
PROPOSAL TO CONDUCT A

COMPREHENSIVE MANAGEMENT AUDIT
of
National Grid USA's New York Gas Companies
(Case 13-G-0009)

Submitted to the

New York State Public Service Commission

Three Empire State Plaza
Albany, NY 12223-1350

March 27, 2013





March 27, 2013

Records Access Officer
Office of Accounting, Audits and Finance
New York State Department of Public Service
Three Empire State Plaza
Albany, NY 12223-1350
Email: recordsaccessofficer@dps.ny.gov
cc:Dennis.Graham@dps.ny.gov

RE: Proposal to Conduct a Comprehensive Management Audit of National Grid USA's New York Gas Companies Case 13-G-0009

Dear Records Access Officer:

The River Consulting Group (RCG) is pleased to provide our proposal to the New York State Department of Public Service (DPS) to perform a comprehensive management audit of the National Grid USA's New York Gas Companies (NGrid). Our proposal is fully responsive to all requirements outlined in the Request for Proposal (RFP) associated with Case Number 13-G-0009. This cover letter (email), the full proposal, the Proposal Submission Form, and the work samples have been electronically sent as individual files to the Records Access Officer at recordsaccessofficer@dps.ny.gov with a courtesy copy to the Project Manager Dennis Graham at Dennis.Graham@dps.ny.gov. Another cover letter (email) alone has been sent to the Secretary at secretary@dps.ny.gov.

Following are RCG's guiding principles:

- Promote a positive atmosphere during the audit process to facilitate the smooth transfer of data and information from NGrid;
- Use only highly experienced professionals whose qualifications and understanding of the utility industry go far beyond performing consulting assignments. We understand the dynamic nature of the nine audit elements and their interrelationships;
- Minimize logical and factual errors during the audit process by adhering to a proven methodology and a formal quality review process;
- Develop positive recommendations that are the product of a thorough evaluation and that lead to tangible benefits for NGrid and their rate-paying customers;
- Ensure that the DPS and its audit team are kept abreast of the audit's progress and the evolving conclusions and recommendations, and participate as they see fit;
- Use an experienced project management team that understands the audit objectives, deliverables, and milestones and will meet them;

- Foster the development of a meaningful and reasonable implementation plan for the recommendations which support NGrid's strategic goals; and
- Ensure that the experienced principals proposed are the ones you get at competitive rates-- "What you see is what you get."

We have prepared our proposal embodying these principles; we believe they will ensure the successful outcome of this critical management audit. RCG stands ready to discuss our proposal in detail and certifies that:

- RCG and its team are committed and able to perform the work as outlined in the RFP and this proposal;
- RCG and its team are in compliance with the requirements set forth in the RFP;
- The information contained in our proposal is accurate; and
- The proposal is valid for 180 days from the submittal date of March 27, 2013.

Robert (Bob) Grant and Raymond (Ray) Saleeby will be the primary contacts for RCG and this proposal. Their contact information is:

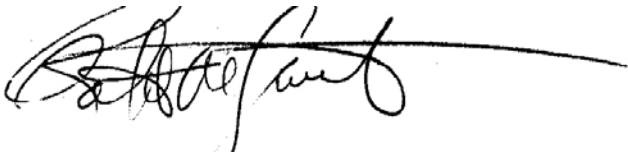
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Per New York State's Public Officer's Law §87(2)(c), we are requesting that the attached proposal be treated in its entirety as confidential information. We request such exception from public disclosure until the Public Service Commission selects a winning proposal for this investigation. Public disclosure of this proposal prior to selection by the Commission would impair present or imminent contract awards for this engagement.

RCG's Team is more than an audit firm; *we are a full requirements firm identifying and solving both today's and tomorrow's issues for our utility clients and their Commissions.* We stand ready to answer any questions you and your team may have.

Yours truly,



Robert M. Grant
President

CC: Mr. Dennis Graham, Project Manager

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COMPREHENSIVE MANAGEMENT AUDIT of National Grid USA's New York Gas Companies

(Case no. 13-G-0009)

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I. INTRODUCTION

River Consulting Group (RCG) is pleased to respond to the New York State Public Service Commission's (the "Commission") Request for Proposal for a Management Audit of National Grid USA's New York Gas Companies (NGrid)(Case 13-G-0009) dated February 13, 2013 (the "RFP"). This management audit of NGrid will evaluate the nine elements identified in the RFP using the Commission's criteria. Bob Grant of RCG has extensive experience with the planning and implementation of utility management and operations audits (demonstrated in Chapter VII of this proposal), and will act as Engagement Director and contract manager for this proposal.

As recommended in the RFP, RCG has engaged and is prepared to manage an elite team of highly experienced industry professionals capable of providing the Commission, New York State Department of Public Service staff (DPS Staff), and the Company with valuable insights into Company operations and management that will eventually produce real and measureable benefits for New York State ratepayers. Partnering with RCG is the firm of Raymond G. Saleeby, LLC (d/b/a SCG).

Our goals in the proposed audits are to:

- Provide a quality, constructive, and balanced assessment of NGrid Gas's overall management and operations including its response to Super Storm Sandy;
- Provide a comprehensive management audit of the nine elements which comprise the feedback loop.
- Develop the assessment through a positive process that captures the perspectives and needs of all parties with an interest in the outcomes; and
- Deliver a final report that provides a clear, independent, and objective evaluation of the Company; demonstrates and promotes a clear understanding of NGrid's operations; and offers concise, beneficial recommendations that assist the Company in improving the manner in which it controls and manages performance, assets costs including the appropriateness of its affiliated transactions, and delivers safe, reliable, and cost-competitive gas services and customer services to its New York customers as a regulated gas utility organization.

RCG has designed its team and approach to promote an in-depth analysis, by highly experienced professionals, of each of the areas included in the scope of work. This approach enables development of high-quality, credible, and pragmatic recommendations of lasting value that meet quantitative and qualitative parameters approved by DPS Staff as a component of the audit work plan.

Throughout the management audit, we will comply with the standards contained in the *United States General Accounting Office Government Auditing Standards (GAGAS)*¹, commonly known as the “Yellow Book,” and the “Consultant Standards and Ethics for Performance of Management Analysis” published by the National Association of Regulatory Utility Commissioners.

The remaining chapters of this proposal describe RCG’s approach, preliminary work plan, firm and individual consultant experience, schedule, and budget estimates.

- **Chapter II – Scope and Objectives** details RCG’s understanding of the scope and objectives for this audit.
- **Chapter III – Approach, Methods and Project Management** discusses RCG’s approach to this audit and its management, including a description of project deliverables.
- **Chapter IV – Audit Areas and Issues** provides RCG’s preliminary work plan, including the list of element areas to be reviewed with evaluative criteria and a list of work tasks to be performed for each element.
- **Chapter V – Project Team and Responsibilities** provides the structure of the RCG team’s consulting assignments and the background of assigned personnel.
- **Chapter VI – Schedule and Budgets** itemizes professional staff fees and out-of-pocket expenses, and provides RCG’s total “not-to exceed” cost to perform the audit. It also provides a complete work schedule and an elapsed time estimate for each task in the work plan.
- **Chapter VII – Experience and Qualifications** presents RCG’s experience and provides a list of relevant projects with client names and references for RCG and for the key team members.

These chapters are organized consistent with the requirements of set forth in “The Guide.”²

¹ We will use the Government Auditing Standards, December 2011 Revision, put forth by the Comptroller General of the United States.

²State of New York Department of Public Service, *The Guide: A Guide for Consultants Submitting Proposals for Management and Operations Audits*. February 13, 2013

II. SCOPE AND OBJECTIVES

This chapter contains a brief background of National Grid USA's New York Gas Companies, and confirms the scope and objectives for the management audit as defined in the RFP and the Audit Guide.

A. Introduction

River Consulting Group is pleased to respond to the February 13, 2013 Request for Proposal (RFP) from the Commission to perform a Comprehensive Management Audit of National Grid USA's New York Gas Companies (CASE 13-G-0009). Our proposal responds to the Commission's specific requirements, as expressed in its RFP, and makes use of our extensive knowledge of the gas utilities industry to expand those requirements.

NGrid is wholly owned by National Grid plc (NGrid plc). National Grid plc is a British multinational electric and gas utility company headquartered in London, United Kingdom. Its principal activities are in the United Kingdom and northeastern United States. The National Grid plc corporate vision is to be the foremost international electricity and gas company delivering safety, reliability and efficiency, vital to the well-being of their customers and communities. They are also committed to being an innovative leader in energy management and to safeguarding their global environment for future generations. Its stated strategy is to operate and grow their business to deliver consistently superior service and financial returns through:

- Driving for operational excellence;
- Embedding innovation and efficiency in their corporate culture;
- Understanding stakeholder needs and shaping energy policy through external engagement; and
- Maintaining a disciplined investment program to grow their regulated asset base and non-regulated investments.

As part of the group's strategic objectives, their US strategy for their regulated businesses includes:

- Aligning their end-to-end processes to the needs of their customers and working to strengthen their relationships with the communities they serve;
- Improving their financial performance through new rate filings and actions to increase the efficiency of their operations;
- Increasing their safety and reliability (Work to improve their response to major weather events will continue and can help enhance their reputation); and

- Re-engaging their people and taking action to improve their employee engagement index.

In their 2011/2012 annual report, NGrid plc reported an operating profit of \$5.357 billion. 57% of the revenue and 33% of its adjusted operating profit is from US regulated operations. US revenue however includes a commodity price element which does not contribute to profit. In terms of Capital Expenditure by segment, 34% is for US properties.

Last year they had three fatalities that were investigated to determine the root cause. They have said that they are taking a wide number of measures to ensure they learn from these tragic events.

Currently there are 14 Board Members; four are from the United States. The Board provides oversight of the company and its businesses and determines the governance structure and strategic direction of the company.

In 2012/2013 NGrid plc stated corporate priorities are focused towards:

- Driving a marked improvement in their safety performance;
- Delivering their ongoing capital investment program on budget;
- Continuing to work with Office of the Gas and Electricity Markets on the final RIIO (revenue= incentives + innovation + outputs) proposals;
- Driving improved performance and returns across their US regulated business; and
- Improving their operational processes, both in the US, following reorganization, and in the UK, as they prepare to operate within a RIIO framework; and further developing key leadership and business capabilities to support their long-term strategic ambitions.

Priorities for their U.S. properties include:

- Focusing on process excellence and modernizing their networks;
- Delivering planned regulatory filings;
- Deepening their relationships with their communities and stakeholders, to help achieve their local economic and environmental goals; and
- Ensuring that continuous improvement is embedded in the organization and that their costs have clear transparency to ensure regulated recovery.

Their US regulated gas utility business includes a network of approximately 36,000 miles (58,000 kilometers) of gas pipeline serving an area of approximately 11,200 square miles (29,000 square kilometers).

Regarding NGrid's Gas business in the United States:

- Gas is delivered into the US interstate and Canadian pipeline network by producers, and LNG importers. National Grid holds only a minority interest in two interstate pipelines: Millennium Pipeline Company and Iroquois Gas Transmission System.
- National Grid owns and operates LNG storage and vaporization facilities to support their gas distribution businesses as well as an LNG storage facility in Providence, Rhode Island, where they store gas for third parties for a fee. They purchase gas directly from producers and LNG importers for resale to their customers.
- They pay to reserve firm transportation and storage capacity on the US interstate and Canadian pipeline network to transport natural gas from the various supply sources to distribution facilities. The initial term under these agreements is said to be typically from 10 to 20 years.
- Gas is delivered by the interstate pipeline companies to National Grid's and other companies' local distribution networks for distribution to their customers. Their US gas distribution networks provide services to about 3.5 million customers across the northeastern US, located in markets in upstate New York, New York City, Long Island, Massachusetts, New Hampshire, and Rhode Island. New York customers represent nearly 55% of this total.
 - Niagara Mohawk (NMPC), 446,574 customers
 - Keyspan Energy Delivery (KEDNY), 986,677 customers
 - Keyspan Energy Delivery Long Island (KEDLI), 487,439 customers
- National Grid and other qualified gas marketers purchase gas for customers connected to NGrid's distribution system. NGrid's responsibility is to ensure there is adequate distribution capacity to serve all the customers in their franchised territories, whether NGrid is the supplier or not.

Our review of NGrid's business uncovered several issues. For example only, two are (1) the customer's view of NGrid Gas as a customer service entity and (2) the number of gas leaks in their system per mile which affects safety, reliability, customer service, and capital budgeting. Both these issues have a significant impact on a number of elements identified in the Commission's RFP.

1. National Grid participated in four studies in the J.D. Power and Associates customer satisfaction study in the US covering residential & commercial gas and electric.

Their target goal was a one quartile improvement in each of the four studies; they achieved this in the Business Gas study. In the Residential Gas study, however, they fell one quartile. Even NGrid's own Residential Gas Customer satisfaction key performance indicator (KPI) is below what the company desires. The reasons and the current path selected to improve this indicator is relevant to the RCG review.

2. Frequently our team will be confronted with significant cross-cutting issues. We will approach these issues in a highly coordinated fashion as directed by RCG's project leadership. For example, one important issue impacting system planning, capital construction, budgeting, work planning & maintenance, information technology, and system operations involves NGrid's gas leaks and its methods for predictive modeling, priority setting, or other analytical methods applied to ensure appropriateness of its mains replacement plans and funding. Leveraging what we observe using multiple-year DOT- PHMSA (Pipeline and Hazardous Material Safety Administration) filings - (Exhibits II-1 and II-2 are 2011 snapshots of NGrid Gas's ranking in these critical areas), we would probe deeper to understand the relationship between doing the right work (e.g. planning and prioritization within and among divisions), and doing the work right (field resource efficiencies and capturing lessons learned).

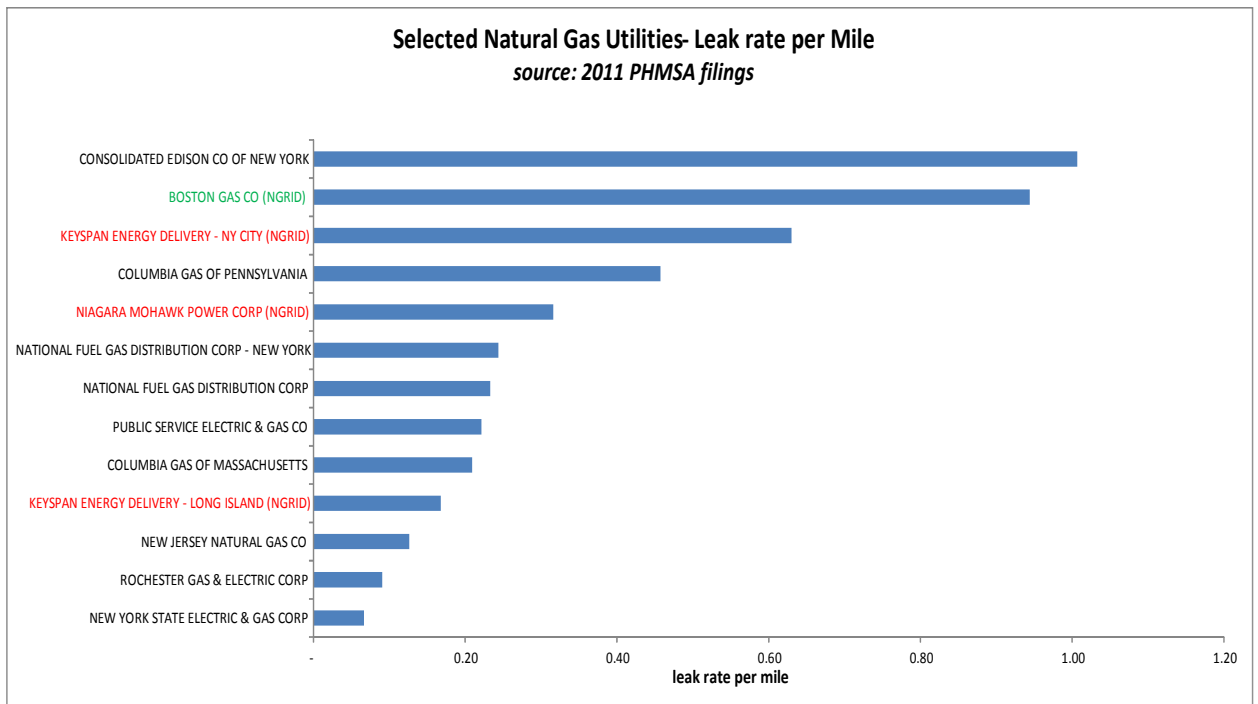


Exhibit II-1 NGrid's Leak Performance

| Gas Company | Cast Iron/Bare Steel Mains as a percent of Total Main miles |
|---|---|
| Consolidated Edison Company of New York | 58% |
| NGrid - Boston Gas Company | 54% |
| NGrid - Keyspan Energy Delivery - NY City | 49% |
| NGrid - Keyspan Energy Delivery - Long Island | 47% |
| Public Service Electric & Gas | 30% |
| Columbia Gas of Pennsylvania | 25% |
| National Fuel Gas Distribution Corporation - New York | 25% |
| Columbia Gas of Massachusetts | 23% |
| NGrid - Niagara Mohawk Power | 20% |
| National Fuel Gas Distribution Corporation | 20% |
| Rochester Gas & Electric(Iberdrola) | 9% |
| New Jersey Natural Gas Company | 8% |
| New York State Electric & Gas (Iberdrola) | 7% |

Exhibit II-2 NGrid Gas's Ranking for Cast Iron / Bare Steel Mains in the Northeast

Initial observations lead us to seek to understand how corporate goals are created, further segmented by division, within and outside of the State of New York. What is NGrid replacement rationale, how does it support corporate goals; are they adequately analyzing the issue; and how is the replacement rational executed by the actions of the corporate staff and field forces? We recognize that NGrid has a mains replacement program a necessity providing for the long-term safety, reliability, and service to the customer. Typically cast iron, ductile iron, and bare steel mains would be replaced with modern polyethylene or coated steel pipes. Replacement of bare steel services typically occurs three ways: targeted replacement, replacement due to leaks, and replacement in the course of cast iron and bare steel main replacement program. Among other issues we will want to understand how NGrid balances this to support overall goals (both company and by division) and what analytical tools are being used to appropriately develop the budgets for this replacement. As with all cross-cutting issues, the RCG project leadership will coordinate all tasks to ensure all parameters on this issue are covered.

One very significant strategy NGrid has focused on over the past year resulted in significant changes to their information systems with the implementation of a new enterprise resource planning system. This was to be supplemented by process improvements aimed at delivering efficiency gains while also improving operational performance.

NGrid USA is headquartered in Massachusetts. This raises interesting governance questions from the New York regulator/gas customer standpoint;

- Are New York customers receiving the appropriate level of attention from NGRID plc's executives and Board of Directors?
- What is the level of attention and direction given from the USA headquarters?
- Are the needs of the New York gas customers understood and being adequately addressed in a timely fashion?

NGrid USA's New York Gas Companies are an amalgam of the former Keyspan Gas and Niagara Mohawk gas territories. As such each property operates somewhat differently and had rate structures which fit the needs of the former firms. Now that the three territories are under the same umbrella, it is fair to ask the following:

- Are customers served uniformly across the three New York territories? Service expectations for handling requests (service turn on, receiving/paying a bill, or updates to an outage, etc.) are set by other industries such as financial services or travel. How will NGrid satisfy these customers by embracing new innovations?
- Should two or more of the three existing entities be merged in order to provide better service, lower costs or advance rate equity?
 - Are there legal or operational limitations to merging entities?
 - Are there operating constraints such as supply sources (city gates and pipelines) that form natural or cost distinctions between the three companies?
- How can the utility consistently influence customers' perceptions of NGrid's performance through reliable, coherent and meaningful communications?

From the New York Public Service Commission's point of view, these are critical questions which need to be addressed when one considers that the majority of investor-owned utilities in New York are controlled from non-USA firms.

The Commission is seeking an independent consultant to perform a comprehensive management audit of NGrid's New York gas business. The audit of NGrid will be performed in accordance with Public Service Law, § 66 (19) which states that:

"The Commission shall have power to provide for management and operations audits of gas corporations and electric corporations. Such audits shall be performed at least once every five years for combination gas and electric companies, as well as for

straight gas corporations having annual gross revenues in excess of two hundred million dollars.”³

The Law also states that:

“. . . the audit shall include, but not be limited to, an investigation of the company’s construction program planning in relation to the needs of its customers for reliable service and an evaluation of the efficiency of the company’s operations.”⁴

The audit described in the RFP provides a unique opportunity for the Commission and the Department of Public Service (DPS) Staff to gain valuable insight into NGrid’s gas operations and management from objective, third-party experts. It is a prospective review to project the impact of their operations on the performance, cost, benefits, and safety to their New York customers and their employees. Any review must include a detailed focus on the critical areas of a NY gas distribution company operation, such as:

- Gas pipeline safety issues
- Gas storage
- Pipeline integrity verification plan
- Load forecast
- Supply mix
- Emergency planning & response
- Asset management
- Cast iron pipe replacement
- Cathodic protection program
- New business response
- Retail access
- Customer management and communications

As indicated in the RFP, the framework of the audit scope is a series of nine elements or functions that are generally sequential in nature and which can be viewed as a feedback loop. The scope elements and their components are:

- Corporate mission, objectives, goals, and planning
- Load forecasting
- Supply procurement

³ As stated in the New York Department of Public Service’s RFP 13-G-0009, dated 02-13-2013.

⁴Ibid.

- System planning
- Capital and operations and maintenance (O&M) budgeting
- Program and project planning and management
- Work management
- Performance and results measurement
- Information systems

Except for the ninth, these elements although generally sequential, require feedback from one or more of the latter elements to allow for revisions, adjustments, and other changes, over both the short and the long term. For example, the framework begins with the element of “corporate mission, objectives, goals, and planning” and ends with “performance and results measurement” -- an “end” which is also the means by which the flow of the elements is connected to the first element. The feedback typically facilitates changes and improvements that will result in better future performance. Therefore, in reviewing these elements using the primary DPS criteria, and the subordinate topics, we will evaluate the construction program’s feedback system and affiliate transactions. Our audit will also assess NGrid’s efficiency and effectiveness in meeting its appropriate performance goals, and regulatory and safety requirements, as well as the extent to which there are opportunities for future beneficial improvements. The ninth -- Information Systems -- touches all the other elements by facilitating the flow of information between them.

We believe that the audit should be conducted in a constructive manner, characterized by frank and open discussion of findings, conclusions, and recommendations. RCG’s final report will provide an independent and objective evaluation of NGrid’s current performance, specifically with respect to its construction program planning.

B. Scope

RCG’s management audit will provide a comprehensive analysis of NGrid’s gas operations, focusing on the nine elements of the planning-execution process defined in the RFP, and any additional concerns that DPS Staff deem appropriate. The nine audit elements of the planning-execution process, as defined in the RFP, are: (1) corporate mission, objectives, goals, and planning; (2) load forecasting; (3) supply procurement; (4) system planning; (5) capital and O&M budgeting; (6) program and project planning and management; (7) work management; (8) performance and results measurement; and (9) information systems (IS).

Within the context of each of these nine elements, RCG’s work scope includes an analysis of the following generic components:

- Purpose, mission, planning, goals, and strategies;

- Functions, processes (including inputs and outputs), policies, practices;
- Information systems for collecting data and reporting critical system information;
- Organizational design;
- Staffing, responsibilities, and accountabilities;
- Cost control, cost oversight, and cost analysis;
- Efficiency and effectiveness including a focus on safety;
- Minimization of impacts to other elements and Company operations to prevent sub- optimization elsewhere;
- Results and performance measurements, including how the results are used;
- Opportunities for improvements, including “leading practices,” based on the experience and research of the RCG team, that are appropriate to NGrid’s New York State operating environment; and
- Benefit focused cost-effective recommendations for implementing the improvements, described in detail later in this proposal.

The audit scope also includes an assessment of NGrid’s effectiveness in fulfilling its mission, particularly meeting its performance goals, and the extent of opportunities for improvement.

The nine elements described above form the core of a successful natural gas business model. Without formal business and technical planning processes it is extremely difficult for utility management to navigate their rapidly evolving environment and take full advantage of new technology and management tools. Specifically, new technology allows management to address some of the most pressing industry issues, such as knowledge management in an increasingly complex delivery system and managing an increasingly diverse customer base with widely varying needs.

Enhanced management processes and systems allow the Company’s leadership to ensure that the right resources are employed cost-effectively. Without formal feedback mechanisms, it is difficult to evaluate progress against appropriate goals that are set during the planning process; these mechanisms also enable management to fine-tune their processes with a full understanding of implications to reliability, safety, and cost.

The audit scope includes an assessment of the entire Company’s effectiveness in meeting mission and planning goals, particularly identification of opportunities for improvement.

Finally, RCG’s audit scope includes an evaluation of NGrid’s construction program feedback system. The nine elements that form the foundation for RCG’s audit are integrated, and generally support strategic planning efforts by providing needed inputs to the planning process and information to adjust plan objectives over time. This process loop

begins with the element of “corporate mission, objectives, goals, and planning” and completes the cycle with “performance and results measurement,” as illustrated in Exhibit II-3. We chose to represent the Information Systems element as the light brown ellipse, as it will support very other element in the feedback loop. Also defined is our interpretations of *Energy Efficiency Demand Response Planning* and *Asset Management*, both are critical to this audit as defined in the DPS's evaluation criteria.

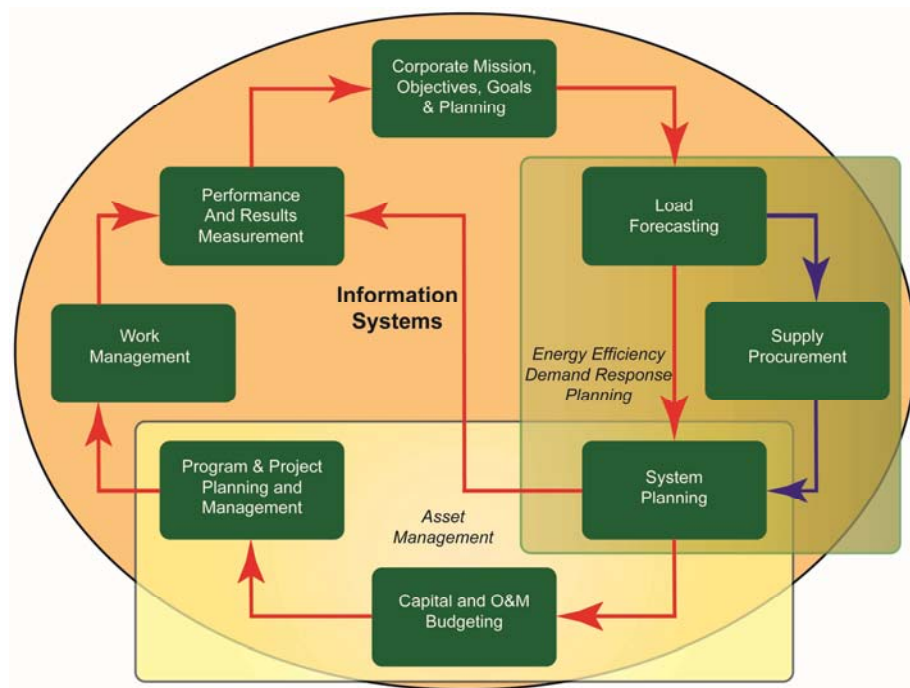


Exhibit II-3 Construction Program Feedback Loop

When executed properly, the results will yield continuous performance improvements by allowing management to modify objectives based on the information gathered as it cycles through the process.

