but not limited to, negligent acts, errors, and omissions in the performance of any engagement agreement resulting from this RFP. Proof of insurance shall be provided if SAGE is selected to perform this audit.

Following is a description of the insurance coverage currently carried by SAGE Management Consultants, LLC.

- A commercial general liability policy with coverage of \$2,000,000 for each occurrence and \$4,000,000 general aggregate.
- Hired automobile coverage and non-owned automobile coverage of \$2,000,000 per occurrence (SAGE owns no automobiles).
- Workers compensation and employer's liability coverage of \$500,000 per accident and \$500,000 per employee for disease.
- Professional liability (errors and omissions) coverage with limits of \$500,000 per occurrence and \$500,000 aggregate per policy year arising out of the rendering, or the failure to render professional services.

## **XII. MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES**

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SAGE is neither a New York State certified minority-owned business enterprise nor a New York State women-owned business enterprise.