C. Objectives

RCG's objectives for this management and operations audit are those specifically set forth in both the RFP and Audit Guide:

- To identify specific opportunities, as needed, for improving planning, organizational design, business processes, management practices, systems, and operations. This applies to work elements inside the nine audit element areas and those that are tangential to them.
- To identify, as needed, specific opportunities to improve performance, including operational productivity, operational reliability, organizational effectiveness, cost controls and savings, work quality, customer service, safety, and other measurable

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elements. This objective includes the impact of new technology on effectiveness and efficiency.

- To develop recommendations, as needed, for implementing changes or undertaking the studies necessary to achieve performance improvements. Where feasible, recommendations will be supported by risk/benefit and cost/benefit analyses. Where possible, the consumer should benefit from recommended performance improvements.

In addition to these objectives, RCG contends that a key objective of this engagement is to deliver a balanced final report, which is clear and concise, and accurately portrays both strengths and major opportunities for improvement. In addition, RCG's objective is always to produce a road map of high quality, mutually agreed to recommendations that include a benefit and cost or value discussion and timetable developed by RCG in collaboration, where appropriate, with the Company, and approved by DPS Staff.

III. APPROACH, METHODS AND PROJECT MANAGEMENT

This chapter explains RCG's approach and philosophy to management audits. It presents an in-depth description of the process RCG uses to show its compliance with the required scope of work, including how RCG personnel will plan, implement, supervise, and manage the audit, and the philosophy behind RCG's approach to each step.

A. Introduction

RCG's approach is designed to complete a comprehensive management audit of the Company in the most efficient and effective manner, and with the least amount of disruption to NGrid operations. RCG's consistent ability to meet the commitments of its audit schedules and to produce effective results relies on the following approach:

- Development of a formal work plan with clearly defined deliverables;
- Use of *only* experienced, senior professionals, who possess the appropriate combination of professional maturity, utility knowledge, audit work experience, and, whenever possible, a previous working relationship with the assigned Partners, Project Manager, or Lead Consultants;
- Use of both quantitative and qualitative data and information to evaluate actual performance;
- Development of conclusions that are consistent with generally-accepted auditing standards, which require thorough documentation of the facts that support the findings relied on for those conclusions;
- Continuously reviewing how conclusions reached in one area of an audit framework may impact other areas, and determining how overall performance may be improved through a clearer understanding of those connections and interactions;
- Employment of a formal, interlocking, quality control process to ensure accurate results;
- Proper maintenance of work papers in a manner that supports the documentation of findings,
- Use of one senior editor to ensure that draft and final reports are clear and consistent; and
- Ensuring that the concerns of the DPS Staff are being addressed.

A simple philosophy permeates RCG's audit approach: we are convinced that open and constructive communication between audit parties produces the strongest conclusions and, as a result, the most effective recommendations. Although RCG will perform an independent and objective management audit of NGrid, communication is at the heart of the project. This means that RCG will conduct an audit that:

- Maintains open and positive communications with all parties to the audit -- this improves results by minimizing factual, logical, and process errors, and ensuring that there are no surprises;
- Uses a formal process to address any concerns the DPS Staff may have and early in the process incorporates them into the work plan as appropriate;
- Works jointly with the DPS project manager to develop a clear and concise work plan embodying and focusing on the DPS Staff's objectives;
- Coordinates schedules with the DPS Staff and NGrid's Audit Team for interviewing Company personnel;
- Holds regular bi-weekly briefings with the DPS staff to ensure they are informed of RCG's activities and preliminary observations; and
- Ensures that RCG's approach integrates the ethics and practices contained in both the Federal "Yellow Book" and National Association of Regulatory Utility Commissioners' "Consultant Standards and Ethics for Performance of Management Audits."

B. Audit Approach

RCG's approach is a five-stage process that includes: planning and orientation, fact-finding and analysis, conclusion and report development, recommendation and cost/benefit development, and development of a final report. These stages are detailed below.

Stage I - Planning and Orientation

The Stage I objectives are:

- Understand the audit objectives and scope;
- Use a formal process to identify and incorporate DPS Staff's expectations into the audit;

- Finalize contractual, project reporting, and other administrative processes;
- Understand the current operations, organization, and key management processes of NGrid; and
- Develop and gain approval of an initial detailed work plan (the “Work Plan”).

The RCG engagement director (Engagement Director) and Project Manager will meet with DPS Staff and Company project managers to complete logistical and contractual arrangements. Those arrangements will include, but not necessarily be limited to, policies and processes for:

- Additional DPS Staff issues or concerns;
- Initial data request response;
- Office requirements, security, and access;
- Requesting and tracking interviews and data;
- Setting and meeting agreed-to response times;
- Managing confidential information;
- Adhering to auditing standards;
- Managing working papers and documentation requirements; and
- Managing the quality control and reporting processes.

Tracking and managing the tremendous amount of information generated in the audit process is essential to its effectiveness. The RCG team has significant experience in effectively managing this process and has demonstrated expertise in handling the volumes of information expected. Our computerized interview and data tracking process allows us to ensure that all data and information is captured in a timely manner. This tool has been invaluable in helping our consultants ensure that they are getting the information they need to support their analyses. If NGrid has its own tracking system, we will of course use it as long as it is made available to our team.

We will minimize costs and increase the productivity of the team by working with the Company to retrieve and download discovery information electronically. This will limit costs to only those items that are not in a suitable electronic format and we require an exact copy.

If NGrid commits to delivering critical information on its businesses, processes, organization, and operations as early as possible in the Stage I process, a positive audit atmosphere is fostered and understandings are advanced. To further this objective, RCG will, during the orientation stage:

- Present an initial set of data requests to the Company to be delivered to and be reviewed by the appropriate RCG team members prior to the beginning of on-site interviews;
- Meet with DPS Staff to understand emerging issues and concerns;
- Use the Company's document management system or use RCG's system;
- Attend NGrid's audit orientation and, where practical, conduct initial executive interviews shortly thereafter;
- Schedule and conduct additional interviews once the work plan is finalized;
- Review and analyze all the initial data and information received;
- Identify potential topics for a collaborative approach for the review;
- Refine the initial work plan to reflect this new information;
- Refine initial analyses of audit requirements with respect to the nine audit elements and determine how the final work plan applies to the process for completing work related to each element; and
- Obtain the approval of DPS Staff to proceed with the final work plan.

Because the development and delivery of an initial data request is a critical element of launching RCG's Stage I approach, the RCG team has completed a preliminary draft of these documents and included them in **Appendix A** of this proposal. RCG has already identified the individuals or positions within the Company that will be interviewed initially. Final initial interview guides and schedules will be prepared once an orientation meeting has been scheduled by the Company. RCG stands ready to provide a working session to present its approach and work methods if DPS Staff wishes to become more familiar with this approach. This exercise would be conducted by RCG's Engagement Director and Project Manager.

The RFP identified a reasonable time schedule for the consultant to issue a draft report to Staff in March 2014. *Chapter VI – Schedules and Budgets* contains RCG's proposed schedule, which is consistent with that shown in the RFP.⁵ The RCG project team is committed to meeting the milestones set by this initial schedule.

To enable the RCG team to refine the work plan, and thus to foster adherence to schedule, we will use the data and information provided by the Company (in response to our initial data request and initial executive interviews) to give the individual RCG team

⁵ Case 13-G-0009 – The RFP, 1.3 Key Events/Timeline

members a deeper understanding of the Company's approach to the nine elements. As stated previously, the preliminary data requests and initial interviews, subject to DPS Staff approval, are included in **Appendix A** to this proposal. RCG's ability to meet the proposed schedule will require the Company to be responsive to data and interview requests on a timely basis.

To that end, after the initial data request, RCG recommends that a turnaround schedule of three working days be the standard for the return of Company reports and existing data. RCG will negotiate delivery times for specially requested analysis, reports, and data. This approach helps support on-time delivery of high-quality work products.

Stage II - Fact Finding and Analysis

During Stage II, RCG will perform the primary data gathering and analysis for each of the nine audit elements. This process will incorporate the following activities:

- Develop a task report outline of the potential issues to be addressed for each of the nine audit elements and other areas identified by the DPS Staff or RCG during Stage I activities;
- Review and enhance the criteria for each audit element (See, *Chapter IV: Audit Areas and Issues* for a list of initial criteria developed for each of the nine audit elements);
- Develop a set of questions and data requirements to support the formation of findings and conclusions addressing each of the potential issue area's criteria;
- Identify and request individuals or positions for interviews that will allow RCG to better understand the strategic deployment, policies, and processes used by the Company to conduct business;
- Prepare interview guides to be distributed to intended interviewees, allowing adequate preparation time to facilitate a smooth and accurate transfer of information;
- Determine if the DPS Staff wishes to attend specific interviews;
- Document all interviews in standardized, accessible, summary format using Microsoft Word;
- Issue additional data requests required to support further analyses;
- Perform and document field observations or review after-action reports;
- Perform data sampling to quantitatively evaluate criteria;
- Arrange for additional or follow-on interviews;

- Review all assembled data against criteria for each issue and form a set of initial findings applying known industry best practices and comparisons;
- Reference all findings against data responses and interview summaries;
- Draft initial conclusions;
- Subject conclusions to the RCG quality verification process;
- Conduct three-party fact verification sessions;
- Review results with DPS Staff; and
- Prepare and forward task reports.

Depending on the subject area, some of the above steps may be combined or rearranged to facilitate a more complete understanding of a process or issue. It is important to understand that the task report outline is critical to managing both the schedule and the budget. This outline permits the Lead Consultants and their teams to focus on what is most important for the specific element's analysis. In this manner, only the required data is gathered and the interviews remain focused. This process allows the leads to identify other opportunities as they emerge during the discovery effort.

As a function of this audit, RCG specifically expects to identify:

- Opportunities to combine functions to reduce expenses;
- Asset management strategies and programs that are consistent across all service territories;
- Opportunities to use technology (i.e., GPS locator devices, advanced pipeline inspection tools, asset management and GPS mapping systems) to drive cost from the business and improve reliability;
- Opportunities to appropriately integrate capital and O&M planning to more efficiently manage costs and optimize reliability and pipeline safety; and
- Opportunities to adjust Company management practices to improve senior and board-level attention to the tasks of delivering safe and reliable service to the Company's New York gas customers at a reasonable cost.

It is RCG's policy to focus team attention on critical and substantive issues so that NGrid management can focus post-audit efforts on the implementation of recommendations that will yield the greatest returns for their New York customers.

Stage III –Development of Conclusions and Report

On engagements of this size, RCG’s practice is to have its Quality Committee perform an additional review of the conclusions. Comprised of the team’s most senior consultants, this committee is charged with ensuring that the quality of each conclusion and recommendation meets the audit standards expected by RCG and the DPS Staff. The Engagement Director will also rely on this committee’s feedback when analyzing the overall continuity of all audit conclusions relative to the DPS Staff’s stated objectives. During Stage III, RCG also will perform the following activities:

- Complete task report outlines that contain findings and preliminary conclusions;
- Convert the completed outlines into task reports that contain the following information:
 - Description of the task and the audit element or area;
 - Description of industry leading practices;
 - Evaluation criteria and metrics used, if applicable;
 - Description of the Company’s performance in the element or area;
 - Findings and conclusions, including detailed supporting annotations; and
 - Identification of potential rough cost and/or benefit levels associated with each conclusion area.
- Performance of a quality verification review on each task report by key senior members of the RCG team, including identification of items that require further analysis be conducted;
- Edit the completed task report for clarity and consistency; and
- Forward completed task reports to the DPS Staff for review, comment, and release when Staff concurs with the report.

Task reports that are approved by the DPS Staff will be assembled into an overall report framework by the RCG editor, without recommendations. RCG will provide “a general health statement”-- a concise and frank condition summary after a thorough examination is completed -- for each chapter of the draft audit report.

As a matter of course, RCG will apply the “reasonable person” test to all its conclusions to ensure that the ensuing recommendations are sound, fair, cost-effective, and consistent with leading practices and existing regulation.

To foster the desired results, RCG will include the following activities:

- Formal team meetings upon start-up of the project;

- Attendance by all team members at the Company's orientation session, either in person or remotely;
- Preparation of a draft and final work plan for each audit element by that element's Lead Consultant with the assistance of the supporting consultants engaged for that area, including formal written signoffs;
- Development of a detailed style sheet for the draft and final report by the audit editor;
- Approval of the draft and final work plan for each audit element by the Project Manager, Engagement Director, and editor, including formal written signoffs;
- Ongoing document tracking and reporting by the Project Manager;
- Approval of each interview summary by the Lead Consultant for that audit element and by the Project Manager, including a formal written signoff;
- Formal cross-cutting RCG team meetings led by the Project Manager;
- Approval of each task report by the Project Manager, Engagement Director, and editor, including formal written signoffs;
- Approval of the draft report by the quality committee, including formal written signoffs;
- Approval of each preliminary recommendation and potential costs and benefits levels by the Project Manager and Engagement Director, including formal written signoffs,
- Approval of the final report by the quality committee and editor, including formal written signoffs; and
- All documents supporting signoffs will be maintained by the editor.

Stage IV - Recommendation Development

During Stage IV, the RCG team will develop recommendations that satisfy conclusions that are approved by the DPS Staff. RCG recognizes its responsibility to develop independent recommendations; however, there may be several areas of focus where collaboration with the DPS Staff and NGrid may accelerate acceptance. It is important to obtain Company support of these recommendations so that the benefits may be expeditiously delivered to customers.

The RCG team will meet with the DPS Staff and the Company to forge workable recommendations that NGrid can begin to implement as soon as practical. This will be achieved through collaboration with the parties to develop acceptable recommendations

with achievable timetables. To facilitate this outcome, RCG will perform the following activities:

- Reach consensus on conclusions and order of value;
- Develop recommendation options for each conclusion or group of conclusions, including the performance of an initial cost-benefit analysis of the options;
- Present this information to the DPS Staff and the Company as a starting point for discussion;
- Conduct frank and open discussions with NGrid management and, if necessary, with the appropriate pipe fitters union as to how to best achieve the desired results;
- Refine the recommendations and cost-benefit analyses, where applicable; and
- Develop an initial implementation schedule that may be reasonably achieved by NGrid and monitored by the DPS Staff upon receipt of a Commission order.

RCG's key outcome measures for its internal evaluation of this audit task are: (1) each delivered recommendation must be founded on solid conclusions that are data-driven; (2) each delivered recommendation must serve, at a minimum, the best interest of NGrid's New York State customers; and (3) no recommended solution will cost the Company's customers more to implement than it can deliver in measurable and meaningful results. These are the only criteria that RCG believes that the Commission will accept when presented with the final audit report for this project.

Stage V - Develop Final Report

During Stage V, RCG will assemble a draft of the final report in a form that is consistent with the nine defined audit elements presented in the RFP, and any additional areas of review that are requested or approved by DPS Staff. The draft report will be reviewed by DPS Staff first and, subsequently, by the Company for the verification of facts.

Each element or area will be presented in the following chapter format:

- **Introduction**, including a description of the subject area and its importance to the strategic planning loop, a graph representation of the manner in which this element or subject area impacts the construction feedback model, and a concise list of recommendations that will be presented in detail in that chapter.
- **General Health Statement**, RCG's overall opinion of the element's status as compared to leading practices or other accepted performance measures.

- **Chapter-by-Chapter Discussion of Individual Recommendations**, (as agreed to by all parties) will include an introductory description of the recommendation; properly annotated discussion of the supporting conclusions, findings, and facts; a cost-benefit discussion and analysis, as appropriate; and an implementation timeline. Where it makes sense, RCG may outline several options for consideration and will evaluate each option, citing the advantages and disadvantages of each. Based on the current capabilities of NGrid, we can then outline the best option. In some instances, audited clients may disagree with the recommended option and, through further exploration, RCG may incorporate their concerns and refine the recommended options so that they are viable for implementation.

In addition to the nine element and area chapters, the final report will include an executive summary and a recommendation roadmap chapter.

C. Methods

The methodology behind RCG's management audit proposal is built on four essential elements:

- **Facts** - Facts are data or other information that can be reasonably proved as an actual depiction of some characteristic of the Company. Generally these are gleaned from one or more of the following sources:
 - Hard financial, reliability, staffing, or other performance data that is non-disputable;
 - Interview results that are captured and are verifiable by data, observations or other interviews; and
 - Physical observation of field or process related activities.
- **Findings** - A finding is reached after reviewing a summary of the facts; it depicts the auditor's best judgment based on a reasonable analysis.
- **Conclusions** - A conclusion is a determination reached after reviewing a summary of findings; it requires the auditor to form an overall opinion about a specific topic based on analysis against relevant criteria and industry leading practices, and suggests some form of action.
- **Recommendations** - A recommendation is an actionable and prescriptive statement based on a number of conclusions and some level of cost/benefit analysis, and is generally time-bound.

Because accurate retrieval of facts is the basis for developing findings, conclusions, recommendations, and measurable results, RCG requires its consultants to have appropriate sources for fact verification. It is the responsibility of the Project Manager and Lead Consultants to ensure that reasonable support exists for all the facts presented in the audit report. The Engagement Director and Project Manager will participate in any reviews to promote consistent results that align with the DPS Staff's objectives.

RCG embeds its factual references within the draft report (generally as footnotes) to allow for efficient verification of facts. This is an essential quality verification tool used by RCG to ensure report accuracy, minimize errors, and, ultimately, to help to create confidence in the recommendations that are presented due to the ability to expeditiously respond to questions and concerns. Consistent with DPS Staff practices or requirements, the footnotes may be removed or retained in the final report.

RCG will be responsible for developing its findings and conclusions, and will take the lead on developing reasonable recommendations. All recommendations remain subject to the approval of DPS Staff and may be developed collaboratively with the Company to craft workable solutions and timetables. Should NGrid be restricted from or be unwilling to collaborate on a specific recommendation, RCG will independently develop appropriate and reasonable recommendations for review by the DPS Staff first and will bring those that the DPS Staff believe are most promising to the Company and its stakeholders at that point.

Another critical component of conducting an effective management audit is the approach used to conduct interviews, data sampling, cost/benefit analyses, and the organization of data elements. The methodologies RCG uses are presented below.

Interview Technique

With a task report outline in hand, RCG team members will develop a list of questions necessary to gain insights into each of the audit element being evaluated by that consultant. These questions will be assembled into interview guides, which will be used to manage the individual interviews; further, these questions are used to identify additional data requests before the interview.

Interviewees will be provided with an *interview guide summary* one week in advance of the interview so they may adequately prepare complete and accurate responses. Interviewees will be advised that additional topics may be covered during the interview process as issues unfold.

Further, RCG encourages the individuals being interviewed to present samples, flowcharts, and other documentation to support their answers. The goal of RCG's interview

approach is to gain a fair, accurate, and complete picture of the facts in order to produce high-quality findings. DPS Staff is also encouraged to attend and observe interviews, either in person or by telephone. We believe this approach promotes a better understanding of the Company's operations at a more granular level.

Interview guides will be tailored to the level and special duties of the individual who will be interviewed to ensure a productive session. For example, the RCG team would discuss strategy and policy with senior-level managers but focus on process at the supervisory and line levels. This makes it possible to test the validity and effective implementation of management strategies or policies all the way through the organizational chain to determine the true value and effectiveness to the Company.

Sampling Techniques

Data will be sampled to quantify impacts to the business and validate what RCG is being told by Company personnel. Sampling methodology depends on the topics under analysis but, in all cases, the sample will follow this approach:

- Identify data sources required to address and test the criteria stated in the task report outline;
- Determine if the sampling will be by past performance data, process review, or physical observation;
- Determine sampling techniques and representative sample populations using the population that best reflects the full range of available data;
- Obtain approval from both the Lead Consultant and Project Manager as part of RCG's quality verification process;
- Request the data from the Company or arrange for physical observations;
- Analyze the sample data and develop findings; and
- Validate the findings by comparing and contrasting those findings with other information sources, such as interview notes.

Sampling and trend data may:

- Represent a range of capital projects or maintenance programs by both type and dollar value;
- Represent capital projects at different stages in the life cycle;
- Cover a specific period of time, for example five years of historical budget and actual data;

- Represent gas distribution project performance;
- Review specific events and after-action reports, i.e., Super Storm Sandy recovery efforts;
- Review the Company's back-cast load and supply forecasting to verify accuracy of the tools, methodologies, or strategies used;
- Depict major capital spent on vendors;
- Represent staffing and retirement trends;
- Generally confirm that all financial reports, elements accounts, or funds are fairly presented and consistent with Generally Accepted Accounting Principles; and
- Determine if internal controls and control systems employed are reasonable and adhere to acceptable standards.

Benefit Analyses

The Guide provided with the RFP defines DPS Staff expectations for performing benefit analyses including, where applicable, cost considerations. RCG concurs with this approach and will apply it to those potential recommendations where benefit and or cost justification is reasonable and appropriate. RCG will approach identifying the cost and or benefit of specific recommendations in two phases. First, we will develop a relative ranking of recommendations for each of the of the nine scope elements using a four-quadrant diagram which depicts both the potential cost to implement and benefit to the ratepayer (sample provided in Exhibit III-1 below). This presentation format provides a clear and concise illustration of the impact of a group of recommendations. It is particularly effective in facilitating the comparison of no- or low-cost recommendations with the more expense and/or capital-intensive recommendations where further cost and/or benefit analyses are required.

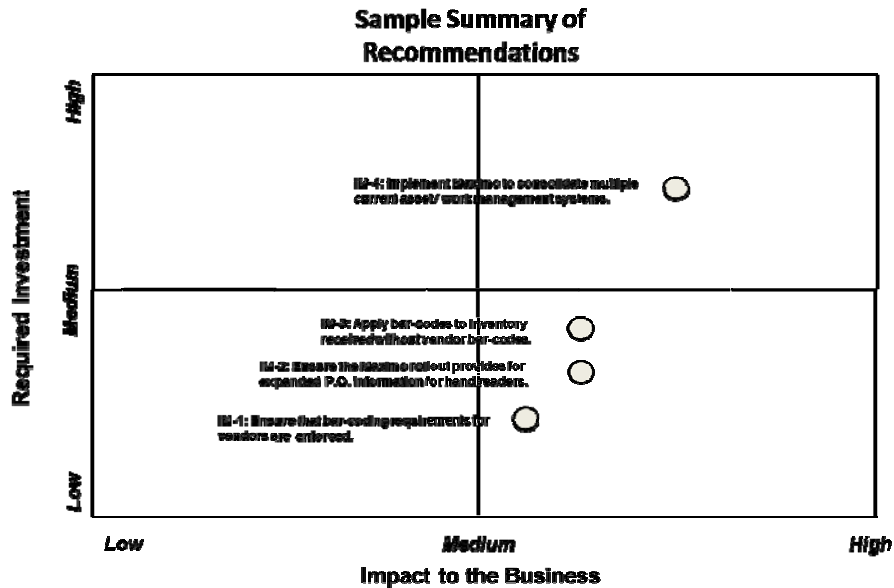


Exhibit III-1 Four Quadrant-Recommendation Triage

Prior to finalizing the list of recommendations and the need for cost/benefit analysis, RCG will work with the DPS Staff to vet the recommendations and agree upon those which need to have cost/benefit analysis.

Second, RCG will apply a **SMART** methodology to the development of recommendations. Each recommendation must be *Specific*, so that the intent and purpose is clear to all concerned; where appropriate, the results must be *Measurable* to demonstrate a change that produces a benefit to customers; the recommendation must be *Achievable* by the Company, otherwise the costs will not be offset by benefits; the recommendation must be *Relevant*, so that one or more of the benefit component considerations⁶ will be positively changed; and, the recommendation must be *Traceable* to ensure that a specific Company executive or organization will be responsible for successful execution.

To enhance “buy-in,” RCG will request, review, and test the Company’s cost/benefit template (or model) for reasonableness and completeness, including standard assumptions for inflation, overhead costs, and other non-specific inputs. The cost/benefit analysis will be computed using the Company’s template for ease of communication. RCG consultants will apply their specific utility experience to apply the benefit component considerations to

⁶ State of New York, Department of Public Service, The Guide for Consultants Submitting Proposals for Management and Operations Audits, February 13, 2013, page 19.

the individual recommendations. In the event the Company doesn't have a formal template, RCG will use its own methodology.

D. Deliverables

The audit process will generate a large number of documents and work plans through the delivery of the final audit report. Those documents and plans will need to be available to the DPS Staff during and after completion of the audit. The RFP defines a range of deliverable products related to this project. RCG's technique to approaching these documents and the documentation of an audit is provided below.

- **Work Plan** - RCG will work closely with DPS Staff during the creation of NGrid audit work plan. During the process of developing that plan, DPS Staff comments, suggestions, and concerns will be integrated into the document. RCG's project manager will be responsible for submitting initial and final draft work plans to the DPS Staff's project manager. In addition to the items included in the RFP scope for the work plan, RCG will include the tools it proposes to use to analyze data and findings, and a detailed schedule of with objectives and milestones associates with each audit element. DPS Staff approval of the work plan will signal the RCG team to begin Stage II work. Because no successful plan is ever static, but rather a dynamic tool which adapts to circumstances, the audit work plan may be modified during the course of the audit if RCG finds a significant issue with ramifications to customers that was not covered in the work plan, and DPS Staff agrees that the issue merits a modification to the original plan.
- **Briefings** - RCG will provide regular briefings to DPS Staff on the progress of the audit and will identify emerging issues. DPS Staff will be encouraged to bring up any issues that they feel RCG needs to place additional focus on and not leave these types of issues to the draft report stage. It is possible that, as the audit progresses, RCG may be required to provide preliminary assessments of findings to the Commission or senior members of the Commission's DPS staff or other government offices. These briefings can be conducted in person, by telephone, or with written reports, as requested by the DPS Staff project manager. In all cases, the briefings will be documented and become part of the audit work papers.
- **Briefing Reports** - The final work plan will define a schedule for RCG to provide formal report briefs to the DPS Staff and others identified by the project manager for the DPS Staff. These formal progress reports will be become part of the audit work papers. RCG expects to have these briefings monthly during periods of high activity. In addition, RCG can have bi-weekly phone briefings to discuss emerging issues and schedules.

- **Draft Reports** - The preliminary schedule for delivery of the initial draft audit report is March 19, 2014 as set forth in *Chapter VI* of this proposal. The initial draft report, intended to be representative of the final audit report, will be reviewed by DPS Staff, who will comment on the draft. RCG will edit the initial draft and present a revised initial audit report to DPS Staff, who will authorize RCG to send the revised draft report to the Company for a factual review when the DPS Staff is satisfied with the product. It is expected that there will be two passes at the draft report to address DPS Staff issues and NGrid's factual concerns.
- **Final Report** - A final report is scheduled to be delivered to the DPS Staff by April 2014. DPS Staff will document RCG's evaluation of each aspect of the audit work scope, as outlined in the RFP and in this proposal. All audit work papers will be made available for DPS Staff review on DVDs.

In addition to the deliverables set forth in the RFP, RCG will be preparing and maintaining the following documents:

- **Data Requests** - RCG will generate *written* requests for documents and other data that will be distributed by the RCG project manager. These document requests will clearly identify the data, analysis, or documents being requested, and the individual or department that has been requested to provide them. Data requests, like interview requests, will be assigned a unique number for document-tracking purposes and will be maintained as audit work papers.
- **Data Request Report** - This metric report will identify data and documents that have been requested, the date of the request, the Company individual or department responsible for responding to the request, the agreed delivery date, and the date of delivery. RCG will use NGrid's own document-tracking system or its own Microsoft Access-based tool. RCG will accommodate the Company's preference in this regard but strongly recommends that *only* one system be used for tracking audit requests.
- **Interview Requests & Summaries** - RCG uses a formal interview request form that acts as a record of the request. All interview requests will be assigned a unique number, either by the Company or by RCG. This approach supports an organizational system that permits RCG to track NGrid's responsiveness, and provides a formal reference that will be used to track the task, and to document RCG's findings in the draft and final reports. RCG also will prepare a formal interview summary that includes: a unique document reference number, the name of the individual interviewed, that individual's title and affiliation, the interviewer, the interview date and time, interview facts and observations, potential issues, and any follow-up required, including the preparation of subsequent data requests resulting from the interview. Typed summaries will become a permanent part of

the audit work papers. As a general rule, RCG does not include findings or conclusions in interview summaries to avoid snap judgments or unsupported conclusions.

- **Interview Schedules** - A weekly document presenting a schedule of upcoming interviews and observation visits will be provided to the DPS Staff and NGrid program managers. The notice will contain the name of the individual to be interviewed, the name of the interviewer, the area of focus, and the date, time and location of the interview. RCG reserves the right to conduct observation visits without specifying the date or time determined for that visit. This potent tool allows RCG consultants to form clear opinions about actual management practices that may not be observable during planned visits.
- **Task Reports** - RCG will complete regular task reports for each of the nine audit element areas. The task reports will be provided to the DPS Staff project manager and will form the basis for the draft reports to follow. Task reports give the DPS Staff an early and informal look at the issues and conclusions that are being developed by RCG team members.
- **Project Management Reports** - A monthly progress report that includes person-days expended during the past month and any audit-related expenses will be provided to the DPS Staff project manager by the 10th day of the following month. This report will record this information by activity and individual team member. It will be presented alongside the approved work plan and budget, and will calculate the percentage of completed at that point in time. Any deviations, delays or remediation needs will be captured in this monthly report.

All of the above documents, together with analyses and any other information gathered as part of this management audit will be considered to comprise the engagement working papers. Consistent with the requirements set forth in the Audit Guide, these documents will be organized into a neat and concise electronic package, and will be provided to the DPS Staff at the time that RCG delivers the final audit report.

E. Project Management

Effective project management begins with a logical, effective, and efficient work plan that is clearly understood and accepted by the parties. The Engagement Director and Project Manager will be responsible for crafting and managing the overall work plan. In engagements of this magnitude, the Project Manager will devote reasonable effort to managing both the audit costs and schedule using acceptable project management tools.

RCG's Project Manager is responsible for the day-to-day execution of the work plan and schedule, while the Engagement Director focuses on the development of the central

issues, budget management, and management of key relationships. Both the Project Manager and Engagement Director have a long and productive working relationship (over three decades) relative to management audits assignments.

A key aspect of RCG's approach to process control is to limit contact for audit process decisions to the Project Managers assigned by RCG and its client, which in this case is a representative assigned by DPS Staff, who is RCG's primary client, and an additional representative assigned by the Company. RCG welcomes DPS Staff and NGrid personnel as active participants in the audit review process, and will work through its Project Manager to accommodate requests throughout the course of the audit.

The Project Manager will also make any or all RCG team members available to DPS Staff to discuss emerging issues, as needed. Using quality audit tools and experienced consultants, together with maintaining open and honest communication between project managers, will lead to a positive audit experience for all parties involved in the process. Again, RCG understands the travel limitations of the DPS Staff and, therefore, will make use of structured conference calls as much as possible.

A significant benefit to this approach is that it prevents surprises by encouraging an open, ongoing, informal dialogue. RCG also has pulled together an experienced team of professionals who understand how to minimize the disruption of a client's normal activities and when it is important to reach out with information or for advice.

Nevertheless, RCG will rely heavily on the knowledge and experience of its Engagement Director and Project Manager, whose responsibilities, in part, are outlined below:

- Defining the tasks to be performed for each audit element and assigning those tasks to the most experienced team member where that experience is necessary to outcome quality;
- Determining, with the aid of the Lead Consultants, what must be studied, what facts must be gathered to support credible and verifiable findings, and how those facts should be gathered;
- Determining dependencies, and implementing the plans and discipline that will support the successful operating of an efficient construction program feedback loop in order to ensure that a comprehensive audit is completed;
- Identifying any duplication of tasks across areas of study before they take place, and assigning single responsibility for the performance of related analytical tasks;

- Determining the level of effort required to gather, analyze, and report on each element under study, and to manage the process in conformance with the work plan and audit budget;
- Conducting regular sessions among the RCG team to explore cross-cutting issues, and to report findings to the DPS Staff;
- Managing the schedule aggressively to ensure milestones are met and momentum is maintained;
- Discovering and reporting any budget variances of time and expenses in order to expedite and implement corrective action;
- Reviewing all findings and conclusions for completeness and proper documentation;
- Ensuring that working papers are managed and identified according to established outcome standards, requiring, at a minimum, that they be clear and neat, complete and accurate, assigned a control number, identifiable by source, and digitally backed up;
- Ensuring that an audit trail is maintained at all times;
- Preparing and submitting recommended adjustments to the work plan should developments warrant the need to do so; and
- Conducting ongoing discussions and meetings with the RCG team and DPS Staff to minimize surprises.

The Project Manager will be responsible for conducting bi-weekly briefings, in person or by conference call, with the project manager selected to represent DPS Staff and his assigned audit team. At a minimum, these briefings will follow the following agenda:

- Summary of the team's progress, including audit metrics;
- Discussion of emerging issues, observations, preliminary findings and potential conclusions when appropriate;⁷
- Discussion of open data or interview requests;
- Review of process issues encountered; and
- Discussion of budget versus earned progress status.

⁷ RCG recommends that discussions involving highly sensitive issues take place as independent conference calls scheduled pursuant to the directions of the project manager for the DPS Staff.

IV. AUDIT AREAS AND ISSUES

This chapter provides a detailed description of audit elements and issues that have been assigned to individual members of the RCG team. This information includes name of the individual(s) assigned to each task and RCG's Lead Consultant for each audit element identified in the RFP.

A. Introduction

As set forth in the RFP, RCG's management audit will focus on nine elements related to NGrid's gas distribution operations:

- Corporate mission, objectives, goals, and planning
- Load forecasting
- Supply procurement
- System planning
- Capital and O&M budgeting
- Program and project planning and management
- Work management
- Performance and results measurement
- Information systems

RCG will evaluate these elements or functions according to the construction program feedback system recommended by the DPS Staff in the RFP. In each section of our work plan we illustrate how the element under examination functions in a feedback loop.

This audit will assess the Company's effectiveness in meeting its mission, particularly with meeting its performance goals, and the extent to which there are opportunities for improvement that would benefit the Company's New York State customers. RCG's audit will focus on the Company's construction program planning, operational efficiency, and performance, including reliability.

We believe that any utility's maintenance program can significantly affect important aspects of its distribution capital program. Reviewing the capital and O&M programs holistically thus gives the review the character of a formal asset management strategy, which not only impacts capital spending, but also O&M expenses and overall system reliability and safety.

RCG contends that, by optimizing these two areas of spending within its New York State operations, the Company will produce the best results for customers. As the RCG team reviews each of the nine audit element areas, incorporating "leading practices"

identified in past assignments will be one of RCG's primary objectives. (RCG deliberately chooses to define these practices as "leading" because using the term "best practices" tends to imply that only one company has achieved an optimum approach or that only one approach can be the best for all utilities. But industry benchmarks must consider the variables in different utility environments that can prevent true "best practices" from producing effective results in certain situations. We therefore use "leading practices" as our benchmark term to indicate that a number of utilities have achieved positive results with various practices independent of a unique or shared environment.)

To provide a complete and understandable picture of RCG's evaluation of each audit area and the issues presented within the context of the proposed audit of NGrid, RCG has provided a draft audit work plan based on descriptions of each audit element area that include the following information:

- RCG's perspective on the audit element;
- Potential benefits;
- The Commission's evaluation criteria;
- RCG's staffing assignments for each element; and
- A list of initial work tasks to be included in the draft work plan.

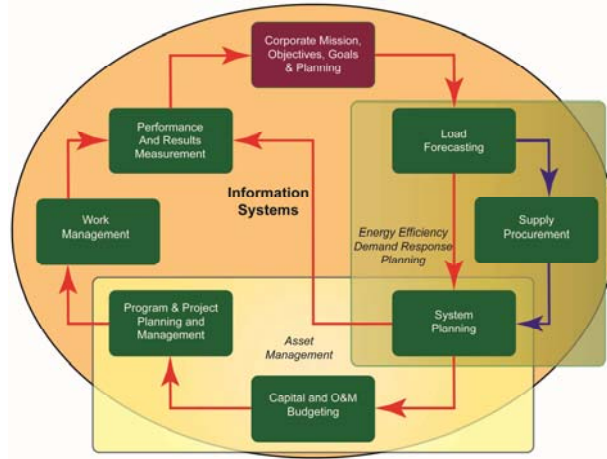
RCG has also included initial data and interview requests in **Appendix A** to this proposal. These data requests address each audit element and should be considered part of RCG's draft initial work plan for this audit.

B. Audit Element Area Work Plans

RCG proposes the following preliminary work plans for each of the nine audit element areas.

Element No. 1: Corporate Mission, Objectives, Goals and Planning

The Company's Board of Directors and Executive management team, while addressing all its other businesses, must spend an appropriate and proportionate level of time on ensuring NGrid USA's New York gas operations are moving in the right direction and applying governance in an appropriate manner thereby mitigating risk and conflict of interest, and ensuring the direction and control of the organization properly support all stakeholder needs. This task area examines the corporate structure, including the Line of Business (LOB) model, and function of the utility's executive management and the ability of both its Boards of Directors and its management to anticipate and respond to opportunities and problems, provide proper direction, leadership and oversight, and plan, manage, and execute effectively.



RCG contends that an effective board of directors, executive management, and governance approach should have the following attributes:

- An experienced and knowledgeable board of directors with appropriate committees to provide effective oversight and direction that benefit New York State gas customers;
- Given that 57% of NGrid plc's revenue and 33% of its adjusted operating profit are from its USA operations, there should be Board Members who have specific knowledge of the history and environment that New York State gas utilities operate within;
- An executive management structure with the right people focusing on the needs of New York State gas customers;
- A management team and strategic planning process properly focused on delivering the quality service at a reasonable cost to New York State gas customers;
- A set of strategic plans, goals, objectives, and execution methods grounded in delivering improved performance and value to New York State gas customers;
- An effective corporate management process for addressing operational, legal, and regulatory issues with formal and effective performance reporting and management oversight;
- A process for developing management talent and filling key positions with highly-qualified individuals; and
- A uniform process for managing and operating across its gas service territories appropriately modified to account to geographic differences.

Benefits:

Wide ranging and significant anomalies and misuse of funds can result from a fractured and poorly designed corporate direction, and poorly derived strategic plans and objectives. Not only will execution be problematic but the entire agenda that is set for the firm could jeopardize many of its components for years to come. The kinds of benefits that can be derived and costly errors that can be avoided with a review of this broad area include:

- Putting in place a credible and well-thought out corporate strategy which takes into account appropriate future scenario analysis, risk assessments and applies a rigorous process to guide and define the nature and direction of the organization;
- Eliminating risks of competing strategies and non-supportive objectives below the Board and its executive team;
- Application of more appropriate methods, Board effectiveness assessments, selection criteria, and insightful guidance by the Board through approaches to better assure stronger Board capability, oversight and diversity;
- Implementation of processes to ensure congruence between corporate strategy and the strategies of the New York gas business units will enable the organization to pull together in the same direction. Without this, the probability of achieving its critical results will be deeply weakened; and
- Using KPIs that are meaningful to and supportive of their New York gas businesses and reflect the future gas market place.
- In addition, a major area where utilities and their stakeholders can achieve significant benefit is customer communications. A critical component of RCG's work will therefore be to assess and review customer communications, an effort which crosses most organizations and business functions in the modern gas utility. Customer communications directly includes public relations and media (i.e., corporate communications, web, town hall sessions, etc.), customer service (call centers, web, mobile, monthly bills, social media, etc.), and marketing (message development, target marketing, web & social marketing, and product promotion). Effective communications serve to inform, educate, and notify; influence customer behavior towards program adoption or conservation; and influence perceptions of how the utility is both performing and serving the customer; and provide emergency communications when needed, openly, straightforwardly and on a timely basis. These perceptions heavily affect customer satisfaction in regulated utilities and are part of utility management's fiduciary responsibility.
- NGrid reported dissatisfaction with the JD Powers ranking of their gas business and have goals to improve its quartile ratings. Much of the industry assesses customer

satisfaction for their customers and against peer companies by the use of JD Powers, MSI, or other survey mechanisms. However, receiving results showing ratings for customer service in the 3rd quartile or reliability in the 4th quartile often aren't very useful. The information provided is "not actionable" for most utilities. As an example, if customers are dissatisfied with customer service, even specifically from a call center, is this because the hold time is too long, the agent is ill informed and doesn't provide value, or the customer received a high bill and couldn't pay it so they took this out on the utility? Our audit will include both operational reviews of targeted business functions and correlate them with survey results for those areas. This will not deliver specific interventions to directly impact satisfaction results, but will identify potential areas to focus on that might matter most to customers in their experience with the utility. This type of prioritization will also ensure that "uneconomic investments or non-beneficial changes" are not made or perpetuated. Focus will be on what will matter to customers and what they will notice and what is important, rather than attempting to change everything. If designs and investments are optimized, customers have higher degrees of satisfaction and the utility lowers their cost to serve through areas such as repeat calls, more effective and efficient interactions, movement to self-service for those customers that prefer it, and higher adoption of conservation efforts when promoted in a more relevant, clear, and timely manner.

Commission's Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG acknowledges the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element's chapter in the final report.

- *Assess the New York management structure's ability to influence corporate decision-making within National Grid USA.*
 - *Assess the effectiveness of National Grid USA's restructuring of the management and reporting relationships in New York to address recommendations from NorthStar's 2008 Management Audit report in Case 08-E-0827.*
 - *Evaluate the communication paths and reporting structures between the New York executives and National Grid USA.*
 - *Determine through a review of organization charts and corporate structures whether the needs of the New York ratepayers are discretely and adequately addressed.*
- *Review and assess if anticipated synergies were realized from the merger of National Grid USA with the Keyspan Companies in 2006.*
- *Assess potential for consolidation of KEDNY and KEDLI.*

- *Assess the adequacy of National Grid USA's Enterprise Risk Management programs and process.*
 - *As part of this review, determine if the risks associated with potential disasters, including preparation, restoration and recovery, are given sufficient weighting as compared to other risk factors.*
- *Review the loss of the Long Island Power Authority (LIPA) management services contract and its implications for the Keyspan companies.*
- *Assess the impact of the loss of the LIPA contract on the:*
 - *Cost of services from the service company;*
 - *Process for meter reading;*
 - *Customer communications involving gas business (call center).*
- *Review and assess governance, organizational structure, missions and relationships within National Grid Gas as they relate to the construction program planning process.*
- *Review organizational responsibilities for planning priorities and budgeting allocations for each gas business.*
- *Assess the role of the national and international Boards of Directors and executive and senior management in the development of budgeting guidelines and periodic budget reviews and approvals.*
- *Examine National Grid Gas financial position and the level of rates that are factored into the budgeting process.*
- *Assess National Grid Gas use of measurable goals, metrics, key performance indicators, etc. to achieve the corporate mission and objectives, and the performance improvement process used at successive levels of management.*
- *Review performance and compliance with procedures and practices related to the scope of this audit, including, but not limited to, internal controls, internal audit function and the Sarbanes Oxley Act.*
- *Review management performance and compensation programs and assess alignment with the corporate mission, objectives and goals at all organizational levels.*
- *Examine National Grid Gas goals and plans for modernization of gas transmission and distribution systems in response to the Energy Independence and Security Act of 2007.*
- *Review National Grid USA's approach to competitive issues for new customers and markets (such as gas expansion, natural gas vehicles, etc.)*

- *Determine if appropriate new markets are being considered by the Companies and how the costs for entry into those markets would be funded?*

Proposed Staffing Assignment

| Audit Area Staff Assignment – Corporate Mission, Objectives, Goals and Planning | |
|---|--|
| Lead Consultant | Ray Saleeby/Bob Grant |
| Consultant(s) | Chip Wright / George Fandos / Drew McCrossan |

Exhibit IV-1 Planning Element Staff Assignment

Work Tasks:

Plan Tasks

- Revise Corporate Mission, Objectives, Goals and Planning tasks, and initial data requests based on feedback from the DPS Staff review of the proposal and the structured Staff input process.
- Review initial data request responses related to Corporate Mission, Objectives, Goals and Planning. Identify missing data, evaluate quality and completeness, and engage management as needed. In addition collect information including, but not limited to:
 - a. *The recommendations from NorthStar’s 2008 Management Audit report in Case 08-E-0827 and*
 - b. *Documentation concerning NGrid USA and Keyspan 2006 anticipated synergies.*
 - c. *Financial and other documentation related to the loss of the LIPA contract*
- Develop initial high-level interviews to clarify and verify understanding of the Corporate Mission, Objectives, Goals, and Planning process in NGrid plc, NGrid USA, and NGrid Gas New York.
- Develop a Corporate Mission, Objectives, Goals and Planning task report outline, and the next level of interview guides and data requests.

River Consulting Group

Proposal to Conduct a Utility Management Audit
(Case 13-G-0009)

Collect & Analyze Data

- Review the current overall and LOB organization structure to ensure appropriate clarity, management direction and control, decision making, risk mitigation, priority setting and governance, especially in support of New York ratepayers. Determine if alternative organizational schemes for KEDNY and KEDLI would provide benefits. Evaluate the performance and compensation programs to ascertain alignment with the corporate direction.
- Coordinate with audit teams to determine the extent of Company coordination and consistency of assumptions, strategies, and execution of a corporate mission, objectives, goals, and planning. Determine how well corporate objectives are communicated, understood, and applied throughout the New York gas operations.
- Assess the Board's role in strategy and budgeting oversight and determine if the New York gas business has an appropriate level of focus and attention.
- Assess governance throughout the overall organization based on the appropriateness of the oversight activities, the decision making effectiveness and the execution of their fiduciary responsibilities.
- Determine how NGrid assesses the success of its corporate mission, objectives, goals, and planning process. Review KPIs for corporate mission, objectives, goals, and planning. Compare the overall corporate mission, objectives, goals, and planning process to leading practices.
- Determine how NGrid USA's and the gas LOB's management determine how to focus and align resources or set priorities among the three New York gas territories.
- Evaluate the firm's response to the recommendations made in the NorthStar audit report of 2008.
- Conduct a review of all impacts, changes, burdens or benefits related to the loss of the LIPA contract.
- Evaluate how differences between the LOB and NGrid USA are resolved as it pertains to New York Gas operations.
- Review how NGrid benchmarks its corporate mission, objectives, goals, and planning practices and how they compare with industry results and other New York State gas utility performance results.

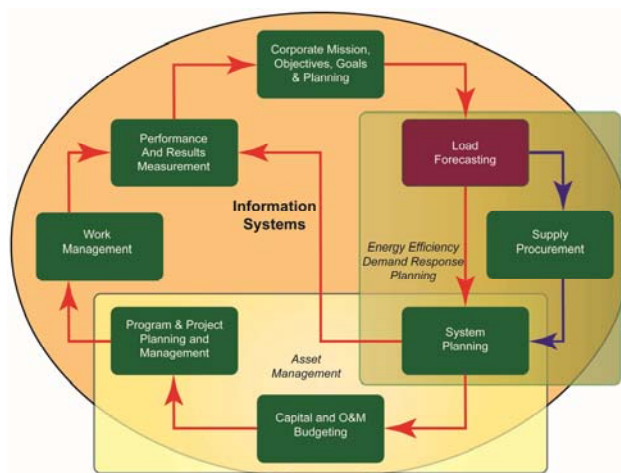
- Review NGrid USA’s Enterprise Risk management program to determine its adequacy, priority setting and rationale for all activities from planning through restoration and recovery.
- Evaluate the external communications strategy and tactical plans to determine if it is supporting NGrid’s goal to improve customer relations. Identify the components of the strategy to determine appropriateness. Determine if company funding for improving customer communications is adequate.

Complete Task Report

- Verify facts.
- Prepare the Corporate Mission, Objectives, Goals, and Planning Task Report.
- Submit the Corporate Mission, Objectives, Goals, and Planning Task Report for RCG quality review.

Element No. 2: Load Forecasting

A utility’s load forecast is the foundation for all tactical aspects of its planning process. RCG’s diagram below illustrates that the forecast should support supply procurement, system planning, and financial planning and should recognize strategic planning issues and concerns. The utility needs to ensure that its gas load forecasting provides accurate and timely commodity and demand requirements so management can make prudent “downstream” operational decisions regarding supply procurement options, transmission capacity requirements and procurement, distribution system requirements, risk management, and financial and regulatory strategies.



Key factors for developing accurate load forecasts include tested models, relevant inputs, and incorporation of energy efficiency, demand-side management, and projected weather requirements. A high-level measure of the effectiveness of the load forecasting

function can be determined by comparing forecasts with weather-adjusted actual consumption, but the forecasting process must be broad enough to recognize emerging trends and/or rapid discontinuities (“Black Swan” events) and therefore customer research, sensitivity studies, and para-analytical techniques should be part of the forecasting process.

Evolving challenges in forecasting include the estimation of retail gas choice and the impact of distributed gas-fired generation, natural gas vehicles (NGV), and other emerging technologies along with volatile prices for competitive fuels and rapid changes in economic conditions.

Benefits:

RCG has seen utilities with a fully integrated planning system that uses the corporate load forecast to drive supply procurement, revenue forecasting and system planning; however, RCG has also seen utilities that use rudimentary load forecasting that does not meet the needs of downstream users. Such disconnects often result in sub-optimal forecasts produced by user departments that may meet their needs but are not integrated across the utility. This apparent lack of integration leads to increased costs and mismatches between departments, which may further inflate costs or construction. A user-focused load forecast properly integrated across the utility leads to potential benefits and savings such as:

- Elimination of duplicate forecasting costs;
- Identification of accurate short-term impacts at a lower cost and time expenditure;
- Planning and construction based on customer-based forecasts rather than on mathematical approximations; and
- Integration of customer research across multiple departments that eliminates duplication and/or provides more and better information for planners and revenue forecasting.

Commission Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG acknowledges the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element’s chapter in the final report.

- *Review the models, assumptions and key drivers, and other inputs used to forecast local and system-wide load requirements.*
- *Assess the inputs, including demand side management (demand response, etc.), energy efficiency, and other initiatives that are factors in the forecasting process.*
- *Evaluate the organization and staffing of forecasting functions.*

- Determine the extent to which the planning for company-wide gas load, as well as loads reflecting region-specific factors, is integrated into the overall business processes and strategies, including gas planning.

Proposed Staffing Assignment:

| Audit Area Staff Assignment – Load Forecasting | |
|--|------------------|
| Lead Consultant | Howard Solganick |
| Consultant(s) | |

Exhibit IV-2 Load Forecasting Staff Assignment

Work Tasks:

Plan Tasks

- Revise load forecasting tasks and initial data requests based on feedback from the DPS Staff review of the proposal and the structured Staff input process.
- Review initial data request responses related to the load forecasting process. Identify missing data, evaluate quality and completeness, and engage management as needed.
- Develop initial high-level interviews to clarify and verify understanding of the load forecasting process within NGrid.
- Develop a Load Forecasting task report outline, the next level of interview guides and data requests.

Collect & Analyze Data

- Assess the overall planning process including recent changes such as integration into Energy Portfolio Management. Assess NGrid’s approach to load forecasting and its uniformity between the three operating entities. Consider whether the process is centralized across NGrid (particularly the New York business units), well documented, and tested appropriately and updated as needed.
- Assess the models used to forecast commodity and peak. Consider whether the forecast addresses geography and customer classes appropriately. Examine the treatment of weather within the forecast and the development of “normal weather.”

- Assess how non-traditional forecasting techniques such as sensitivity studies, para-analytics, environmental scanning, and emerging trends are considered in the forecasting process.
- Determine how demand response, energy efficiency, gas-fired distributed generation, vehicle fuel and environmental-driven conversions, and other customer-facing programs are integrated into the forecast.
- Consider whether customer research (competitive fuels, saturation studies, statistical load research for larger classes, and billing analysis for larger customers) is supported, how it is used, and whether it is needed.
- Assess the forecast review and approval process.
- Assess how customer choice is estimated and integrated into the forecasting process.
- Determine if the forecasting process horizon and granularity are appropriate.
- Evaluate the process that generates sub-forecasts by customer, end use, rate, and rate elements.
- Determine whether the forecast is used for supply procurement, system planning, and financial (revenue) planning and how those entities' considerations and concerns are addressed in the process.
- Determine if the forecast is used within the regulatory process including rate case.
- Assess the Company's comparisons of each forecast (2007 through 2012) to weather-adjusted consumption. Review the post-forecast analysis process. Evaluate the back-casting process for tuning forecasts.
- Coordinate with the Corporate Mission, Objectives, Goals, and Planning; Supply Procurement; System Planning; and Performance and Results Management audit teams to determine the extent of Company coordination and consistency of assumptions, strategies, and execution.
- Determine how the Company and load forecasting process management group assesses the success of the load forecasting process. Review the KPIs for the load forecasting process.
- Review how the Company benchmarks load forecasting practices and results with industry and other New York State utility performance.
- Compare the overall load forecasting process to leading practices.

- Complete an analysis of the load forecasting process, including cost implications, where possible.

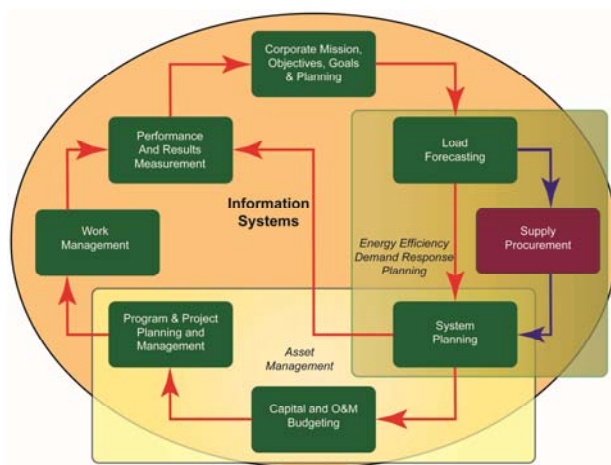
Complete Task Report

- Verify facts.
- Prepare the load forecasting task report.
- Submit the load forecasting task report for RCG quality review.

Element No.3: Supply Procurement

Supply procurement is generally the single largest expense a New York State gas utility faces. Errors in supply procurement strategy or its execution can therefore have significant financial implications to the Company and the customers. Securing competitive and reliable gas supply (i.e., energy, pipeline capacity, ancillaries, and storage) to serve mass-market default supply option (“DSO”) customers in a deregulated competitive marketplace has become an increasingly challenging activity fraught with many inter-dependent risk factors. A utility’s DSO customer peak usage and load volumes are subject to fluctuations as energy users respond to regulatory and competitive market changes.

The utility needs to determine the level of price stability and volatility that the regulators and customers expect; the costs to manage these concerns and the impact of the utility’s program on the unregulated marketplace. These criteria must be clearly defined, examined and the costs and implications explored with stakeholders.



To constrain price volatility, utilities hedge a portion of their natural gas obligations with a combination of fixed and floating (indexed) supply purchase contracts, both physical and financial and with varying terms; they purchase the balance on spot markets. In some cases, utility affiliates also own production fields and transmission resources and other legacy gas purchases that can be included in the supply portfolio under various pricing and term structures. This increasingly sophisticated and complex supply process requires coordinated planning and execution with senior management attention, clear goals and objectives, and effective risk management and controls, all with an eye toward future developments and trends.

A successful gas supply strategy also includes executing the contracts on a daily basis. Depending on the mix of customer load profiles (residential, residential heating, commercial, manufacturing, weather sensitivity, interruptible, critical use, etc.), and the resultant seasonal, daily, and hourly diversity, the gas supply procurement strategy can vary considerably from one local gas distribution company to another. Even within the same state, different hedging or customer tariff approaches may be designed to deal with specific supply procurement concerns and mandates. The pursuit of price stability may certainly be in conflict with a desire for “market-driven” customer price signals. A demonstrated ability to foresee and test a much larger variety of possible market conditions and or events will be necessary to navigate both current and future markets.

The need for management of risk across a corporate structure has received much attention, nowhere more so than in energy supply procurement. A robust risk management policy directly related to the energy supply procurement process is a basic expectation. Such a policy must set clear and precise expectations about policy development, governance, oversight, execution, record keeping and retention, role clarity and separation, accountability, periodic evaluation, and auditing.

Moreover there must be clear evidence that the policy is communicated, understood, reviewed, adjusted, and executed consistently and effectively through the organization. A system of key controls and systems supported and championed by senior management is essential to an effective risk management approach.

Benefits:

RCG has seen instances where the objectives of the various stakeholders have evolved over time from a position of customer protection to a pro-marketplace viewpoint that encourages most customers to seek the product that best meets that their needs. As (or if) this evolution takes place the utility’s role in supply procurement evolves and potential savings and benefits may include:

- Increased customer usage of retail providers;
- Decreased usage of the DSO with longer term cost decreases;

- Reduction of switching to game the system during periods of price volatility;
- Consideration of external or outsourced supply management;
- Reduction of hedging and portfolio management costs;
- Clearer, more timely price signals to customers; and
- Reduction of marginal or underused supply options.

Commission Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG acknowledges the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element’s write-up in the final report.

- *Identify and evaluate supply portfolio principles, goals and objectives for mass market default customers.*
- *Identify and evaluate risk management strategies and practices.*
- *Review and assess supply procurement strategies, policies, processes, and methods.*
- *Review and assess National Grid Gas financial and physical hedging practices by customer types (e.g., residential, small commercial and industry (C&I), large C&I, Temperature Control, etc.).*
- *Examine National Grid Gas use of performance benchmarking with other utilities.*
- *Review portfolio performance goals.*
- *Evaluate portfolio oversight and controls.*
- *Examine the role of demand side management/response, energy efficiency, and migration of retail customers to competitive suppliers in the portfolio and procurement processes.*
- *Examine the role of affiliate transactions in supply procurement, when one entity is procuring supply and capacity contracts for multiple distribution utilities and allocating costs and benefits among them. For example, are storage assets being shared equitably?*

Staffing Assignment:

| Audit Area Staff Assignment – Supply Procurement | |
|--|--------------------------------|
| Lead Consultant | Howard Solganick |
| Consultant(s) | Donna Mullinax /Drew McCrossan |

Exhibit IV-3 Supply Procurement Staff Assignment

Work Tasks:*Plan Tasks*

- Revise Supply Procurement tasks and initial data requests based on feedback from the DPS Staff review of the proposal and the structured Staff input process.
- Review initial data request responses related to the Company's supply procurement process. Identify missing data, evaluate quality and completeness, and engage management as needed.
- Develop initial high-level interviews to clarify and verify understanding of the supply procurement process in NGrid and NGrid plc's business units.
- Develop the Supply Procurement task report outline and the next level of interview guides and data requests.

Collect & Analyze Data

- Evaluate the organization structure and management roles, responsibilities and accountability for the supply procurement process. Identify the effectiveness of the communication and feedback processes involved.
- Identify and evaluate the adequacy and effectiveness of NGrid's decision-making process, and the organizational location of key decision-makers and the criteria used to reach them.
- Review and evaluate NGrid's strategic plan, including goals and objectives. Examine the process and procedures used to communicate, execute, and control wholesale market transactions and supply operation practices. Determine if proper counterparty, execution platform, and market contacts are identified and effectively used to provide appropriate transaction options and information feedback. Evaluate the extent to which the Company protects the short- and long-term interests of its retail customers.
- Review the supply procurement process, strategies, policies, processes, and methods. Assess consistency with Company goals and objectives, risk management, and other internal and external requirements, including customer benefits and New York Commission regulations. Review modeling, related calculations, and key drivers used by NGrid to identify and evaluate documentation and performance of the required inputs.
- Determine the adequacy and timeliness of the supply procurement process in identifying, prioritizing, and developing alternative strategies in response to

emerging market issues and regulatory requirement changes within the current process.

- Understand NGrid's process for determining stakeholders' objectives for the mass market default supply option. Determine and review the management of the mass market default supply arrangements. Examine alternatives considered by NGrid and the decision process. Understand the impact of the underlying goals and objectives.
- Review back-, mid-, and front-office organization, processes, and procedures. Determine if transactions are properly captured, audited, and reported, and if any changes are identified, processed, and reported. Evaluate documentation and performance including ability to respond to data requests and meet internal and external requirements in a timely and efficient manner.
- Evaluate the effectiveness and integration of risk management strategies and practices in the supply procurement process.
- Coordinate with the Corporate Mission, Objectives, Goals and Planning; Load Forecasting; System Planning; and Performance and Results Management audit teams to determine the extent of Company coordination and consistency of assumptions, strategies, and execution.
- Determine how the Company and the supply procurement process management team assess the success of the supply procurement process. Review the KPIs for the supply procurement process.
- Review how the Company benchmarks supply procurement practices and results with industry and other New York State utility's performance.
- Compare the overall supply procurement process to leading practices.
- Complete the analysis of the supply procurement process, including cost implications, where possible.

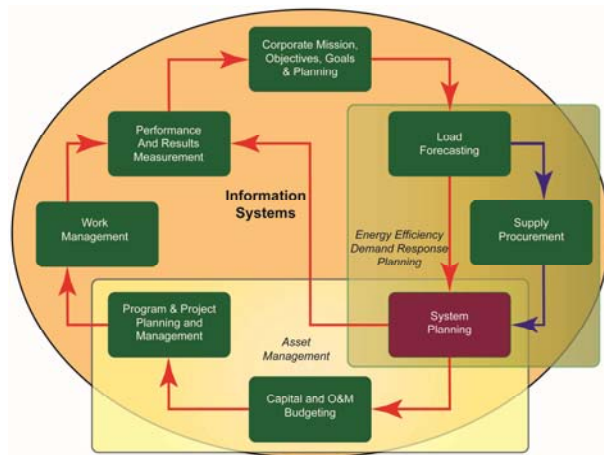
Complete Task Report

- Verify facts.
- Prepare the Supply Procurement Task Report.
- Submit the Supply Procurement Task Report for RCG quality review.

Element No. 4: System Planning

System planning is the cornerstone of the utility's effort to ensure adequate, safe, and reliable gas energy delivery. It must be consistent with the Company's strategic plan and will impact customer satisfaction. The resulting planning efforts drive a utility's capital and O&M budgeting process. Specifically, the system planning process will have the following impacts:

- Plans NGrid's capital construction program which:
 - Minimizes equipment failures and leaks of all types,
 - Addresses the replacement of aging infrastructure, particularly cast iron and bare steel mains and the use of protection on metal pipe,
 - Ensures adequate gas supply to new and existing customers, and
 - Minimizes the need for excessive corrective maintenance actions;
- Supports the development of a formal asset management strategy and plan;
- Encourages a proactive maintenance plan to optimize O&M spending;
- Minimizes overlapping spending caused by uncoordinated capital and maintenance efforts; and
- Permits management to determine the most cost-effective means for executing its capital plan.



Benefits:

RCG has seen a number of companies that have chosen to outsource this critical function -- with less than desirable results. RCG will closely evaluate the NGrid's approach to system planning. Our principals have recommended significant expense savings in

several companies by adjusting the overall Plan-Design-Build (PDB) process to be more effective. Examples of savings and benefits sources include:

- Increasing the use of design standards - reduces engineering design time, allows supply chain savings through standard equipment designs;
- Enforcing the use of standard materials and equipment - reduces equipment costs, installation errors, and maintenance expenses;
- Involving supply chain earlier in the PDB process for long lead time items - lowers first cost of equipment;
- Cost reduction, through cost sharing by early identification of projects and coordinating with municipalities;
- Tightening the project selection to select the most cost efficient projects - gains the greatest value for the dollars invested; and
- Combining projects along the same route - minimizes construction preparation costs and duplication, achieves shorter installation times.

Commission Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG acknowledges the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element's chapter in the final report.

- *Review and assess infrastructure planning and engineering functions.*
- *Evaluate priorities, guidance and other instructions for evaluations, tradeoffs and decision making, including an asset condition and management process and linking asset management decisions (e.g., predictive failure analyses) to improve reliability and performance.*
- *Assess the development of system forecasts and infrastructure requirements.*
- *Address the extent and manner in which consideration is made of demand response initiatives in the planning process.*
- *Review consideration of infrastructure factors and energy efficiency initiatives, in the planning process.*
- *Determine processes and requirements for identifying, developing, and justifying the need for major capital projects (e.g., gas lines). Assess the process and criteria for making decisions regarding replace versus repair, including how each overall construction program planning process is affected.*
- *Review the planning processes for: (a) reliability versus new business tradeoffs, and (b) regional versus central planning dynamics.*

- Determine the extent to which benefit/cost analyses and risk analyses are considered in the decision-making process, including an assessment of the specific types of benefit/cost and risk analysis methodologies.
- Review the optimization of trade-offs with respect to the replacement of older technology with newer technology and the resulting impact on the useful lives and depreciation assumptions of the existing infrastructure, cash flow and system reliability.
- Evaluate whether the distribution systems are designed to ensure optimal results in the areas of delivery, safety and upgrades.
 - Assess emphasis given to hardening, especially as it relates to coastal conditions
 - Risk evaluation
- Review how the dynamic nature of the current natural gas markets are factored into planning, including new business and customer growth opportunities such as natural gas vehicles and the required conversion in New York City of buildings using 4 and 6 oil to less polluting fuels and economic conversions from oil to gas.
- Assess the readiness, capability and possible impediments to address gas service expansion.
 - Assess the companies' economic development programs, i.e., outreach to communities to explain the costs and benefits of gas system expansion.

Staffing Assignment:

| Audit Area Staff Assignment – System Planning | |
|---|---|
| Lead Consultant | Bob Grant |
| Consultant(s) | Charlie Fijnvandraat/ Chip Wright/ Ed Titus |

Exhibit IV-4 System Planning Staff Assignment

Work Tasks:

Plan Tasks

- Revise System Planning tasks and initial data requests based on feedback from the DPS Staff review of the proposal and the structured Staff input process.

- Review initial data request responses related to system planning. Identify missing data, evaluate quality and completeness, and engage management as needed.
- Develop initial high-level interviews to clarify and verify understanding of the system planning process within NGrid.
- Develop a System Planning task report outline, and the next level of interview guides and data requests.

Collect & Analyze Data

- Assess the system planning process and how it integrates planning, forecasting, engineering, operations, standards, construction, and supply chain.
- Assess the readiness, capability, and possible impediments to address gas service expansion.
 - a. Assess the companies' economic development programs, i.e., outreach to communities to explain the costs and benefits of gas system expansion.
- Assess the development of system forecasts and infrastructure requirements.
- Address the extent and manner in which consideration is made of demand response initiatives in the planning process.
- Review consideration of infrastructure factors and energy efficiency initiatives, in the planning process.
- Identify the key drivers (e.g., reliability, safety, operability, and new business) to identifying new capital projects and the selection process.
- Determine the adequacy of the system planning process for identifying, prioritizing, and developing corrective projects for chronic system problem areas.
- Evaluate the tools and models used to project gas main replacement.
- Determine System Planning's impact on maintenance planning in terms of programs and spending.
- Assess infrastructure planning and engineering functions.

- Evaluate priorities, guidance, and other instructions for evaluations, tradeoffs and decision-making, including an asset condition and management process and linking asset management decisions to improve reliability and performance.
- Determine processes and requirements for identifying, developing, and justifying the need for major capital projects (e.g., main replacement). Assess the process and criteria for making decisions regarding replace-versus-repair, including how each overall construction program planning process is affected.
- Review the planning processes for: (a) reliability versus new business tradeoffs, and (b) regional versus central planning dynamics.
- Review the optimization of trade-offs with respect to the replacement of older technology with newer technology and the resulting impact on the useful lives and depreciation assumptions of the existing infrastructure, cash flow, and system reliability.
- Determine the extent to which benefit/cost analyses and risk analyses are considered in the decision-making process, including an assessment of the specific types of benefit/cost and risk analysis methodologies.
- Evaluate whether the transmission pipelines and distribution systems are designed to ensure optimal results in the areas of delivery, safety, and upgrades.
 - a. Assess emphasis given to hardening, especially as it relates to coastal conditions
 - b. Risk evaluation
- Understand how risk management is formally integrated in the process.
- Review the project ranking tools and processes for reasonableness.
- Determine how NGrid allocates the capital budget between gas transmission and distribution.
- Review NGrid's use of standards for equipment and system design. Where possible, determine the impact of replacing old technology on spending, staffing, and reliability.
- Determine where and who sets the annual budget within NGrid's multi-tiered organization.
- Assess the assumptions and accuracy of the planning models used.

- Review how the dynamic nature of the current natural gas markets is factored into planning, including new business and customer growth opportunities such as natural gas vehicles and the required conversion in New York City of buildings using 4 and 6 oil to less polluting fuels and economic conversions from oil to gas.
- Determine if demand response, energy efficiency, smart grid, and alternative resources are adequately incorporated into the system planning process.
- Review the asset management strategy and supporting organization to ensure safe and reliable energy delivery systems.
- Identify where the ultimate decisions are made on the system planning and the criteria used to reach them.
- Determine the frequency of the validation process.
- Coordinate with the Corporate Mission, Objectives, Goals, and Planning; Load Forecasting; Supply Procurement; Capital and O&M Budgeting; and Performance and Results Management audit teams to determine the extent of Company coordination and consistency of assumptions, strategies, and execution.
- Determine how storage and main capacity will be impacted with the dynamic nature of the current natural gas markets evolving and opening expanded uses for natural gas.
- Determine how the Company and system planning management assesses the success of the system planning process. Review the KPIs for system planning.
- Review how the Company benchmarks its system planning practices and results with industry and other New York State gas utility performance.
- Compare the overall system planning process to leading practices.
- Complete analysis of the system planning process, including cost implications, where possible.

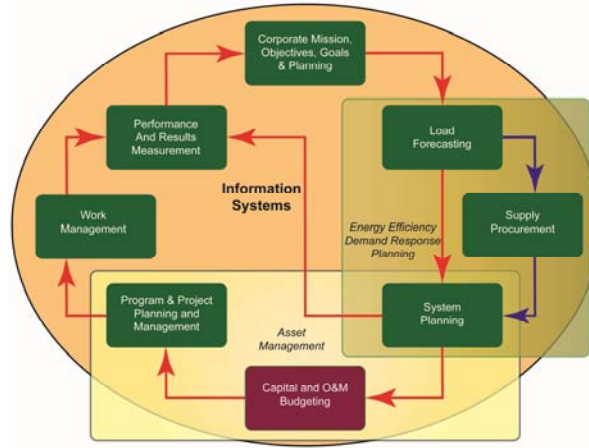
Complete Task Report

- Verify facts.
- Prepare the System Planning Task Report
- Submit the System Planning Task Report for RCG quality review

Element No. 5: Capital and O&M Budgeting

The dynamic environment in which utilities operate and the need to allocate scarce resources to areas of highest value make an effective budgeting process essential. A sound budgeting process provides the framework for defining the company's activities. The planning and budgeting process is complex, involves a number of people, and often extends over several months. Successful capital and O&M budgeting have the following traits:

- A clear and defined budgeting process with a formal timetable and criteria;
- Built-in bottom-up input and top-down limits;
- Formal time-based targets;
- A clear understanding of the budget by managers and recognition that they will be judged on budget performance;
- A formal performance reporting and monitoring mechanism;
- Regular executive and Board-level visibility of capital budgets;
- Clearly defined accountability for delivering results relative to budgets;
- Formal capital committee oversight and regular evaluation of the rate of spending, and budget adjustments for unforeseen events;
- A system planning process tied to capital budgets, as well as expected new business growth predicted by load forecasting;
- Clearly articulated budgets reflecting the O&M needs of the gas T&D systems, generally expressed in formal programs (repair, cathodic protection, gas leak survey, etc.);
- Integrated capital and O&M budgets that are based on business needs and not focused on labor utilization; and
- Indirect linkage to work management systems and processes to provide detailed information on spending.



Benefits:

RCG will closely evaluate the Company's approach to capital and O&M budgeting. Significant savings and benefits can be obtained by ensuring a sound budgeting process is in place. Examples of savings and benefits sources include:

- Priorities are developed involving both a top-down and a bottom-up approach that supports buy-in from all levels;
- A good budget development process focuses on sound and documented priorities to ensure that ratepayer moneys are wisely and prudently spent;
- Clear communications throughout the organization of priorities during the development and implementation of the capital and O&M budgets increases the likelihood that appropriate priorities are established and achieved;
- Flexibility exists to allow for deviations from the budget if priorities change, thus avoiding unnecessary spending to meet the numbers;
- The capital budget review process can act as a check and balance bringing to light specific issues with capital projects and more systemic issues with the project planning and execution processes; and
- Accountability for and understanding of deviations from approved budgets.

A potentially significant impact to capital budgeting is the development of inaccurate capital project budgets. An issue with accurate capital project budgeting was reported in the 2009 Comprehensive Management Audit of Niagara Mohawk Power Corporation D/B/A National Grid Electric Business.

Commission Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG embraces the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element's chapter in the final report.

- *Examine and assess the roles of the Board of Directors, executive and senior management in goal setting, preparation, and oversight of the capital and O&M budgets.*
- *Review the processes that govern Board involvement in the capital and O&M budgets and identify the level of budget detail the Board sees and what their responsibilities are with regard to the budgets.*
- *Evaluate the construction/capital priority setting process.*
- *Evaluate the maintenance priority setting process across all areas including vegetation management.*
- *Review the incremental O&M expenses associated with new construction that are factored into the budgeting process.*
- *Study the effects of allowed revenues/rates and financing opportunities or constraints on budget levels and priorities.*
- *Identify the relationships among planned/budgeted expenditures, rate case proposed expenditures, and actual expenditures.*
- *Review and assess the capital budgeting process, including project authorization, project appropriation, increase/decrease of authorization/appropriation, capital budget status reporting, validation in advance of appropriation, funding controls, and other elements of the capital budgeting process.*
- *Examine and assess the budgeting guidelines, practices and procedures, including "zero-based" and other alternative methods.*
- *Identify and assess the roles of and relationships between regional and centralized planning and budgeting functions.*
- *Examine the methodology for prioritizing and determining which capital projects get approved, including an examination of modeling software for capital and O&M budgeting.*
- *Evaluate the management and control of capital budgeting processes, including the methodologies used to control and manage program and project capital costs in the near- and long-term; the annual process for reviewing and determining whether total capital and O&M planned expenditures are adequate; cost control systems and processes from both a top-down and bottom-up perspective; controls to ensure that increases/decreases to the construction budget/expenditures are justified and appropriately approved.*

- Evaluate the bottom-up and top-down processes for developing the budgets for capital/construction classifications and categories.
- Evaluate how the capital and O&M planned expenditures, both near- and long-term, maximize new business and new customer opportunities, including the requests from potential new customers for natural gas service.

Staffing Assignment:

| Audit Area Staff Assignment – Capital and O&M Budgeting | |
|---|--|
| Lead Consultant | Donna Mullinax |
| Consultant(s) | Bob Grant, Chip Wright, Drew McCrossan, Charlie Fijnvandraat |

Exhibit IV-5 Capital and O&M Budget Staff Assignment

Work Tasks:

Plan Tasks

- Review Capital and O&M Budgeting tasks and initial data requests based on feedback from DPS Staff review of the proposal and the structured Staff input process.
- Review responses to the initial data requests related to capital and O&M budgeting. Identify missing data, evaluate quality and completeness, and engage management as needed.
- Develop initial high-level interviews to clarify and verify understanding of the capital and O&M budgeting processes in NGrid.
- Develop the capital and O&M budgeting task report outline, interview guides, and data requests.

Collect & Analyze Data

- Determine if the Company's approaches to developing and controlling budgets are effective.
- Evaluate the board of directors' roles and responsibilities with respect to goal setting, preparation, and oversight of the capital and O&M budgeting processes.

- Identify the processes that govern the board of director's involvement in capital and O&M budgets and whether they are adhered to.
- Determine if the board of directors is exposed to the right level of detail to make informed decisions on budgets.
- Understand where both the initial and final decisions on budgets are made within the NGrid organization.
- Evaluate the budgeting guidelines, practices, and procedures (including "zero-based" and other alternative methods).
- Understand the roles of and relationship between regional and centralized planning and budget functions.
- Understand the use of shared services in the development of capital and O&M budgeting.
- Understand the method used to balance mandated projects with asset condition and system reliability projects.
- Review the methodology for prioritizing and determining which capital projects get approved.
- Examine the modeling software used for capital and O&M budgeting.
- Evaluate the construction/capital priority-setting process and its reasonableness.
- Evaluate the maintenance priority setting process across all areas including vegetation management.
- Understand how allowed revenues/rates and financing opportunities or constraints affect budget levels and priorities.
- Determine if rate equity across the three New York territories is considered during the budget process.
- Determine the relationship among planned/budgeted expenditures, rate case proposed expenditures, and actual expenditures.
- Determine how the capital and O&M planned expenditures, both near- and long-term, maximize new business and new customer opportunities, including the requests from potential new customers for natural gas service.
- Determine how incremental O&M expenses associated with new construction is factored into the budgeting process.

- Review the capital budgeting process (including project authorization, project appropriation, increase/decrease of authorization/appropriation, capital budget status reporting, and validation in advance of appropriation, funding controls, and other elements of the capital budgeting process).
- Evaluate the adequacy of management oversight and control of budgets over the course of a year.
- Understand the annual process for reviewing and determining whether total capital and O&M planned expenditures are adequate.
- Determine whether cost control systems and processes flow from both a top-down and bottom-up perspective.
- Evaluate the bottom-up and top-down processes used for developing the budgets for capital/construction classifications and categories.
- Review the controls that ensure that increases/decreases to the construction budget/expenditures are justified and appropriately approved.
- Understand the methodologies used by management to control and manage program and project capital costs in the near- and the long-term.
- Identify adjustments to annual maintenance program budgets and the reasons.
- Determine the annual variances in budgets and the associated reasons.
- Understand how management deals with multi-year project run rates which exceed annual budget targets during the life of the project.
- Determine how management balances capital and O&M budgets when one deviates widely from its plan.
- Coordinate with the Corporate Mission, Objectives, Goals, and Planning; Supply Procurement; System Planning; Program and Project Planning and Management; and Results Management audit teams to determine the extent of Company coordination and consistency of assumptions, strategies, and execution.
- Determine how the Company and its capital and O&M budgeting management assess the success of the capital and O&M budgeting process. Review the KPIs for capital and O&M budgeting.
- Review how the Company benchmarks the capital and O&M budgeting practices and results with industry and other New York State utility performance.
- Compare the overall capital and O&M budgeting process to leading practices.

- Complete an analysis of capital and O&M budgeting process, including cost implications, where possible.

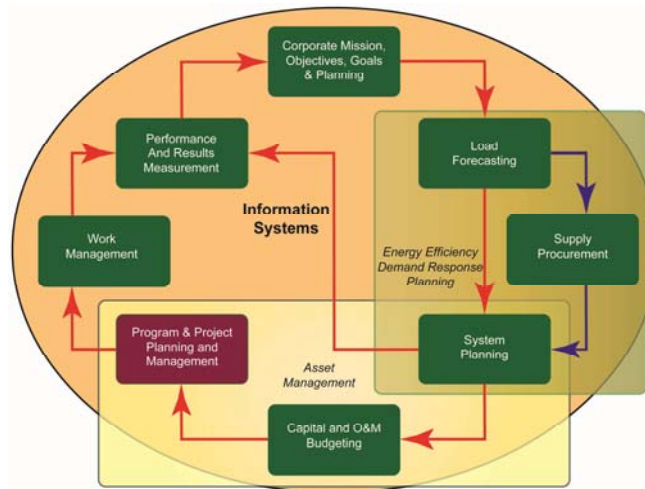
Complete Task Report

- Verify facts.
- Prepare the Capital and O&M Budgeting Task Report.
- Submit the Capital and O&M Budgeting Task Report for RCG quality review.

Element No. 6: Program and Project Planning and Management

Program and project planning and management are of interest to executive management and regulators for many reasons, including:

- The potential adverse effects of poor project cost and schedule performance;
- The possibility of management being poorly informed and caught off guard regarding project issues and events;
- Problems arising from technical and managerial limitations or insufficient staff resources for successful project completion;
- Pressure from the public or politics relative to project selection; and
- The risks arising in general from the litigious environment.



River Consulting Group

Proposal to Conduct a Utility Management Audit
(Case 13-G-0009)

Program Planning and Management has two distinct missions: strategic and tactical as shown in Exhibit IV-6. **The strategic role** is essential in ensuring that strategic goals and initiatives promulgated by senior management are translated into discrete, tangible projects, and that final deliverables are in line with management's strategic vision and objectives. As projects progress, the program planning and management function continues to monitor compliance with strategic objectives, including mid-course corrections that may arise from shifts in strategic focus or tactical drift.

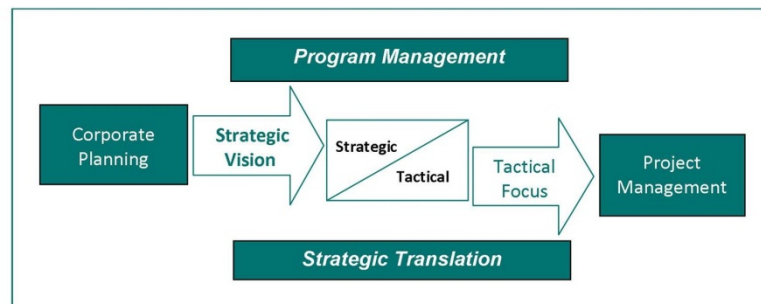


Exhibit IV-6 Dual Program Management Missions

The tactical program management mission aligns budgetary and resource allocation decisions with management's strategic objectives and values. A key aspect of this is the development of realistic budgets and schedules for capital projects to maintain the integrity and safety of existing infrastructure, and to expand system capacity and capabilities. These budgets and schedules become the basis for planning and coordination of requisite engineering, procurement, contracting, quality control, and construction activities.

Program management also provides a common framework of tools, policies and procedures, and services that help to ensure that various teams assigned to a project or projects are effectively working together. Day-to-day responsibility and decision-making for projects remain with project managers within the overall program management framework.

Project Planning and Management focuses on the specific requirements needed to successfully complete individual projects within the scope, schedule, and resources allocated through the program planning process. Exhibit IV-7 shows the critical components of project planning. The initial step in the project planning task is to define and document the project scope and requirements for an individual project. Assumptions and resource allocations adopted during the program-planning phase are reviewed and revised as necessary. The final project scope, schedule, and budget are documented prior to the initiation of an individual project.



Exhibit IV-7 Tactical Project Approach

If a project is to be managed to its completion within the planned scope, schedule, and resource constraints, project management must involve several key activities:

- **Scope Management** - Throughout the duration of a project, scope management is critical to manage both cost and delivery.
- **Budget Tracking and Forecasting** - Project expenditures are tracked against budgeted amounts, and updated forecasts are compiled using standardized templates and formats. Significant variances may require revisiting the program planning process to resolve issues such as resource contention between projects.
- **Issue Tracking and Resolution** - As project issues inevitably arise an Issue Log must be maintained to track open issues and associated action plans through resolution during the course of a project.
- **Risk Management** - Project managers should proactively identify, monitor, and evaluate project issues and risks, and develop preventative and/or mitigating measures, as appropriate. A Risk Register should be maintained.
- **Reporting & Compliance** - Routine project reporting requirements typically include the following information, which is provided on a frequent and regular basis:
 - Status reports, with master program schedule reporting and maintenance;
 - Milestone summaries;
 - Burn rate/hours expended by company and contractor resources;
 - Project risk and risk status reports;
 - Late tasks and possible remediation plans;

- Pending or new change requests; and
 - A document repository and collaboration tool is useful to provide a document-management.
- **Communications Management** - An effective communications framework is key to the success of any project. The importance of a communications framework increases in proportion to the scale and complexity of the project. A formal communication plan should be developed for each project and be circulated to executive managers, general managers, section heads, and project managers that will be impacted by the project.

Benefits:

Program and project planning and management (P&PPM) provide significant benefits to senior management, customers, and other key stakeholders, such as shareholders and regulators. P&PPM address both capital projects and O&M programs (main and regulator inspection and replacement, DOT pipeline safety, etc.) These benefits include:

- **Integrated Strategic View:** P&PPM is designed to take a larger and more comprehensive view of the organization's activities to ensure that the multiplicity of capital projects and O&M programs are working across an organization toward common strategic goals and objectives while avoiding conflict and duplication of effort.
- **Consistency:** In many projects, the project leader must take time at the beginning to outline the process, rules, and methods of communication. With a well-developed P&PPM infrastructure, these are defined for all projects in advance and are consistent from project to project. This means that employees can move right into team-forming and need not spend initial meetings discussing how the process is going to work. The end result is that there are fewer communication issues. This also produces cost savings and reduced project risks by identifying problems earlier and solving them quicker, and often at a lower cost.
- **Cost Savings:** The program management office evaluates all new requests and groups them so that efficiencies of scale can be achieved when allocating limited budgetary and staffing resources. Strong project management fundamentals ensure that projects stay on track and that variances are addressed quickly and economically. The program management office can identify projects on common lines and arrange to perform them together to minimize service disruption and front-end project setup costs.
- **Risk Mitigation:** Proactive risk management anticipates potential project risks so they may be avoided entirely or mitigated by minimizing consequences early.

- **Stakeholder Value:** Through effective P&PPM approaches, senior management have more cohesive information to provide to key stakeholders about the Company's general processes, growth, customer service, strategic initiatives, compliance, and other relevant facts requested by stakeholders. This focus on communication ensures that management stays informed of key issues and events.

Commission Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG embraces the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element's chapter in the final report.

- *Study the conversion process of capital and O&M plans and budgets into specific programs and projects.*
- *Evaluate the emphasis placed on safety concerns when planning replacement projects.*
 - *Review and assess how emphasis on safety concerns has changed since the gas events in San Bruno, California and Allentown, Pennsylvania.*
 - *Evaluate the Companies' process and plans for predisaster hardening.*
 - *Review the Companies' plans for damage mitigation.*
- *Review the process for prioritization and approvals over various time horizons.*
- *Assess the program and project planning, design, estimating, engineering, costing, scheduling and execution processes.*
- *Evaluate the right of way vegetation management program on a system wide basis.*
- *Evaluate the planning and management of materials, equipment, transportation, and other logistical support for programs and projects.*
- *Review the analysis and decision-making process for tradeoffs to optimize the use of in-house workforce versus contractor labor.*
- *Identify and assess contractor and engineering bidding practices.*
- *Determine how effectively National Grid Gas monitors planning and management of construction contractor projects, including accountability, goals, objectives, and performance measurement.*
- *Assess the quality assurance and quality control at the program and project level.*
- *Evaluate the methodology for tracking costs, work units and work quality for specific programs and projects.*
- *Identify the typical variances between original budgeted and actual capital expenditures and work units.*

- *Determine how variances are tracked and minimized in order to improve the cost control, efficiency/productivity and work quality.*
- *Evaluate storm planning and restoration program planning. Specifically review the Companies' response to recent storms, such as Irene and Sandy.*

Staffing Assignment:

| Audit Area Staff Assignment – Program & Project Planning and Management | |
|---|---|
| Lead Consultant | Tom Hurley |
| Consultant(s) | Donna Mullinax, Chip Wright, Charlie Fijnvandraat, Ed Titus |

Exhibit IV-8 Program & Project Planning and Management Staff Assignment

Work Tasks:

RCG will develop a profile of planned, in-progress, and recently completed construction projects in the Company's service area. RCG will then select a representative sample of these projects for detailed review of the Company's program and project management performance, including:

Plan Tasks

- Revise P&PPM tasks and initial data requests based on feedback from the DPS Staff review of the proposal and the structured Staff input process.
- Review initial data request responses related to the P&PPM process. Identify missing data, evaluate quality and completeness, and engage management as needed.
- Develop initial high-level interviews to clarify and verify understanding of the P&PPM process in NGrid.
- Develop the P&PPM process task report outline, and the next level of interview guides and data requests.
- Coordinate with the Corporate Mission, and Capital and O&M Budgeting audit teams to determine process coordination handoffs, consistency of assumptions, and areas of focus and execution.

Collect & Analyze Data

- Review how capital and O&M plans and budgets convert to specific programs and projects.
- In light of the gas events in San Bruno, California and Allentown, Pennsylvania evaluate if management made any adjustments to program and project planning, management, and policies.
- Evaluate storm planning and restoration program planning. Specifically review NGrid Gas's response to recent storms, such as Irene and Sandy.
- Assess how programs and projects are prioritized and approved over various time horizons.
- Define and review program and project planning, design, estimating, engineering, costing, scheduling, and execution.
- Evaluate the right of way vegetation management program on a system wide basis.
- Evaluate how materials and equipment, transportation, and other logistical support are planned and managed for programs and projects.
- Evaluate how projects for the same infrastructure are coordinated.
- Determine if there is a formal and consistent process for coordinating with state and municipal agencies on planned repairs that will impact streets, walkways, etc., including leveraging of any cost sharing opportunities where possible.
- Determine if there is a formal training program or certification in place for project managers.
- Review project management training materials for completeness.
- Determine how tradeoffs are analyzed and decisions made in order to optimize the use of in-house workforce versus contractor labor.
- Examine contractor and engineering bidding processes.
- Evaluate how construction contractor projects are planned and managed.
- Examine quality assurance and quality control at the program and project level.
- Examine contractor management, and project program management, including accountability, goals, objectives, and performance measurement.

- Determine if the Company uses a formal Program Management Office (PMO) for program management or an ad hoc approach.
- Assess whether NGrid developed a standard program and project management infrastructure, including standardized policies and procedures, budget and reporting templates, and project management and collaboration tools.
- Determine if there is one project owner or if ownership shifts as the project progresses.
- Examine methodologies for tracking costs, work units, and work quality for specific programs and projects.
- Determine if the typical variances among original, budgeted, and actual capital expenditures and work units are justified.
- Assess how the Company tracks and minimizes variances in order to improve cost control, efficiency, productivity, and work quality.
- Determine how issues are managed from a knowledge management perspective and incorporated into project manager training and future learning tools and project designs. This is particularly critical with main extensions and the knowledge of soil conditions.
- Assess if there is a formal project review committee.
- Determine how NGrid and P&PPM management assess the success of the P&PPM process. Review the KPIs for P&PPM.
- Review how NGrid benchmarks, P&PPM practices, and results with industry and other New York State utility performance.
- Coordinate with the Corporate Mission Objectives, Goals and Planning; Capital and O&M Budgeting; Work Force Management; and Performance and Results Management audit teams to determine the extent of Company coordination and consistency of assumptions, strategies, and execution. Complete analysis of P&PPM, including cost implications where possible.
- Compare the overall P&PPM process to leading practices.
- Complete analysis of P&PPM, including cost implications, where possible.

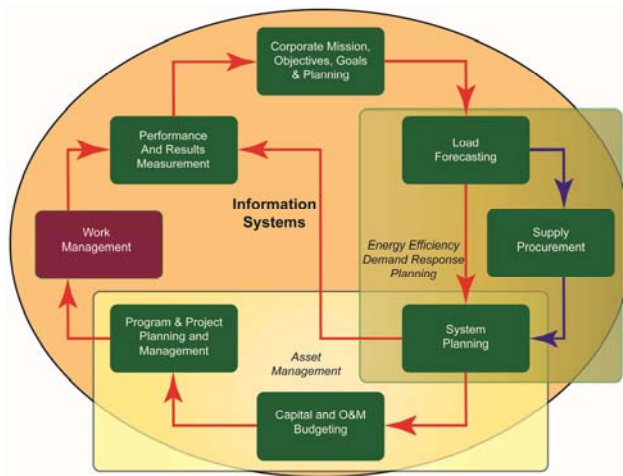
Complete Task Report

- Verify facts.

- Prepare the P&PPM Task Report.
- Submit the P&PPM Task Report for RCG quality review.

Element No. 7: Work Management

Most utility companies aspire to achieve operational excellence in such areas as system reliability and customer service, but many have fallen short of identifying and implementing industry leading practices in the management of workers and work processes required to realize those goals. Excellence in work management requires well-planned, properly scheduled, and effectively executed work tasks using the proper resources and skill sets, and a formal means to monitor progress.



Work properly prepared and managed in this fashion enhances operational efficiency and is accomplished more effectively with higher quality, lower cost, greater safety, and greater job satisfaction than work performed without proper preparation. Successful application of these leading practices in work management ultimately leads to better system reliability and customer service, and cost-effective utilization of resources.

Benefits:

An organization trending toward excellence is one that has transitioned from a reactive to a proactive approach to assigning and executing work. It has effectively integrated planning, coordination, and scheduling into day-to-day work activities. It has developed a culture of quality, continuous improvement, and pride in its performance.

Specifically, the Work Management processes will:

- Assure that work required for long-term system performance is completed on time and according to schedule;

- Improve the efficiency and effectiveness of human resources thereby reducing overall labor costs;
- Track rework, failures, repair history, and corrective actions; productivity, quality, schedule adherence; and identify areas for performance improvement and potential additional training requirements;
- Provide an annual review of work staffing and skills requirements to assure that sufficient human resources (with the proper skills) are available for day-to-day operations and for emergencies to meet customer service, service quality, safety, and reliability standards;
- Integrate the annual work plan with emergent work, and with monthly, weekly, and daily work schedules, enabling determination of the optimum work force for each work area, and coordination of capital jobs with maintenance jobs to reduce duplicative work;
- Promote monthly work schedules that are resource-constrained to identify the tasks that cannot be accomplished with in-house resources, including a rational decision methodology for determining tasks that will be outsourced, contracted, or deferred, enabling continued high utilization and efficiency of the in-house work force;
- Use an aggressive backlog management process with a priority system that differentiates urgent from important work tasks, assuring that emergency work does not distract from the longer-term programs that improve overall system performance;
- Continuously improve work force efficiency, effectiveness, and safety by upgrading tools and methods with new technology;
- Promote a robust work management information system that supports leading practice work processes, and proactively plans work, manages backlogs, and monitors performance;
- Use a work management information system that creates schedules, develops resource requirements, and produces metrics to track key performance areas, such as schedule attainment, planned versus unplanned work, labor productivity, actual costs versus budgets, and non-productive time caused by work delays;
- Use a work management plan that includes full-time and part-time employee crewing and contractor labor/crewing, resulting in staffing flexibility during peak and lean work periods; supplement staffing during emergencies through mutual aid.

- Ensure crews are out of the yard in a timely fashion with all the materials required for the day's work and have sufficient work to keep them in the field for the day -- this can produce one to two additional hours of productive work;
- Ensure adequate field supervision to support safety and productivity goals;
- Use the work management system to manage on-site contractors and track outsourced work, allowing improved oversight, supervision of contractors, and schedule adherence; and
- Use data from the work management system to benchmark against other utility companies.

Commission Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG embraces the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element's chapter in the final report.

- *Review the planning, conversion and execution of programs and projects into short-term and day-to-day work schedules.*
- *Study and assess work management systems that are used to schedule and manage field crews, including transportation, equipment, and materials.*
- *Identify the roles and responsibilities of project managers, supervisors, and inspectors.*
- *Assess quality assurance and quality control.*
- *Evaluate the management of program and project schedules on a day-to-day basis as well as the management of employee availability, utilization, efficiency, productivity and effectiveness.*
 - *Assess if staffing levels are appropriate to complete the planned work on time and within approved budget parameters.*
- *Review the processes by which information about rework, failures, repair history, etc., becomes corrective actions or is translated into infrastructure aging analysis, and in making repair versus replacement decisions.*
- *Assess the feedback of work management systems into performance improvement opportunities.*
- *Review and assess the planned mix of in-house personnel vs. contractor utilization.*

Staffing Assignment:

| Audit Area Staff Assignment – Work Management | |
|---|--------------------------------|
| Lead Consultant | Tom Hurley |
| Consultant(s) | Charlie Fijnvandraat, Ed Titus |

Exhibit IV-8 Work Management Staff Assignment**Work Tasks:***Plan Tasks*

- Revise Work Management tasks and initial data requests based on feedback from the DPS Staff review of the proposal and the structured Staff input process.
- Review responses to the initial data requests related to work force management. Identify missing data, evaluate quality and completeness, and engage management as needed.
- Develop initial high-level interviews to clarify and verify understanding of the work force management process within NGrid.
- Develop the Work Management task report outline, and the next level of interview guides and data requests.

Collect & Analyze Data

- Assess work force management processes and how they integrate with system planning, asset management, maintenance planning, construction planning, customer service, and supply chain.
- Evaluate the use of highly visible metrics to track progress toward organization goals, and the extent to which goals include such items as safety, quality, budget, schedule adherence, and backlog.
- Examine how planning and execution of programs and projects are converted into short-term and day-to-day work planning and management.
- Determine if annual workload forecasts identify planned tasks and resources required.

- Determine how work force management systems are used to schedule and manage field crews, including transportation, equipment, and materials.
- Review the roles and responsibilities of project managers, supervisors, and inspectors.
- Determine how well work force management principles are applied in the field.
- Determine how NGrid measures and manages employee availability, utilization, efficiency, productivity, safety, and effectiveness.
- Evaluate how work program and project schedules are managed on a day-to-day basis.
- Evaluate crew activity and supervisory performance at a representative sample of job sites, storerooms, loading docks, and yards.
- Evaluate the extent to which backlog management processes incorporate a priority system that differentiates among urgent (emergency) work, important (corrective replacement and upgrade) work, and routine (PM/PdM) tasks.
- Determine if there is a logical linkage among asset management, long-range work planning, capital vs. O&M work schedules, budget development, and day-to-day work schedules.
- Determine if information about rework, failures, and repair history gets translated into corrective actions, infrastructure aging analysis, and repair-versus-replace decisions.
- Determine if workforce and work management systems feed back into performance improvement opportunities. Evaluate how supervisors use this information in managing crews.
- Analyze staffing trends for the past five years by functional area and compare to work load and backlogged work.
- Evaluate how work quality is maintained as the supervisory span of control increases.
- Analyze workforce planning and management information system tools.
- Assess key work backlogs by functional area.
- Review the work prioritization tools and processes for reasonableness.

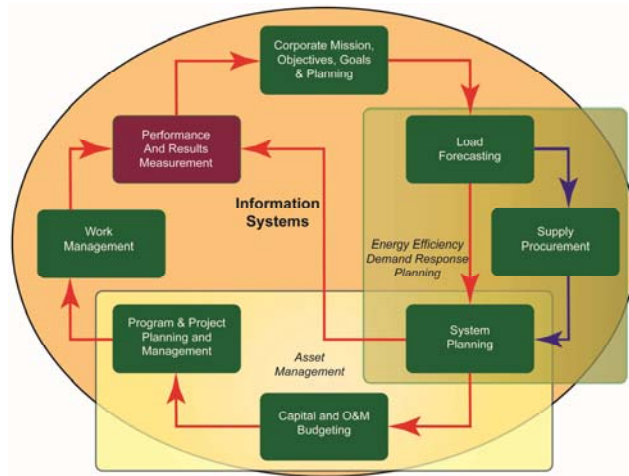
- Coordinate with the Corporate Mission Objectives, Goals and Planning; Program and Project Planning and Management; and Performance and Results Management audit teams to determine the extent of Company coordination and consistency of assumptions, strategies, and execution.
- Determine how NGrid and work force managers assess the success of the work force management process. Review the KPI for work force management.
- Evaluate the information gleaned from this audit work task to determine how this audit element is enhancing or detracting from the effective operation of the construction feedback loop.
- Review how the Company benchmarks its work force management practices and results with industry and other New York State utility performance.
- Compare the overall work management process to leading practices.
- Complete an analysis of work management, including cost implications, where possible.

Complete Task Report

- Verify facts.
- Prepare the Work Management Task Report.
- Submit the Work Management Task Report for RCG quality review.

Element No. 8: Performance and Results Measurement

Performance and results management is an ongoing process of identifying, measuring and achieving targeted strategic and operational performance, measuring outcomes and the efficiencies of its programs, services and activities and using that information to identify improvement opportunities.



This structured approach includes critical activities meant to evaluate gaps in current operational performance, define key objectives and targeted improvement opportunities, identify and implement improvement initiatives, and institutionalize a formal framework for continuous improvement. This process, as illustrated in Exhibit IV-9, answers the four key questions.

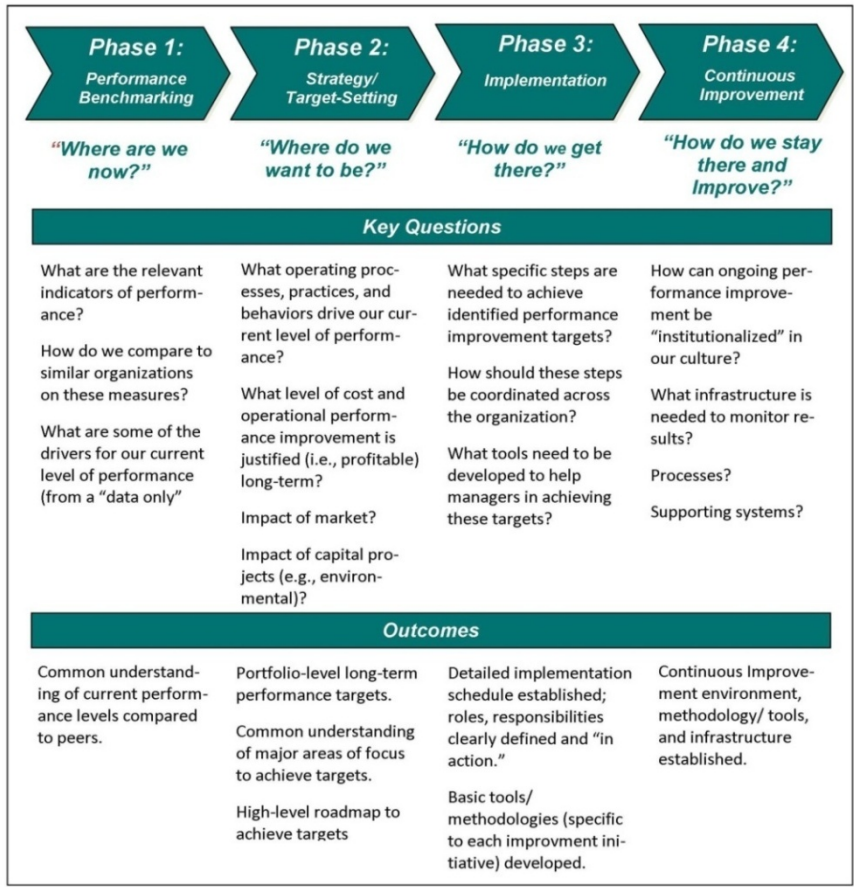


Exhibit IV-9 Performance & Results Management

The development of a cascading performance measure blueprint is a key tool for effective performance management. RCG contends that a select few key performance indicators (KPIs), developed to support the company strategies, must drive the overall performance of the organization, and all operational and supporting metrics must link back to these KPIs, as shown in Exhibit IV-10.

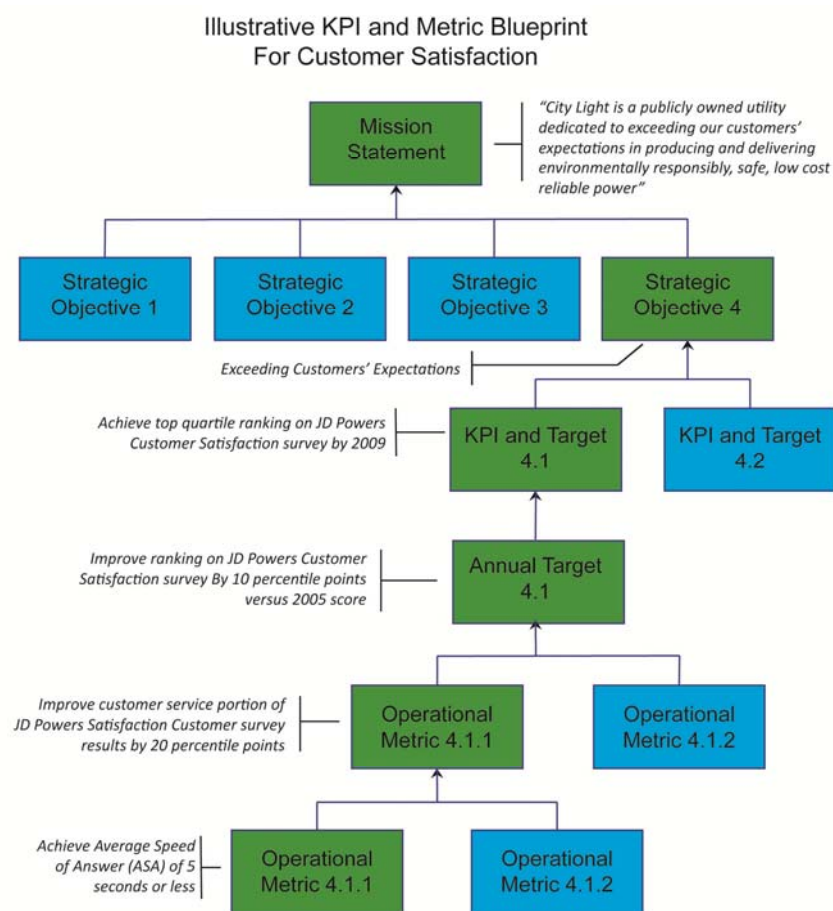


Exhibit IV-10 Illustrative KPI and Metric "Blueprint"

One of the most important aspects of results measurement is the linkage between results and personal performance objectives. Targets for personal performance objectives must be realistic and attainable, and they must be in alignment with the corporation's challenges. NGrid's management personnel should have a clear understanding of how corporate objectives and KPIs relate to their personal performance objectives. We also believe in the "SMART" goal development for employees at all levels:

- **Shared**
- **Measurable**
- **Attainable**
- **Relevant**
- **Time-based**

RCG would expect to see NGrid have corporate and business unit objectives with targets and metrics in all areas, for example: earnings per share; free cash flow; safety

(e.g., no more than X incident rate); recruitment (e.g., hiring X percent of planned vital hires); leak management targets for type 1, 2 and 3 leaks; transmission reliability; and customer service (e.g., speed of answer of X seconds).

Benefits:

Our consultants will seek improvements which provide substantial benefits to the company, its gas customers, and all stakeholders. For example here are a few of the benefits and cost gains that our consultants have found in other audits:

- Elimination of clear barriers to improved performance such as unacceptable employment requirements, tenured cultures, or use of poorly designed management by objectives or performance evaluation standards;
- Introduction of a formal process to ensure appropriate feedback, behavior modification, and re-assessments;
- Applying an “empowered leadership and extreme ownership” approach for and by executive management with the use of properly developed goals; and
- Establishment of an industry-wide benchmarking program to identify and learn from “Leading Practices” that will lead to superior performance.

Commission Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG embraces the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element’s chapter in the final report.

- *Assess the processes for feedback of managers’ and employee performance (reliability, productivity, etc.) to the corporate mission, objectives and goals for the purpose of improving processes, redirecting resources, and changing priorities.*
- *Determine the roles and responsibilities of the Board of Directors in this feedback loop.*
- *Assess management accountability for performance improvements, e.g., cost savings and productivity gains anticipated from specific capital and O&M programs and projects, and specific corporate goals.*
- *Review goals, key performance indicators, and metrics, as well as any additional performance measures or indicators that are used to facilitate attainment of the corporate mission, objectives and goals, and will help improve performance.*
- *Assess participation in benchmarking studies for identifying and developing performance targets.*

- Evaluate change management and continuous improvement processes, and any impediments that might constrain performance improvements and necessary changes.
- Review compensation and performance metrics, including the extent to which a relationship exists between actual performance and manager and employee overall and one-time (bonuses) compensation.

Staffing Assignment:

| Audit Area Staff Assignment – Performance and Results Management | |
|--|----------------|
| Lead Consultant | Ray Saleeby |
| Consultant(s) | Drew McCrossan |

Exhibit IV-11 Performance & Results Mgmt. Staff Assignment

Work Tasks:

Plan Tasks

- Revise Performance and Results Management process tasks and initial data requests based on feedback from DPS Staff review of proposal and the structured Staff input process.
- Review initial data request responses related to the Performance and Results Management. Identify missing data, evaluate quality and completeness, and engage Management as needed.
- Develop initial high-level interviews to clarify and verify understanding of the Performance and Results Management process in NGrid.
- Develop Performance and Results Management process chapter outline, and next level of interview guides and data requests.

Collect and Analyze Data

- Coordinate with all audit teams to determine extent of Company coordination and consistency of assumptions, strategies, and execution of Performance and Results Management.

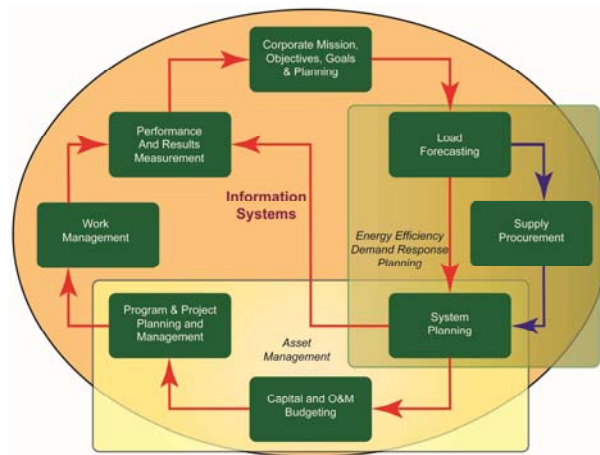
- Assess linkage of corporate KPIs and performance measurement efforts with the mission, objectives, and goals of the Company and the extent to which the Company's senior management and board reviews performance results, implements change management programs, makes adjustments to strategic objectives, processes, resources, and priorities, or uses the information to determine and act upon improvements indicated.
- Determine if employees at all levels understand their performance objectives and goals and are held accountable for performance results. Determine if there is a culture which includes extreme ownership and empowered leadership.
- Assess the adequacy, appropriateness, and timeliness of the performance reporting structure and its ability to provide relevant and actionable information across all levels within the Company.
- Evaluate the use of performance and results data, including KPIs, to ensure that deficiencies and discrepancies are corrected and that the KPIs are consistent with and supportive of the company's mission, strategies, and objectives.
- Determine if business and departmental plans progress and goal attainment are tracked on a timely basis (e.g., monthly, quarterly, annually) and if appropriate steps taken based on the information. Review feedback mechanisms to assess reasonableness and to ensure these evaluation results are used effectively and that the Boards role is appropriate in this review and feedback as well.
- Determine if the consequences (including compensation, training, or replacement, etc.) of poor manager or employee performance are appropriate. In addition determine if the Board role in these performance results reviews and feedback is both appropriate and that they take action on poorly performing executives.
- Determine if there are impediments that tend to constrain performance improvements and necessary changes.
- Determine if additional performance measures or indicators are required to support the corporate mission, objectives, and goals being met.
- Review how the Company benchmarks the Performance and Results Management process practices and results with industry and other NY State utilities performance.
- Compare the overall Performance and Results Management process to leading practices. Complete analysis of the Performance and Results Management including cost implications where possible.

Complete Task Report

- Verify facts.
- Prepare the Performance and Results Management Task Report.
- Submit the Performance and Results Management Task Report for RCG quality review.

Element No. 9: Information Systems

Information Systems is integral to all aspects of NGrid’s operations – from customer service and billing to field operations to management and financial activities. It crosses all other eight areas of the audit.



We will approach this area in two ways. First, we will specifically review the customer information and billing systems areas as specified in the Evaluation Criteria using targeted data collection, selected interviews as well as input from the other eight audit areas. Second, we will draw strategic conclusions related to Information Systems as a whole based on insights gained from working across the other audit areas. These insights might include recommendations on overall IS governance and organization structure, cost saving opportunities, major IS opportunities, or skills.

Benefits:

Our principals have significant experience in improving the performance of information systems. Examples of savings and benefits sources include:

- Refocusing the IS investment portfolio on only the most important initiatives that are critical to supporting planned business changes – such as projects that help drive customer service innovation or provide more value for your customers.

- Reducing ongoing support, maintenance, and other non-discretionary costs that consume large portions of the IS budget and continue to grow. This could include changes in service levels, different sourcing options, tighter management of minor changes and enhancements.
- Implementing simple governance mechanisms that help keep investments focused and improve project performance. This could include business case development, project approval or selection, project management and critical project status reporting, and annual business/IS planning.
- Leveraging systems and resources within the broader company context (e.g. all of National Grid) where appropriate to reduce cost and improve usability of systems.

Commission Evaluation Criteria:

The DPS has clearly defined the critical criteria by which the consultant is to evaluate NGrid. RCG embraces the following RFP evaluation criteria as the principal areas of investigation and the foundation for this element’s chapter in the final report.

- *Review the adequacy and efficiency of customer information and billing systems used to support management information and customer service operations.*
 - *Evaluate the extent to which these systems adequately support: (1) National Grid Gas’ technical business needs and processes including interfaces with other systems; (2) compliance with state laws and regulations; and (3) achievement of customer service goals.*
 - *Identify recommendations for enhancing the efficiency and integration of these systems throughout National Grid Gas New York operations.*

Staffing Assignment:

| Audit Area Staff Assignment – Information Systems | |
|---|-------------------------|
| Lead Consultant | Ed Novak |
| Consultant(s) | Ed Titus, George Fandos |

Exhibit IV-12 Information Systems Staff Assignment

Work Tasks:*Plan Tasks*

- Conduct working session with IS staff to obtain overview of IS organization and systems.
- Revise Information Systems tasks and initial data requests based on feedback from DPS Staff review of proposal and the structured Staff input process.
- Review initial data request responses and identify missing data, evaluate quality and completeness, and engage Management as needed.
- Develop initial high-level interview guide and target interviewee list to clarify and verify understanding of Information Systems in NGrid. These would serve as guides for targeted interviews in the customer information and billing areas as well as seed the interviews in other audit areas with specific IS relevant questions.
- Develop Information Systems process chapter outline, and next level of interview guides and data requests.

Collect & Analyze Data

- Review initial data request status and adjust as necessary.
- Conduct initial interviews to understand major business changes and needs related to customer service, customer information, and billing.
- Conduct initial interviews to understand any issues impacting customer information and billing related to state laws and regulations.
- Evaluate the adequacy of social media solutions in conjunction with customer facing systems.
- Conduct initial interviews to better understand Customer and Billing Information Systems within the Company – including strengths, weaknesses, interfaces, planned upgrades or enhancements. Coordinate with all audit teams to leverage their interview findings and participate as necessary.
- Evaluate NGrid's progress on implementing asset management systems for both distribution and transmission line businesses.
- Work with all audit teams to determine extent of Company coordination and consistency of assumptions, strategies, and execution of Information Systems.

- Review all interview and data collection results and develop working summary of strengths and weaknesses of the customer information and billing areas, as well as overall IS where relevant.
- Identify impediments or opportunities to improve Information Systems performance such as:
 - Better alignment of IS direction to planned business changes including emerging customer needs and preferences;
 - Reallocation of investment to higher priority areas;
 - Reduction of non-discretionary maintenance and support costs; and
 - Improvement of solution delivery and implementation.
- Determine how the Company assesses the success of Information Systems.
- Review how the Company benchmarks or compares their Information Systems performance with industry and other NY State utilities performance. Determine if additional metrics or measures will help improve Information Systems performance.
- Identify key conclusions, recommendations and high-level benefits.

Complete Task Report

- Verify facts.
- Prepare the Information Systems Task Report.
- Submit the Information Systems Task Report for RCG quality review.

V. PROJECT TEAM AND RESPONSIBILITIES

This chapter describes the organizational structure, assignments, personnel, and relationships that will support the performance of the RCG audit team and promote high-quality audit outcomes. For engagement and contract questions please contact:

| | |
|------------------------|------------------------|
| Bob Grant | Ray Saleeby |
| 77 Wilson Bridge Lane | 406 Harding Drive |
| Clayton, GA 30525 | South Orange, NJ 07079 |
| Phone: 770-331-1941 | Phone: 973-524-0390 |
| Email: rivercg@aol.com | Email: SCGNow@aol.com |

A. Introduction

The RCG team is no ordinary team of management auditors. Because the quality of audit results is inextricably tied to the quality of every auditor assigned to the team, RCG has specifically recruited and selected team members who are widely known for their expertise and understanding of the areas they will be assigned to evaluate.

All RCG team members have been guiding utility and regulatory management through the rapidly evolving markets and environment of the modern U.S. utility industry for many years. As a result, the RCG team brings proven and unprecedented skill sets to this audit that align specifically with the audit element areas defined in the RFP. In fact, many RCG team members are performing leading-edge work in their individual specialties. RCG's role is to provide its extensive experience in the performance of management audits to the team, the Company, and DPS Staff in order to cost-effectively capture all the benefits that can be gleaned from such an experienced team of professionals.

The successful execution of the NGrid management audit requires a project team with the unique blend of capabilities that the RCG team has been specifically designed to provide:

- In-depth knowledge of the emerging utility industry issues, and the experience to identify and address issues that affect NGrid's ability to provide the highest-quality, lowest-cost service to customers;
- Technical and functional expertise and skills acquired while serving as senior managers in the gas and electric industries; and
- Direct experience with utility management audits that combine the skill-sets and knowledge necessary to produce balanced, cost-effective recommendations, along with the industry know-how to assist with implement recommendations.

All RCG team members have been selected specifically for their deep understanding of each of the audit elements that they have been assigned to evaluate. Together, the RCG team provides the strongest and most experienced team available at a cost that eliminates the overhead burden associated with larger, equally experienced firms. All consultants are under contract for this engagement.

B. Organizational Structure

Exhibit V-1 is our proposed RCG project team chart; it shows how each of RCG's interdisciplinary team members has been assigned to ensure the successful execution of the management audit. At the bottom of the chart are our support consultants; they provide critical data-gathering and analysis support. The Lead consultants are responsible for the overall direction of their respective areas review, but also for bringing the innovative ideas of industry leading practices. Lead consultants will also communicate with one another to share learning, identify the corporate culture and crosscutting issues, and ensure that their final recommendations are not harmful to other areas outside their area of investigation.

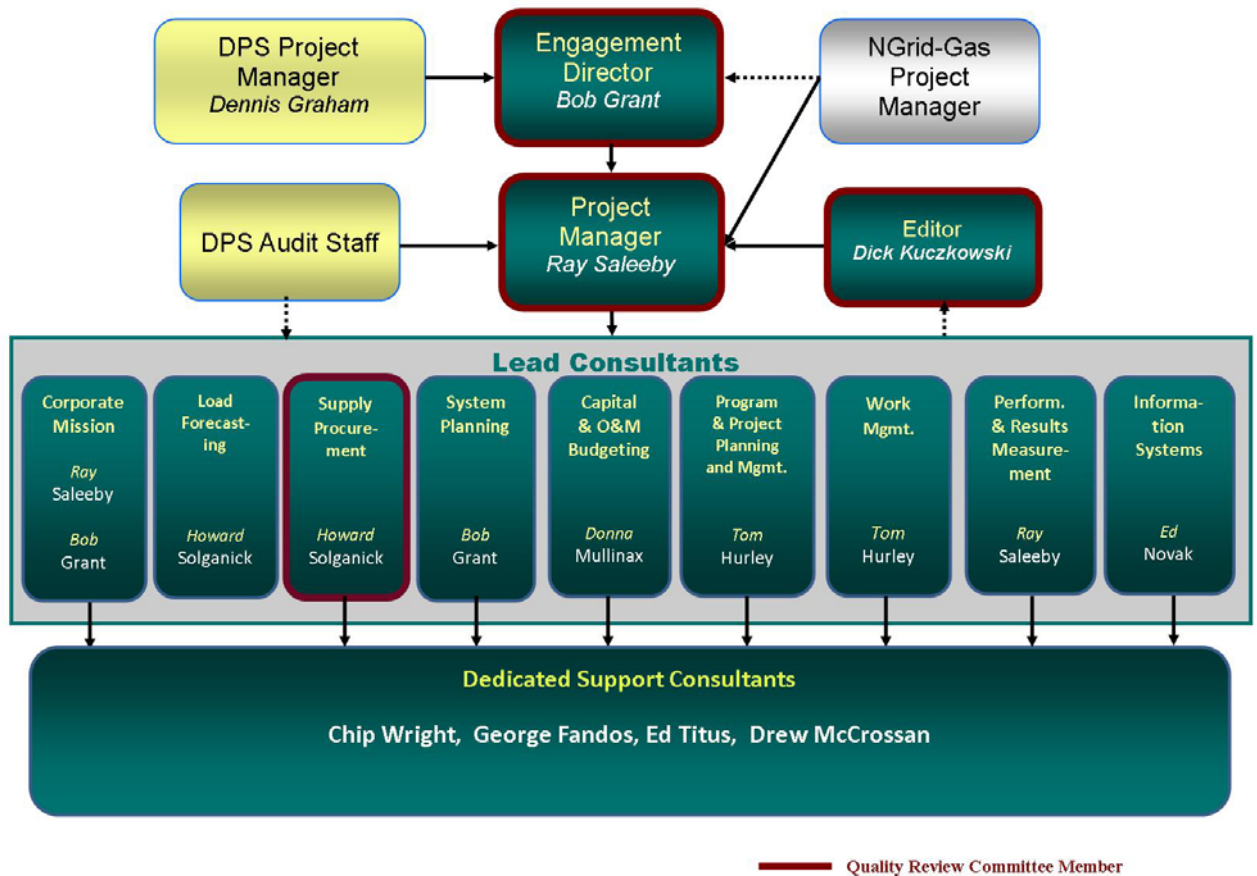


Exhibit V-1 RCG Proposed Project Team

A Quality Review Committee has been assembled and given responsibility for reviewing all work products with the sole objective of verifying the accuracy and appropriateness of conclusions and recommendations that will be produced by team members. The Quality Review Committee is comprised of individuals who have worked together for over 25 years and understand the criticality of stating findings, conclusions, and recommendations in a manner that engenders the most positive response from the client and has the potential for creating change. The Quality Review Committee and Project Manager are also responsible for ensuring that the construction feedback loops is being carefully evaluated throughout the duration of the audit.

Exhibit V-1 indicates that the Engagement Director and the Project Manager will be undertaking lead and supporting consultant roles within some contexts due to their considerable experience in those areas. In particular, Engagement Director and the Project Manager will act as Co-Lead Consultants for the Corporate Mission, Objectives, Goals, and

Planning. Likewise, Bob Grant will be the Lead Consultant for System Planning. The Project Manager Ray Saleeby will also act as Lead Consultant for the Performance and Results Measurement.

Key consultants have been assigned to one or more audit elements, as a Lead Consultant: Howard Solganick will manage both the Load Forecasting and Supply Procurement elements. Tom Hurley will manage the evaluation of the Program and Project Planning and Management, and Work Management elements. Donna Mullinax will lead the Capital and O&M budgeting element, while Ed Novak will lead the Information System element. As clearly shown in Exhibit V-1, supporting consultants have been assigned to more than one task area.

Exhibit V-2 shows the proposed team members' hours by the nine elements. You will see Lead Consultants, working in support of other elements as a result of the criteria established by the DPS.

| Project Activity | National Grid Gas Comprehensive Management Audit Team | | | | | | | | | | | | | | | Total |
|--|---|-----------------|------------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|--------------|-------------------------|------------|-------------|
| | Director | Project Manager | Lead Consultants | | | | | | Consultants | | | | | Project Admin & Editing | | |
| | Grant | Saleeby | Grant | Saleeby | Solganick | Hurley | Novak | Mullinax | Wright | Fandos | McCrossan | Titus | Fijnvandraat | Kuczkowski | Admin | |
| Phase I. Planning & Orientation | 30 | 30 | 32 | 32 | 32 | 32 | 24 | 24 | 24 | 16 | 24 | 16 | 16 | 12 | 48 | 392 |
| Phase II. Technical Review | | | | | | | | | | | | | | | | |
| Corporate Mission | | | 184 | 184 | | | | | 54 | 94 | 118 | | | 8 | | 642 |
| Load Forecasting | 4 | | | | 144 | | | | | | | | | 8 | | 156 |
| Supply Procurement | | 4 | | | 160 | | | 32 | | | 22 | | | 8 | | 226 |
| System Planning | | 8 | 184 | | | | | | 48 | | | 64 | 80 | 8 | | 392 |
| Capital and O & M Budgeting | | 8 | 32 | | | | | 132 | 32 | | 24 | | 60 | 8 | | 296 |
| Program Planning | 4 | 4 | | | | 220 | | 28 | | | | 40 | 80 | 8 | | 384 |
| Work Management | 8 | 8 | | | | 140 | | | | | | 60 | 140 | 8 | | 364 |
| Performance & Results Mgmt | 8 | | | 120 | | | | | | | 60 | | | 8 | | 196 |
| Information Systems | 8 | 8 | | | | 32 | 160 | | | 40 | 40 | | | | | 288 |
| Phase III. Report Development | | | 120 | 160 | 124 | 140 | 50 | 80 | 60 | 40 | 120 | 24 | 40 | 90 | | 1048 |
| Quality Management | 40 | 40 | | | 40 | | | | | | | | | 40 | | 160 |
| Project Management | 128 | 128 | | | | | | | | | | | | | 280 | 536 |
| Phases I-III Hours Totals | 230 | 238 | 552 | 496 | 500 | 564 | 234 | 296 | 218 | 190 | 408 | 204 | 416 | 206 | 328 | 5080 |

Exhibit V-2 Team Member Hours by Element

C. Team Member Qualifications

The following paragraphs present summary information on each of the SCG team members assigned to each audit element task area, as reflected in Exhibit III-I above. (Full resumes for team members are presented in Appendix B.) Skill sets for the individual team members are shown in Exhibit V-3, Skills Matrix.

| Audit Elements / Operational Area | Grant | Saleeby | Solganick | Novak | Mullinax | Hurley | Wright | Fandos | Titus | Fijnvandraat | McCrosan |
|---|-------|---------|-----------|-------|----------|--------|--------|--------|-------|--------------|----------|
| Corporate Mission, Objectives, Goals & Planning | ◆ | ◆ | ◆ | ◆ | ◆ | | ◆ | | | | ◆ |
| Load Forecasting | | | ◆ | | | | ◆ | | | | |
| Supply Procurement | | | ◆ | | | | | | | | |
| System Planning | ◆ | | ◆ | | | | ◆ | | | ◆ | |
| Capital and O&M Budgeting | ◆ | ◆ | ◆ | | ◆ | ◆ | ◆ | | | ● | ● |
| Program & Project Planning and Mgmt. | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | ◆ | ◆ | ◆ |
| Work Mgmt. | ◆ | | | ◆ | | ◆ | | | ◆ | ◆ | |
| Performance & Results Measurement | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | ◆ | | ◆ |
| Information Systems | ● | | | ◆ | | | | ◆ | ● | | |
| Functional Skill Sets | | | | | | | | | | | |
| Field Operations | ◆ | | | | | | | ● | ◆ | ◆ | |
| Supply Chain | ◆ | | ● | | | ◆ | | | ◆ | ● | |
| Asset Management | ◆ | | ◆ | | | | | | ◆ | ◆ | |
| Safety | ● | ● | ● | | | | ● | | | ◆ | |
| Rate Making / Regulation | | | ◆ | | ◆ | | ◆ | | | | |
| Customer Communications | ◆ | | | | | ◆ | ◆ | ◆ | | | |
| Support Services | ◆ | ◆ | ◆ | | ◆ | ◆ | ● | ● | ● | | |

Exhibit Legend: Light Yellow Square denotes Lead

◆= Strong skills and has done a significant work in the area

● = Good skills in area and has done some related projects

Exhibit V-3 Team Skill Matrix

The following paragraphs present summary information on each of the RCG team members assigned to each audit element task area, as reflected in Exhibit V-I above. (Full resumes for team members are presented in Appendix B.)

RCG Audit Managers

Robert M. Grant, President of RCG, will serve as Engagement Director for the RCG audit team. He also has been assigned Lead Consultant responsibility for the Corporate Mission, Objectives, Goals and Planning, and System Planning audit elements, and serves on RCG's four-person Quality Review Committee for this audit. Over the past two decades, Bob has performed nine comprehensive management audits of utilities and ten company pre-audits, including two companies that have engaged him for pre-audit services multiple times. He is highly qualified to act in the role of Engagement Director for this audit and will lend his significant experience to all parties throughout the audit effort. Bob has helped a number of gas utilities improve their organizational responsiveness as well as their operational performance. These companies include; Southern Indiana Gas & Electric (now Vectren), National Fuel Gas, Central Hudson Gas & Electric, Washington Gas Light, Northwestern Public Service Company, Puget Sound Energy, Kansas Nebraska Natural Gas, SCANA, and South Jersey Gas.

Bob began his career with Boston Edison (NStar), where he gained valuable insights into utility operations, system planning, marketing, and the complex requirements of distribution assignments. Since leaving Boston Edison, Bob has managed the North American utility practice for two large consulting firms, and has served as an officer and/or senior executive consultant for KEMA, Inc., AT&T Solutions, Stone & Webster, and Booz Allen Hamilton.

Raymond G. Saleeby, President & CEO of SCG, will serve as the Project Manager for the RCG audit team. He also has been assigned Lead Consultant responsibility for the Strategic Planning, Finance, Executive Management and Corporate Governance, and Affiliate Relationships audit elements, and serves on RCG's four-person Quality Review Committee for this audit. Since 1978, Raymond has conducted both commission-mandated and voluntary management audits at well over 40 gas and electric utilities and implemented the industry's first constructive audit preparation program. His career spans over four decades of utility consulting, auditor training, utility executive development training, C-level executive management, and practice leadership. He was a principal at Booz-Allen & Hamilton, President of a Utility Practice at EDS, Managing Partner at AT&T Solutions and an EVP and BOD member at Stone & Webster and Group VP at Oracle. He was awarded "Top 50 people in America in Energy IT." He is a degreed and licensed Marine Engineer from SUNY Maritime College with an MBA in Finance from NYU Graduate School of Business.

Richard Kuczkowski, PhD, Editor and specialist on municipal matters, has 40 years of extensive, multifaceted experience in communications/corporate communications, a very broad range of editorial/writing assignments, training, and consulting in utility industry and environmental/low-level radioactive waste areas. Highlights and significant projects include: technical writing in medical research and other areas, many reports for utilities, and articles for Public Utilities Fortnightly; business seminar and continuing professional education program development in product tampering, utility issues, R&D

River Consulting Group

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management, and development and overall management of Stone & Webster's 3-week Utility Management Development Program for promising utility managers; safety analysis reports, health physics reports, environmental impact statements, etc.; CEO speeches and reports on storm restoration and 9/11 terrorist recovery for New York City's Metropolitan Transportation Authority, as well as public reports on a range of metropolitan transportation and related issues. He was most recently Associate Chief, Editorial Services at New York City's Metropolitan Transportation Authority, and has been Assistant Vice President at Stone & Webster Management Consultants, and Senior Project Administrator for Dames & Moore. He has spoken on utility issues at North East Power Association's Certificate Program, Iowa Utility Association Management Conference, training programs for General Electric's and IBM's utility practice staffs, the World Energy Council's Regional Forum in Romania, and in a video produced to guide utilities in their preparations for management audits. He holds a PhD (with Distinction) and MA (with High Honors) in English from Columbia University, and BA (Summa Cum Laude in Cursu Honorum) in English from Fordham University, and is a member of Phi Beta Kappa.

RCG Lead Consultants

In addition to Bob Grant and Ray Saleeby, whose Lead Consultant roles are described above, the following professionals have been selected to lead teams charged with the evaluation of each of the nine audit elements.

Howard Solganick, P.E., principal of Energy Tactics & Services, Inc., has been working in the utility industry for over 35 years. He will serve as the Lead Consultant responsible for the Load Forecasting and Supply Procurement elements of the audit scope and is a member of the four-person Quality Review Committee. During the past decade, Howard has participated as Project Manager or a Lead Consultant in conducting management or regulatory audits for gas, electric or combination utilities in Connecticut, Ohio, and Oregon, and provided pre-audit support for gas, electric or combination utilities in New York and Pennsylvania. He has also been a senior manager, officer, and/or senior management consultant for Atlantic Electric, Cogeneration Partners of America, and AT&T Solutions. His areas of expertise as a utility executive and consultant include: management audits, load forecasting, load research, supply procurement for utilities, independent power and commercial and industrial customers, rate design and cost allocation, and performance management and process improvement, among others.

Thomas Hurley is proposed for the role of Lead Consultant for both the Program and Project Planning and Management, and Work Management audit elements. Tom has over 25 years of consulting and management experience with a range of domestic and international utility companies and has completed many assignments as part of an RCG team. His areas of expertise include program and project management, business planning, performance metrics and measurement, organizational and process design, customer care,

supply chain management, operational and process improvement, and outsourcing strategy and implementation support.

Edward T. Novak is proposed for the role of Lead Consultant for Information Systems audit element. Ed specializes in helping companies achieve dramatically improved business process and information technology improvements. Ed has over 30 years of experience including positions as both a CIO and leader of a world-class IT strategy and business transformation consulting practice. He has presented in numerous industry events on the topic of IT strategy and has advised the senior leadership and boards of several leading corporations. Most recently, Ed served as Vice President and CIO for PPL Corporation, one of the ten largest domestic energy utility holding companies. Responsible for all IT activities globally, he was a member of the company's Senior Business Planning Committee. His focus was on establishing business-driven IT strategies, overhauling core business processes and systems, transforming IT management processes, and upgrading staff capabilities. He instilled a business focus to IT and dramatically turned around the reputation and credibility of the 500-person IT organization.

Prior to PPL, he was a lead Partner for Accenture where he helped lead the Strategic IT Effectiveness Practice, which helps top management in companies achieve greater business value from IT. Novak has consulted with numerous Fortune 100 companies and has worked extensively in both Europe and North America. Before joining Accenture, Novak had been a Partner with the Index Group and Computer Sciences Corporation where he specialized in business process reengineering and IT strategy. He has held various IT Executive positions in the pharmaceutical, chemical and financial services industries. Novak serves on the Alumni Board of Bucknell University and the Board of the Rodney Street Tennis and Tutoring Association. He holds a Master of Business Administration degree from the Harvard Business School and a bachelor's degree from Bucknell University.

Donna H. Mullinax, CPA, CIA, CFP, proposed lead consultant for Capital and O&M Budgeting, is Vice President and Chief Financial Officer of Blue Ridge and has over thirty-one years of financial, management, and consulting experience. She has extensive experience in financial and management audits, affiliate transactions, and systems implementation; regulatory and litigation support; financial, administrative, and project management.

Mrs. Mullinax is a skilled financial and management auditor. As a CPA and CIA, she is knowledgeable about sound internal control processes and procedures and has made numerous recommendations in prior audits for modifications to provide reasonable assurance regarding the achievement of objectives related to (1) effectiveness and efficiency of operations; (2) reliability of financial records; and (3) compliance with laws and regulations. She has performed numerous financial and compliance audits for governmental entities, businesses, and public utilities. She has also conducted several detailed revenue requirements and rider compliance audits. She has analyzed financial

information and budget projections, performed risk identification, and evaluated industry benchmarking. Her extensive professional experience allows her to effectively analyze and evaluate methods and procedures and to thoroughly document her findings. She has successfully testified to her audit findings.

RCG Supporting Consultants

Julius (Chip) Wright, Ph.D., Dr. Wright, proposed gas regulation executive consultant, specializes in regulatory issues, business and strategic planning, and economic analysis. With a Ph.D. in Regulatory and Environmental economics, he served eight years as a Utility Commissioner in North Carolina and before that he was a fiber optics process engineer for Corning Glass. While with Corning he served three terms as a state senator in North Carolina. Dr. Wright's practice focuses on economic studies, utility strategy, and regulatory policy. Dr. Wright has led management related audits and investigations for both utilities and for public agencies including the California State Senate, the Georgia General Assembly, the North Carolina Public Staff, and the Attorney General of Illinois. He frequently works with Fortune 500 investor-owned electric and gas utilities in various roles including developing economic studies, long-term resource planning, strategic and economic issues, regulatory and management policies, and basic research on a variety of topics. In addition, Dr. Wright has presented numerous papers, reports and expert testimony on issues related to the energy industry, both gas and electric, including regulatory policy, electric price forecasting, generation dispatch modeling, avoided cost issues, stranded cost valuation and recovery, performance-based ratemaking, metering, rate-setting, and unbundling. In addition, he has been a Visiting Professor at the University of the Virgin Islands teaching both Micro and Macro economic courses. He received his Ph.D. and Masters from North Carolina State University in environmental and regulatory economics. He also has an MBA in finance and a BS in Chemistry.

George Fandos, proposed senior associate, brings over 30 years' experience as an executive-level management consultant and service as an operational executive. His passion and focus have always been on the customer; from marketing to selling to service and support, he has built and consulted with organizations whose aim is to communicate effectively and raise or maintain high levels of satisfaction. He has helped utility customer service and corporate communications organizations define long-range strategies, create messaging goals, and develop comprehensive metrics and processes to track progress toward those. Consulting projects undertaken for his clients have focused on design and deployment of centralized customer service operations; process and organizational change management; customer experience design; development of multi-channel customer strategies; and emergency assessments of customer facing functions. Mr. Fandos has helped utility organizations better understand customer expectations and use this insight to design both employee experiences and the experiences customers have through outage communications, the use/pay experience and service initiation. He has worked with utility

companies in the development of a channel strategy that optimizes both customer interactions and shareholder returns.

Charlie Fijnvandraat, P.E., proposed senior consultant, has been working in the utility industry for over 25 years as an engineer, supervisor, and consultant; he also served two utilities (Northeast Utilities and NSTAR) in these roles. His management consulting experience includes work with SCE, PacifiCorp, AEP, Con Edison, Exelon, Entergy, PPL, and others. His direct T&D management experience (further detailed in Appendix B) includes consulting experience as well as direct electric utility management in both operations and engineering including maintenance, project management, performance, planning, design, and FERC/NERC reliability compliance. He has also been involved in over 50 emergency events, including leading field crews in storm restoration efforts and various back-office-support roles. As a consultant, he has assisted clients to optimize restoration processes, rank T&D budgets, create reliability standards and metrics, and increase field force utilization and performance. Recent consulting engagements involve supporting regulatory reviews of capital trackers for natural gas utilities, leveraging his experience of the planning process, scheduling, and measuring the efficiency of field operations in removing/replacing underground assets.

Drew McCrossan, proposed senior consultant, is an independent consultant who leverages over 13 years of exceptional experience as a senior officer, manager, and leader, in both the government and private sectors. His experience as a senior Officer in the U.S. Navy's Aviation community included assignments as a U.S. European Command's Lead Interagency Military Strategic Planner, Squadron Operations Officer, Department Head, and Helicopter Aircraft Commander. He has been responsible for policy development, organizational and operational planning, operations execution, strategic direction, and program management implementation. He was the Operations Officer for a U.S. Navy helicopter squadron during the squadron's support of both the Indonesian Tsunami and Hurricane Katrina. He has extensive experience leading the planning, staffing, and operational support for rescue operations, humanitarian relief, and disaster response. He now works with global senior managers in a variety of industries to help them assess business continuity and disaster recovery plans, to assist in the development of risk mitigation strategies, and to facilitate disaster recovery exercises. He holds an MBA from NYU's Stern School of Business with concentrations in Strategy, Change Management, and Leadership.

W. Edward (Ed) Titus, proposed senior consultant, has over 30 years' experience with both gas and electric utility companies spanning a wide variety of management positions and consulting engagements. He has extensive experience in Supply Chain, Work Management, Asset Management, Project Management, and Quality Management for utility company applications. Most recently he led a team at Piedmont Natural Gas Co (Charlotte, NC) to plan the integration of a new asset management system into their organization to enhance pipeline safety and reliability.

He has over 30 years experience conducting organization assessments to identify deficiencies and opportunities for improving internal controls and overall management of organizational performance. He has helped organizations define long-range strategies, set goals, and develop comprehensive metrics to track progress toward those goals in addition to metrics to monitor compliance with regulations, directives, and internal policies. He has worked with several large utility companies to transform their supply chain organizations from functional focused suppliers of equipment, material, and services to ones with broad authority to develop oversight and governance of all contracts and corporate spend.

Exhibit V-4 provides a list of key team members and the management audit assignments they have participated in together with other members of the RCG team.

| Project | Grant | Saleeby | Solganick | Novak | Mullinax | Hurley | Wright | Fandos | Titus | Fijnvandraat | McCrossan |
|--|-------|---------|-----------|-------|----------|--------|--------|--------|-------|--------------|-----------|
| CNP Post Ike Restoration Audit | ED | | P | | | | | LC | LC | | |
| CL&P Management Audit | | | LC | | AP | | | | | | |
| NW Natural Gas Affiliate Transaction | | | LC | | AP | | | | | | |
| Utility Emergency Prep. Conferences | LC | | | | | | | | | LC | |
| Ameren Emergency Restoration Audit | ED | | LC | | | | | | | | |
| Northern Utilities Cast Iron Replacement | | | TR | | | | | | | | |
| Duke Energy - Rate Case Audit | | | LC | | AP | | | | | | |
| Columbia Gas- Rate Case Audit | | | LC | | AP | | | | | | |
| Entergy Customer Communications | LC | | | | | | | PM | | | |
| ENCO Customer Service Review | ED | | | | | PM | | | | | |
| Hydro Quebec Call Center | ED | | P | | | LC | | | | | |
| Rate Cases / Fuel Adj. Clause Reviews | | | LC | | AW | | | | | | |
| <i>Projects over 10 years old</i> | | | | | | | | | | | |
| Customer Retention | | | | | | | | | | | |
| Organization Redesign >10 | | | | | | | | | | | |
| Customer System/Call Centers | | | | | | | | | | | |
| Regulatory | | | | | | | | | | | |
| Gas Procurement | | | | | | | | | | | |
| Management Audits >15 | | | | | | | | | | | |
| Focused Mgmt Reviews-Confidential > 50 | | | | | | | | | | | |
| Legend: C- Consultant, ED – Engagement Director, LC – Lead Consultant, PC - Principal Client, PM – Project Manager, TW – Testifying Witness, TR – Technical Resource, APM – Assistant PM Green Block- Experience | | | | | | | | | | | |

Exhibit V-4 Assignments Shared by Team Members

VI. SCHEDULES AND BUDGETS

This chapter provides a schedule for implementation and completion of the NGrid management audit. It also discusses the factors that support and facilitate RCG's proposed not-to-exceed cost for completing the management audit in conformance with the requirements outlined in the RFP.

A. Introduction

In addition to providing a first-class team of highly effective consulting professionals, RCG is proud of its reputation for completing projects on schedule and within budget. The company consistently completes its assignments ahead of the client's requested schedule, and is absolutely confident that it has assembled a team with the appropriate expertise and experience to perform the highest quality job possible in the time frame allotted by the Commission. The DPS Staff can rely on the same competent delivery standards that RCG routinely provides to clients.

RCG is also pleased that it can provide the unique and comprehensive level of expertise embodied in its proposed audit team to this management audit at a not-to-exceed price⁸ that is highly competitive. In so doing, RCG can deliver real benefits to the Company's customers by producing what RCG contends will be extremely high-quality recommendations at the lowest reasonable cost.

B. Schedule

The anticipated start date for this management audit is June 10, 2013 based on information contained in the RFP. RCG's proposed schedule is to deliver the requested draft work plan in August 16, 2013, and the draft and final reports to the DPS Staff in March 19, 2014 and April 16, 2014. In order to achieve an efficient transfer of information between audit stakeholders and the RCG team, a staggered schedule for the commencement of audit activities for each of the nine audit elements is strongly recommended.

By adopting the recommended staggered approach, RCG is able to achieve its information-transfer goals while at the same time providing the DPS Staff with adequate time to digest and discuss RCG's observations thoroughly. This approach also minimizes any disruptions that may accompany the audit work relative to NGrid and its normal operations.

⁸RCG's pricing as quoted in this proposal is based on strict adherence to the work as outlined in our proposal. Any additional reviews not included in the proposal will be negotiated if they are surfaced.

Exhibit VI-1, shown on the next page, provides RCG's initial, recommended schedule for the completion of a comprehensive management audit that conforms to the DPS Staff's overall schedule objectives, as set forth in the RFP.

The schedule as presented is intended to provide the DPS Staff with a comprehensive overview of RCG's proposed approach and does not contain the increased level of detail that will accompany the audit work schedules produced for this project.

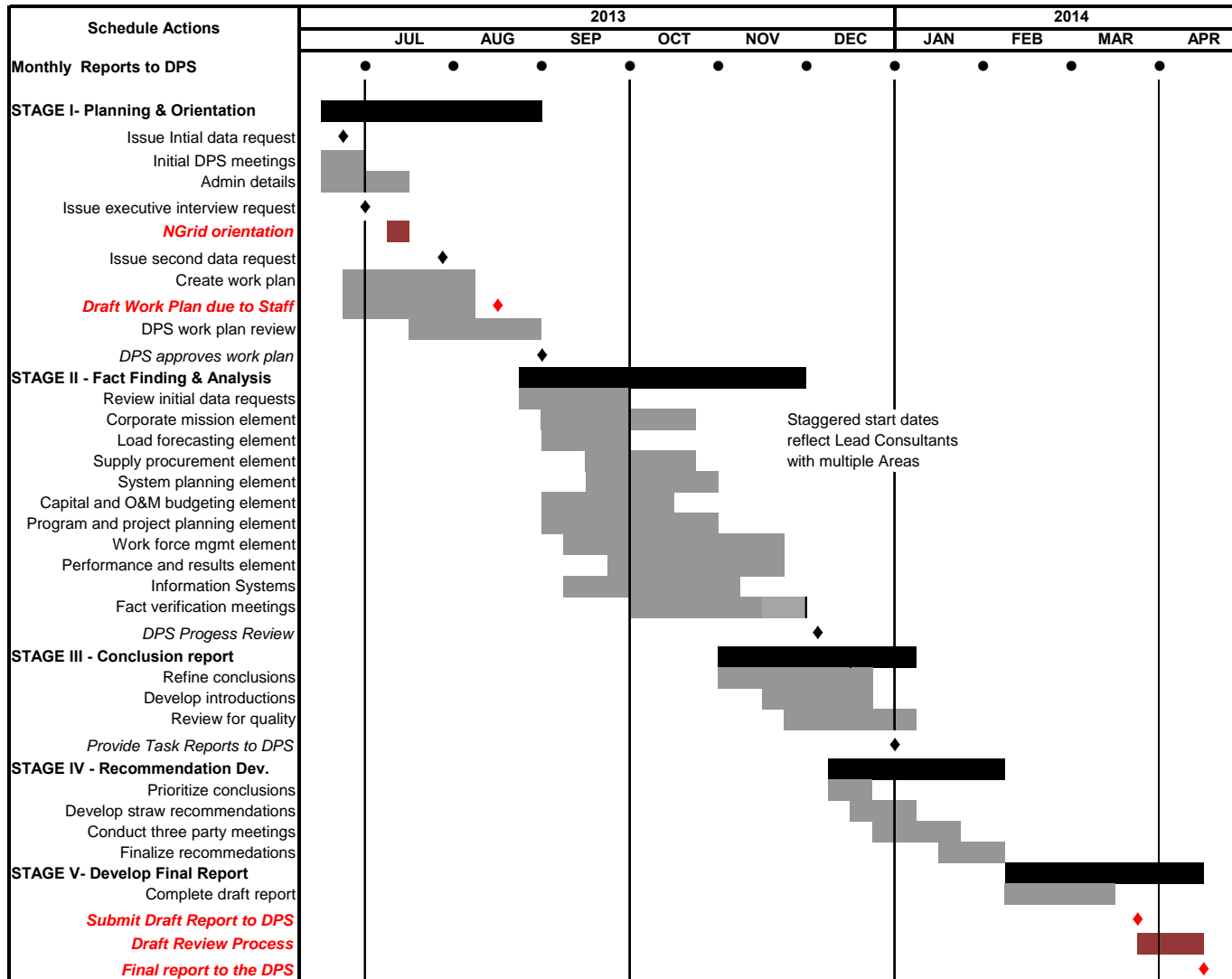


Exhibit VI-1 Proposed Schedule

C. Budget

RCG's proposed *not-to-exceed* cost for performing a comprehensive management audit of NGrid management and operations is \$1,324,405. This price includes professional fees of \$1,145,050 and expenses totaling \$179,355 that are associated with performing the assignment and creating the deliverables described in Chapters III and IV. Details of RCG's proposed project budget, including estimated hours assigned to each consultant by task, are provided in Exhibit VI-2.

No printing costs for draft and final audit reports are included as required by The Guide.⁹

In preparing the proposed budget, RCG has made every effort to develop reasonable travel cost estimates recognizing that airline fees are subject to wide swings over a period as long as the one prescribed for the NGrid audit. All communications, mailing, copying, and miscellaneous expenses have been budgeted at their estimated costs, and will be invoiced with appropriate documentation.

Generally, we expect RCG team members to conduct all initial interviews in person to facilitate the greatest transfer of information possible while allowing RCG to observe the Company's operations first-hand.

Costs associated with the preparation and presentation of testimony, or any additional post-audit meetings requested by the DPS Staff, the Commission, or NGrid's USA Board will be billed at the individual hourly rates provided in Exhibit VI-2. RCG's fees are based on standard hourly rates associated with assignments of this type despite the very high level of professional experience that will be provided by the RCG team members. The travel, lodging, and other expenses are estimated but will be billed at their direct cost.

Details of RCG's proposed project expenses are provided in Exhibit VI-2.

⁹ The Guide, page 21, Section G, item 3.

| Project Activity | National Grid Gas Comprehensive Management Audit Team | | | | | | | | | | | | | | | Total |
|--|---|-----------------|------------------|---------|-----------|--------|-------|----------|-------------|--------|-----------|-------|--------------|-------------------------|-------|---------------------|
| | Director | Project Manager | Lead Consultants | | | | | | Consultants | | | | | Project Admin & Editing | | |
| | Grant | Saleeby | Grant | Saleeby | Solganick | Hurley | Novak | Mullinax | Wright | Fandos | McCrossan | Titus | Fijnvandraat | Kuczkowski | Admin | |
| | \$270 | \$270 | \$270 | \$270 | \$225 | \$225 | \$270 | \$225 | \$250 | \$225 | \$200 | \$200 | \$200 | \$150 | \$100 | |
| Phase I. Planning & Orientation | 30 | 30 | 32 | 32 | 32 | 32 | 24 | 24 | 24 | 16 | 24 | 16 | 16 | 12 | 48 | 392 |
| Phase II. Technical Review | | | | | | | | | | | | | | | | |
| Corporate Mission | | | 184 | 184 | | | | | 54 | 94 | 118 | | | 8 | | 642 |
| Load Forecasting | 4 | | | | 144 | | | | | | | | | 8 | | 156 |
| Supply Procurement | | 4 | | | 160 | | | 32 | | | 22 | | | 8 | | 226 |
| System Planning | | 8 | 184 | | | | | | 48 | | | 64 | 80 | 8 | | 392 |
| Capital and O & M Budgeting | | 8 | 32 | | | | | 132 | 32 | | 24 | | 60 | 8 | | 296 |
| Program Planning | 4 | 4 | | | | 220 | | 28 | | | | 40 | 80 | 8 | | 384 |
| Work Management | 8 | 8 | | | | 140 | | | | | | 60 | 140 | 8 | | 364 |
| Performance & Results Mgmt. | 8 | | | 120 | | | | | | | 60 | | | 8 | | 196 |
| Information Systems | 8 | 8 | | | | 32 | 160 | | | 40 | 40 | | | | | 288 |
| Phase III. Report Development | | | 120 | 160 | 124 | 140 | 50 | 80 | 60 | 40 | 120 | 24 | 40 | 90 | | 1048 |
| Quality Management | 40 | 40 | | | 40 | | | | | | | | | 40 | | 160 |
| Project Management | 128 | 128 | | | | | | | | | | | | | 280 | 536 |
| Phases I-III Hours Subtotal | 230 | 238 | 552 | 496 | 500 | 564 | 234 | 296 | 218 | 190 | 408 | 204 | 416 | 206 | 328 | 5080 |
| Total Fees (x 1000) | 62.1 | 64.3 | 149.0 | 133.9 | 112.5 | 126.9 | 63.2 | 66.6 | 54.5 | 42.8 | 81.6 | 40.8 | 83.2 | 30.9 | 32.8 | \$ 1,145,050 |
| Expenses (x 1000) | 7.4 | 7.3 | 24.6 | 21.7 | 17.1 | 21.5 | 8.4 | 10.0 | 9.6 | 7.2 | 13.5 | 7.4 | 13.7 | | 10.0 | \$ 179,355 |
| Total Not to Exceed Price | | | | | | | | | | | | | | | | \$ 1,324,405 |

| Expense Major Categories | | | |
|-------------------------------|-----------|----------------------------|----------------|
| Hotel (335 Days) | \$ 65,490 | Telephone | \$ 2,500 |
| Air Transportation (84 Trips) | \$ 41,713 | Office supplies | \$ 1,500 |
| Per Diems | \$ 30,159 | London 2 Trips | \$ 6,860 |
| Ground Transportation | \$ 25,133 | Miscellaneous | \$ 6,000 |
| | | Total Expenses = \$ | 179,355 |

Exhibit VI-2 RCG's Project Hours, Fees and Expenses

D. Invoices

RCG's policy is to invoice monthly for services and expenses rendered during the previous month, and invoices are due within 20 calendar days of delivery. Invoices will include professional fees for hours worked, and expenses that have actually been incurred by RCG and its team members. These fees and expenses will not exceed the limits shown in Exhibit VI-2.

Invoices will include backup information, as set forth below:

- Expenses for personnel will be presented in a report that lists those expenses and hours by audit element or another major category, such as project management or editor work;
- Personal mileage to/from home and audit work sites, or to/from home and local airports, will be charged at the rate allowed by the Internal Revenue Service; and
- Copies of all receipts for expenses that exceed \$25.

VII. EXPERIENCE AND QUALIFICATIONS

This chapter introduces RCG and its team partners. We begin with thumbnail introductions of individual team members through summaries highlighting their capabilities and experience relevant to the tasks for which they are proposed. (Fully detailed resumes of all individual team members are found in Appendix B.) Information on individual team members is followed by descriptions of the capabilities and experience of the firms partnering to offer their services on this assignment: River Consulting Group, Inc. and Raymond G. Saleeby, LLC (d/b/a SCG); this material includes summaries of engagements relevant to and consistent with the scope of work presented in the RFP, and client reference information.

A. Introduction

The RCG team is no ordinary team of management auditors. Because the overall quality of audit results is inextricably tied to the overall quality of the auditors assigned to the team, RCG has specifically recruited and selected team members who are widely known for their expertise and understanding of the areas that they will be assigned to evaluate.

All RCG team members have been guiding gas and electric utility and regulatory management through the rapidly evolving markets and environment of the modern U.S. utility industry for many years. As a result, the RCG team brings proven and unprecedented skill sets to this audit that align specifically with the audit element areas defined in the RFP. In fact, many RCG team members are performing leading-edge work in their specific specialties. RCG's role is to provide its extensive experience in the performance of management audits to the team, the Company, and DPS Staff in order to cost-effectively capture all the benefits that can be gleaned from such an experienced team of professionals.

B. Experience and Qualifications of Individual Consultants

RCG strives to produce the highest quality work product possible, one that accurately and concisely reflects the Company's current work environment, and provides clear direction for moving forward. Management audits, in general, and this audit in particular, are extremely complex with many interrelated and evolving parts. Managing an engagement of the magnitude of the NGrid audit takes a highly-experienced Engagement Director, Project Manager, and Lead Consultants, all of whom share a strong record of delivering quality, complex projects on schedule and on budget to the satisfaction of the client.

RCG's team has been specifically structured to meet the requirements of this audit in a manner that embraces audit goals for an evaluation of the nine audit elements

identified in the RFP. This team is made up of firms and individuals that are highly qualified to achieve the outcomes set forth in this proposal and possess the knowledge and tools required to support a superior outcome.

A summary of the experience and qualifications of all proposed consultants, including the specific areas to which each will be assigned, is provided below in alphabetical order as a quick overview. Detailed professional résumés are provided for each RCG team member in **Appendix B**.

- **Robert M. Grant**, President of RCG, will serve as Engagement Director for the RCG audit team. He also has been assigned Lead Consultant responsibility for the Corporate Mission, Objectives, Goals and Planning, and System Planning audit elements, and serves on RCG’s four-person Quality Review Committee for this audit. Over the past two decades, Bob has performed nine comprehensive management audits of utilities and ten company pre-audits, including two companies that have engaged him for pre-audit services multiple times. He is highly qualified to act in the role of Engagement Director for this audit and will lend his significant experience to all parties throughout the audit effort. Bob has helped a number of gas utilities improve their organizational responsiveness as well as their operational performance. These companies include; Southern Indiana Gas & Electric (now Vectren), National Fuel Gas, Central Hudson Gas & Electric, Washington Gas Light, Northwestern Public Service Company, Puget Sound Energy, Kansas Nebraska Natural Gas, SCANA, and South Jersey Gas.

Bob began his career with Boston Edison (NStar), where he gained valuable insights into utility operations, system planning, marketing, and the complex requirements of T&D assignments. Since leaving Boston Edison, Bob has managed the North American utility practice for two large consulting firms, and has served as an officer and/or senior executive consultant for KEMA, Inc., AT&T Solutions, Stone & Webster, and Booz Allen Hamilton.

- **Raymond G. Saleeby**, President & CEO of SCG, will serve as the Project Manager for the RCG audit team. He also has been assigned Co-Lead Consultant responsibility for the Corporate Mission, Objectives, Goals and Planning audit element and the Lead Consultant for Performance & Results Measurement element, and serves on RCG’s four-person Quality Review Committee for this audit. Since 1978, Raymond has conducted both commission-mandated and voluntary management audits at well over 40 gas and electric utilities and implemented the industry’s first constructive audit preparation program. His career spans over four decades of utility consulting, auditor training, utility executive development training, C-level executive management, and practice leadership. He was a principal at Booz-Allen & Hamilton, President of a Utility Practice at EDS, Managing Partner at AT&T Solutions and an EVP and BOD member at Stone & Webster and Group VP at Oracle. He was awarded “Top 50 people in America

in Energy IT.” He is a degreed and licensed Marine Engineer from SUNY Maritime College with an MBA in Finance from NYU Graduate School of Business.

- **Howard Solganick**, P.E., principal of Energy Tactics & Services, Inc., has been working in the utility industry for over 35 years. He will serve as the Lead Consultant responsible for the Load Forecasting and Supply Procurement elements of the audit scope and is a member of the four-person Quality Review Committee. During the past decade, Howard has participated as Project Manager or a Lead Consultant in conducting management or regulatory audits for gas, electric or combination utilities in Connecticut, Ohio, and Oregon, and provided pre-audit support for gas, electric or combination utilities in New York and Pennsylvania. He has also been a senior manager, officer, and/or senior management consultant for Atlantic Electric, Cogeneration Partners of America, and AT&T Solutions. His areas of expertise as a utility executive and consultant include: management audits, load forecasting, load research, supply procurement for utilities, independent power and commercial and industrial customers, rate design and cost allocation, and performance management and process improvement, among others.
- **Richard Kuczkowski**, PhD, proposed Editor and specialist on municipal matters, has 40 years of extensive, multifaceted experience in communications/corporate communications, a very broad range of editorial/writing assignments, training, and consulting in utility industry and environmental/low-level radioactive waste areas. Highlights and significant projects include: technical writing in medical research and other areas, many reports for utilities, and articles for Public Utilities Fortnightly; business seminar and continuing professional education program development in product tampering, utility issues, R&D management, and development and overall management of Stone & Webster’s 3-week Utility Management Development Program for promising utility managers; safety analysis reports, health physics reports, environmental impact statements, etc.; CEO speeches and reports on storm restoration and 9/11 terrorist recovery for New York City’s Metropolitan Transportation Authority, as well as public reports on a range of metropolitan transportation and related issues. He was most recently Associate Chief, Editorial Services at New York City’s Metropolitan Transportation Authority, and has been Assistant Vice President at Stone & Webster Management Consultants, and Senior Project Administrator for Dames & Moore. He has spoken on utility issues at North East Power Association’s Certificate Program, Iowa Utility Association Management Conference, training programs for General Electric’s and IBM’s utility practice staffs, the World Energy Council’s Regional Forum in Romania, and in a video produced to guide utilities in their preparations for management audits. He holds a PhD (with Distinction) and MA (with High Honors) in English from Columbia University, and BA (Summa Cum Laude in Cursu Honorum) in English from Fordham University, and is a member of Phi Beta Kappa.

- **Thomas Hurley**, Senior associate, is proposed for the role of Lead Consultant for both the Program and Project Planning and Management, and Work Management audit elements. Tom has over 25 years of consulting and management experience with a range of domestic and international utility companies and has completed many assignments as part of an RCG team. His areas of expertise include program and project management, business planning, performance metrics and measurement, organizational and process design, customer care, supply chain management, operational and process improvement, and outsourcing strategy and implementation support.

- **Edward T. Novak** is proposed for the role of Lead Consultant for Information Systems audit element. Ed specializes in helping companies achieve dramatically improved business process and information technology improvements. Ed has over 30 years of experience including positions as both a CIO and leader of a world-class IT strategy and business transformation consulting practice. He has presented in numerous industry events on the topic of IT strategy and has advised the senior leadership and boards of several leading corporations. Most recently, Ed served as Vice President and CIO for PPL Corporation, one of the ten largest domestic energy utility holding companies. Responsible for all IT activities globally, he was a member of the company's Senior Business Planning Committee. His focus was on establishing business-driven IT strategies, overhauling core business processes and systems, transforming IT management processes, and upgrading staff capabilities. He instilled a business focus to IT and dramatically turned around the reputation and credibility of the 500-person IT organization.

Prior to PPL, he was a lead Partner for Accenture where he helped lead the Strategic IT Effectiveness Practice, which helps top management in companies achieve greater business value from IT. Novak has consulted with numerous Fortune 100 companies and has worked extensively in both Europe and North America. Before joining Accenture, Novak had been a Partner with the Index Group and Computer Sciences Corporation where he specialized in business process reengineering and IT strategy. He has held various IT Executive positions in the pharmaceutical, chemical and financial services industries. Novak serves on the Alumni Board of Bucknell University and the Board of the Rodney Street Tennis and Tutoring Association. He holds a Master of Business Administration degree from the Harvard Business School and a bachelor's degree from Bucknell University.

- **Donna H. Mullinax**, CPA, CIA, CFP, proposed lead consultant for Capital and O&M Budgeting, is Vice President and Chief Financial Officer of Blue Ridge and has over thirty-one years of financial, management, and consulting experience. She has extensive experience in financial and management audits, affiliate transactions, and systems implementation; regulatory and litigation support; financial, administrative, and project management.

Mrs. Mullinax is a skilled financial and management auditor. As a CPA and CIA, she is knowledgeable about sound internal control processes and procedures and has made numerous recommendations in prior audits for modifications to provide reasonable assurance regarding the achievement of objectives related to (1) effectiveness and efficiency of operations; (2) reliability of financial records; and (3) compliance with laws and regulations. She has performed numerous financial and compliance audits for governmental entities, businesses, and public utilities. She has also conducted several detailed revenue requirements and rider compliance audits. She has analyzed financial information and budget projections, performed risk identification, and evaluated industry benchmarking. Her extensive professional experience allows her to effectively analyze and evaluate methods and procedures and to thoroughly document her findings. She has successfully testified to her audit findings.

- **Julius (Chip) Wright, Ph.D.**, Dr. Wright specializes in regulatory issues, business and strategic planning, and economic analysis. With a Ph.D. in Regulatory and Environmental economics, he served eight years as a Utility Commissioner in North Carolina and before that he was a fiber optics process engineer for Corning Glass. While with Corning he served three terms as a state senator in North Carolina. Dr. Wright's practice focuses on economic studies, utility strategy, and regulatory policy. Dr. Wright has led management related audits and investigations for both utilities and for public agencies including the California State Senate, the Georgia General Assembly, the North Carolina Public Staff, and the Attorney General of Illinois. He frequently works with Fortune 500 investor-owned electric and gas utilities in various roles including developing economic studies, long-term resource planning, strategic and economic issues, regulatory and management policies, and basic research on a variety of topics. In addition, Dr. Wright has presented numerous papers, reports and expert testimony on issues related to the energy industry, both gas and electric, including regulatory policy, electric price forecasting, generation dispatch modeling, avoided cost issues, stranded cost valuation and recovery, performance-based ratemaking, metering, rate-setting, and unbundling. In addition, he has been a Visiting Professor at the University of the Virgin Islands teaching both Micro and Macro economic courses. He received his Ph.D. and Masters from North Carolina State University in environmental and regulatory economics. He also has an MBA in finance and a BS in Chemistry.
- **George Fandos**, proposed senior associate, brings over 30 years' experience as an executive-level management consultant and service as an operational executive. His passion and focus have always been on the customer; from marketing to selling to service and support, he has built and consulted with organizations whose aim is to communicate effectively and raise or maintain high levels of satisfaction. He has helped utility customer service and corporate communications organizations define long-range strategies, create messaging goals, and develop comprehensive metrics and processes to track progress toward those. Consulting projects undertaken for his clients have focused on design and deployment of centralized customer service

operations; process and organizational change management; customer experience design; development of multi-channel customer strategies; and emergency assessments of customer facing functions. Mr. Fandos has helped utility organizations better understand customer expectations and use this insight to design both employee experiences and the experiences customers have through outage communications, the use/pay experience and service initiation. He has worked with utility companies in the development of a channel strategy that optimizes both customer interactions and shareholder returns.

- **Charlie Fijnvandraat**, P.E., proposed senior consultant, has been working in the utility industry for over 25 years as an engineer, supervisor, and consultant; he also served two utilities (Northeast Utilities and NSTAR) in these roles. Charlie will support a number of elements with his keen insights into utility operations and crew management. His management consulting experience includes work with SCE, PacifiCorp, AEP, Con Edison, Exelon, Entergy, PPL, and others. His direct distribution management experience (further detailed in Appendix B) includes consulting experience as well as direct electric utility management in operations and engineering including maintenance, project management, performance, planning, design, and FERC/NERC reliability compliance. He has also been involved in over 50 emergency events, including leading field crews in storm restoration efforts and various back-office-support roles. As a consultant, he has assisted clients to optimize restoration processes, rank T&D budgets, create reliability standards and metrics, and increase field force utilization and performance. Recent consulting engagements involve supporting regulatory reviews of capital trackers for natural gas utilities, leveraging his experience of the planning process, scheduling, and measuring the efficiency of field operations in removing/replacing underground assets.
- **Drew McCrossan**, proposed senior consultant, is an independent consultant who leverages over 13 years of exceptional experience as a senior officer, manager, and leader, in both the government and private sectors. His experience as a senior Officer in the U.S. Navy's Aviation community included assignments as a U.S. European Command's Lead Interagency Military Strategic Planner, Squadron Operations Officer, Department Head, and Helicopter Aircraft Commander. He has been responsible for policy development, organizational and operational planning, operations execution, strategic direction, and program management implementation. He was the Operations Officer for a U.S. Navy helicopter squadron during the squadron's support of both the Indonesian Tsunami and Hurricane Katrina. He has extensive experience leading the planning, staffing, and operational support for rescue operations, humanitarian relief, and disaster response. He now works with global senior managers in a variety of industries to help them assess business continuity and disaster recovery plans, to assist in the development of risk mitigation strategies, and to facilitate disaster recovery exercises. He holds an MBA from NYU's Stern School of Business with concentrations in Strategy, Change Management, and Leadership.

- **W. Edward (Ed) Titus**, proposed senior consultant, has over 30 years' experience with both gas and electric utility companies spanning a wide variety of management positions and consulting engagements. He has extensive experience in Supply Chain, Work Management, Asset Management, Project Management, and Quality Management for utility company applications. Most recently he led a team at Piedmont Natural Gas Co (Charlotte, NC) to plan the integration of a new asset management system into their organization to enhance pipeline safety and reliability.

He has over 30 years experience conducting organization assessments to identify deficiencies and opportunities for improving internal controls and overall management of organizational performance. He has helped organizations define long-range strategies, set goals, and develop comprehensive metrics to track progress toward those goals in addition to metrics to monitor compliance with regulations, directives, and internal policies. He has worked with several large utility companies to transform their supply chain organizations from functional focused suppliers of equipment, material, and services to ones with broad authority to develop oversight and governance of all contracts and corporate spend.

C. Experience and Qualifications of the Partner Firms

As discussed earlier in Chapter V, RCG has engaged a world-class partner who is dedicated to delivering a high-quality product that will encourage NGrid to better position itself for the future and for the benefit of the Company's New York customers. RCG's team of professional consulting firms is pleased to be able to collaborate once again – this time to meet the objectives of the NGrid management audit RFP, and those of the Commission and DPS Staff on behalf of the consumers.

RCG team firms are also proud of their independent and collective reputations for professionalism and excellence, and on our joint and practiced ability to deliver on the promises we make to our clients. A description of each of the two partner firms, and our combined statement of conflict and ethical conduct, are presented below.

D. River Consulting Group, Inc.

RCG's principals assist electric, gas and water companies to address the challenges of operating a utility business in today's competitive environment. Our principals cover a broad spectrum that ranges from strategic planning to tactical operations with a clear focus on preparing for tomorrow. Over the years, RCG principals have helped clients identify and eliminate waste in their organizations, and prepare for the future by taking advantage of technological enhancements to their physical T&D systems and IT solutions. Recent work preparing a storm restoration

analysis has aided both the utilities and their regulators to better understand emergency restoration planning and execution during major system outage events.

The company, incorporated in the State of Georgia, was founded in 1999 by the firm's principal consultant, Bob Grant. Since that time, RCG has provided a broad range of consulting services to over 100 utilities, commissions, and municipal utilities. RCG's consultants have combined work experience of over a century assisting regulated electric utilities, and state and municipal government agencies to better understand the complexities of the changing utility landscape and capture the efficiencies that allow our utility clients to remain competitive. Today, RCG focuses primarily on:

- **Management Audits** - Comprehensive audits of electric and water utilities designed to improve the overall operational efficiency and effectiveness of the business. These evaluations included in-depth reviews of areas such as executive management, financial management, customer services, engineering, system planning, construction, T&D operations, and supply chain and support services.
- **Work Force Management** - Designed to improve the effectiveness, safety and efficiency of the work force, RCG's approach looks not only at supervisory tools, policies, processes, performance reporting, training, and systems to identify cost reductions, but also at the impact of new technology on how the crafts perform their routine and diagnostic work.
- **Planning and Design** - RCG is guiding companies through a process of streamlining their planning process -- the core of a successful capital program - - by ensuring that the right business functions are integrated into the process at an early enough stage to accurately plan and control costs. We also work to help our clients enhance the prioritization process to allow all projects an equal and fair level of attention during the selection process. We are also promoting the use of equipment and construction standards to facilitate improved cost control, scheduling, and construction.
- **Construction Management** - RCG identifies proven methods for controlling construction costs and schedules through a series of tools that include incentivized contracting, enhanced project management, focused supervision, and sound industrial engineering practices designed to identify and eliminate waste.
- **Supply Chain Management** – RCG helps clients lower inventory costs while improving material availability. Our supplier valuation services (SVS) helps clients control costs on major equipment purchases while addressing quality control issues throughout the suppliers' value chain.

- **Operations Management** – Aside from the traditional operating improvement activities embraced by many utilities, RCG focuses on helping clients to understand and plan for the impacts of new technology on their T&D systems and resource requirements.

Representative RCG engagements include:

- **Kansas–Nebraska Natural Gas (KN)** – Confidential (>10 years), Conducted a full-scale management audit of KN. Bob was responsible for evaluating gas pipeline and distribution operations, and engineering.
- **Louisville Gas & Electric Company (LG&E)** – Public- (>10 years), conducted a full-scale management audit of LG&E. Bob was responsible for evaluating distribution operations, engineering, capital planning, and marketing functions.
- **Orange & Rockland Utilities (O&R)** – Public (>10 years), Conducted a full-scale management audit of O&R for the NJ BPU. Bob was responsible for evaluating T&D operations, engineering, capital planning, generation and media relations functions.
- **Groton Department of Public Utilities (GPU)** - Confidential (>10 years), conducted a full-scale management audit of GPU, which led to the re-organization of the Company, staff downsizing by thirty percent, significant process improvements across the business, and identified the need for a strategic plan.
- **Centerpoint Energy, [gas and electric] (CNP)** – (>5 years) Led an in-depth review of CNP’s post-Ike restoration activities. As a result of our review, we made a number of recommendations to improve emergency restoration planning and processes. While the Company did an outstanding job of restoring 1.9-million of its 2.1-million customer outages in 18 days, there were a number of suggestions that could aid the restoration process. In addition, the RCG team evaluated CNP’s distribution design and maintenance practices to confirm they complied with generally accepted industry practices. Our team prepared formal testimony that was included in a commission hearing. Neither our report nor our testimony was challenged.
- **Northwestern Public Service Company** - (>5 years) Led their strategic planning effort for two years and reconfigured their gas operations and customer service function to reduce cost and increase overall service levels. The results were present to the BOD and were accepted.

- **AmerenUE/Missouri Commission** – (>5 years) Ameren experienced major back-to-back wind events that required the utility to pursue restoration activities. As a result of an RCG review, we made a number of recommendations to improve emergency restoration planning and processes. The RCG team also evaluated Ameren’s distribution design and maintenance practices to confirm they complied with generally accepted industry practices. As part of this review, the Missouri commission’s staff participated in an ongoing progress review of the project and commended the work of the RCG team. After the final report was submitted to the commission and its staff, RCG provided an oral review of the conclusions and recommendations to the commissioners and answered questions.
- **Bonneville Power Administration (BPA)** – (<10 years) RCG led an in-depth review of BPA’s transmission plan-design-build process. The net result was a \$47-million reduction in overall costs. It led to the formation of a standards group and the complete redesign of BPA’s planning function. Further, the engineering function was redesigned to produce higher quality designs using more standard equipment and designs.
- **Major Midwestern combination gas and electric utility** –(>10 years) RCG led an evaluation of a major utility’s \$800-million environmental generation construction program at six of its coal-fired plants. After an extensive review of practices, RCG made a number of recommendations (fully agreed to and adopted by management) that, when taken together, produced a savings of \$81-million. Recommendations included enhanced contracting tools, focused project management with strong feedback processes, enhanced supervision, and the application of industrial engineering techniques to eliminate waste and improve safety.

Management audits conducted by RCG principals include:

- Kansas –Nebraska Natural Gas – Confidential
- Louisville Gas & Electric Company - Public
- Bermuda Electric Light Company, Ltd. - Confidential
- Public Utility District No. 1 of Chelan County - Confidential
- Groton Department of Public Utilities - Confidential
- Electricity Authority of Cypress - Confidential
- Central Electric Generating Board, Great Britain - Confidential
- Orange & Rockland Utilities – Public

References

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| COMPANY NAME: | BONNIEVILLE POWER ADMINISTRATION |
| Contact Name: | Jim Hallar |
| Contact Title: | Manager Asset Management |
| Phone Number: | Work number: (360) 418-8810 |
| Email Address: | |
| Start/Completion Date: | May 2005 - August 2006 |
| Project Description: | Re-engineer the Plan - Design - Build process at BPA. In the process of managing this engagement, managed a combined team of consultants and client managers. The results led to \$47 Million in annual and one time savings by completely redesigning the system planning, engineering design, supply chain interaction and construction processes. |
| COMPANY NAME: | CENTERPOINT ENERGY |
| Contact Name: | John Hudson, Terry Finley (retired) |
| Contact Title: | Administrator Regulatory Activities & Compliance, Vice President Distribution Engineering & Operations Services |
| Phone Number: | (713) 207-5285, (936) 597-8808 |
| Email Address: | john.hudson@centerpointenergy.com terry.finley@hotmail.com |
| Start/Completion Date: | October 2008 - July 2009 |
| Project Description: | Performed a comprehensive management and technical review of the Company's post-Ike hurricane restoration efforts. Ike had caused 98% of the Company's customers to be without power for up to 18 days. The final report was used as evidence in the Commission approval of \$650M in capital expense recovery. As part of the work we prepared formal testimony to be submitted on behalf of the client. In addition, the report addressed design and maintenance standards. As a direct result of the review the company redesigned its emergency restoration plan incorporating all the recommendation made in the review. |
| COMPANY NAME: | CITY PUBLIC SERVICE OF SAN ANTONIO |

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| Contact Name: | Keith Jordan |
| Contact Title: | Manager of Distribution Operations |
| Phone Number: | Work number: (210) 353-3414 |
| Email Address: | kajordan@cps-ems.com |
| Start/Completion Date: | May 2008 - August 2009 |
| Project Description: | Conducted a management review of their current ERP process and related documentation. Developed the strategic emergency restoration plan – Prepared the strategic ERP and provided a template for the tactical plans. The plan defined the key roles and responsibilities for the ERP organization. Developed the damage assessment process and data collection tools. |

E. Raymond G. Saleeby, L.L.C. (SCG)

Raymond G. Saleeby, L.L.C or SCG was formed in July 2001 as a professional management consulting and management auditing firm focusing on the utility. It is a NJ Certified SBE, registered and having its principal place of business in the State of New Jersey. In addition, it possesses a valid Business Registration Certificate (BRC) issued by the New Jersey's Department of Treasury, Division of Revenue. The Chairman of SCG is Catherine Saleeby. Raymond G. Saleeby is the President & CEO and its principal consultant. Raymond Saleeby and Robert Grant (SCG) have a strong working relationship, working closely together since the mid-1970s at some of the largest qualified utility management consulting and audit firms in the United States.

With a history of engineering, gas utility consulting, strategic planning, construction evaluations & management, plant operations, executive management, and management consulting spanning 45 years, Raymond Saleeby has led or participated in scores of utility management audits, organizational studies, strategic planning efforts and a broad range high-impact, well known Board-level consulting efforts. For example:

- He conducted scores of Management Audits-both voluntary and commission ordered, gas and electric utilities and fossil and nuclear facilities including at:
 - Consumers Gas - Public
 - TVA Public
 - Philadelphia Gas Works - Public
 - Long Island Lighting Company - Public

- Consumer's Power Private
 - PP&L, multiple audits throughout the firm - Private
 - OPPD Private
 - Groton Utilities - Public
 - CG&E – Private and others
-
- He developed the first incentive compensation system used by a utility company 32 years ago. That system is still in place as designed today.
 - He participated in effort which resulted in the breakup of AT&T.
 - He led Strategic Planning efforts at more than 10 utilities throughout the world
 - He served as the main advisor to Saudi Arabia King & Royal Commission for the utility infrastructure plan and construction of two cities, Jubail, and Yanbu.
 - He led the management and technical audit of Union Carbide following their environmental leak in Bhopal and Institute, West Virginia.
 - He was the officer in charge to design the reorganization and deregulation of the utility industry for two entire countries, New Zealand, and Great Britain.
 - He produced a video sold through the utility industry entitled: "Management Audits: How to Conduct and Prepare for a Management Audit."
 - For a large utility holding company and its three operating companies, he designed, managed, and implemented a benchmarking/best practices effort which was trademarked as the PEER program and used at several other utility companies. The program initially focused on generating facility operations at six client plants, included the visit and analysis of more than 10 best practice plants, and resulted in the implementation of 90% of the recommendations. The effort had a payback as high as 120:1.
 - He served as the Senior Officer-in-Charge and the driver for, and a lead participant in, the analysis and formation of new utility customer service, energy management, telecom, and other products and services ventures. These include ventures involving some of the largest electric and gas utilities in the U.S.
 - He testified, assisted with testimony, or provided analysis and opinions of several major events including his pre-incident analysis of Three Mile Island, his post-incident analysis of Union Carbide's management and environmental and safety programs following the leak in Institute, West Virginia, the privatization

of the Central Electricity Generating Board (CEGB) in England, and the breakup of AT&T. He has run testimony and interview training courses at several companies throughout the United States.

- He was responsible for the development of several new initiatives addressing several clients' significant responses to the evolving deregulated utility business. Issues ranged from the establishment of a national energy brand, the design of utility one-stop concepts, the move to customer value management, the development of electronic commerce and internet/intranet strategies, the "smart box on the side of the house," retail energy trading and call center customer care, futurizing for growth, and the structure of new paradigm-breaking business ventures. He was the responsible for AT&T's involvement with EnergyOne and AT&T's BMD utility industry issue leadership role.
- He ran the S&W Utility Management Development Program for gas and electric utility executives for 10 years and served as the program's key lecturer including topics covering strategic planning, project/construction management, decision-making, re-engineering, and human resource management.

References

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| COMPANY NAME: | BROOKLYN UNION GAS |
| Contact Name: | Bob Catell |
| Contact Title: | President (Retired) |
| Phone Number: | (631) 632-6310 |
| Email Address: | rcatell@notes.cc.sunysb.edu |
| Start/Completion Date: | 2/78 TO 1/79 |
| Project Description: | Commission mandated management audit |
| COMPANY NAME: | ENERGY NEW ENGLAND |
| Contact Name: | John Tziorangas |
| Contact Title: | President/Chief Executive Officer |
| Phone Number: | (508) 698-1200 |
| Email Address: | jtziorangas@energynewengland.com |
| Start/Completion Date: | 2/2001 To Present |
| Project Description: | Board member for this company |

F. Conflicts of Interest and Ethical Conduct

RCG does not have a conflict of interest or the appearance of a conflict of interest with respect to performing a management audit of NGrid. RCG, its principals, partners, or subcontractors, has not previously performed any work for NGrid or its affiliates in the last 15 years, and does not have any existing contracts or agreements with them.

RCG, its principals, partners, or subcontractors have not performed work for other tangential organizations of NGrid, such as the Energy Association of New York State during the five-year period preceding the date of this proposal. In addition, RCG, its partners and subcontractors have no contracts with organizations representing the Company's workforce.

It is the policy of RCG, its partners, and subcontractors to adhere to the highest business, professional, and ethical standards. Further, RCG, its partners, and subcontractors shall not offer any gift, favor, or gratuity of any value, or make any offer of employment to any officer or employee of NGrid, or to any Commissioner or DPS Staff member either during the audit or within two years following its completion. We understand that violation of this restriction may result in immediate termination of services, and may ban RCG, its principals, partners, or subcontractors from future consideration by the Commission.

Finally, RCG, on behalf of its partners and any subcontractors engaged by it on this project, will enter into a three-party contract (RCG, NGrid, and the DPS). RCG, its partners, and subcontractors agree that neither it nor any of its affiliates, or any of its principals, or employees, will perform any work for NGrid or its affiliates during the course of the audit, and for two years after completion of the audit, without the written authorization of the Commission.

G. Sample Audit Work Product

RCG will provide a document entitled CenterPoint Energy Storm Adequacy Review, dated March 25, 2009 (produced under the KEMA banner and submitted as part of Commission testimony in a cost recovery proceeding) as a sample work product. The work was designed, sold and led by RCG's proposed Engagement Director Bob Grant. He was responsible for all aspects of the engagement from project planning analyses to report design and presentation. Our proposed Lead Consultant, Howard Solganick, participated in the review prepared the testimony. Because of the size of this document, however, we are emailing it to the DPS Staff Program Manager under separate cover.

The general format of the report was dictated by KEMA standards. RCG's standards will meet or exceed those of KEMA. It should also be noted here that Bob Grant

worked on the completion of this audit with Howard Solganick. As a function of this engagement, Bob developed KEMA's "no-surprises approach," which allowed the client to adjust to and collaborate through a series of frank and open discussions during the development of the recommendations. As a result, significant changes were made to the emergency restoration plan and the overall management process.

APPENDIX A

INITIAL DATA REQUEST

INITIAL DATA REQUEST

| Data Request Number | Data Request Description |
|---------------------|--|
| | General Background |
| 1 | Provide list of NGrid USA Gas office locations including; headquarters, service centers, control centers, call centers. |
| 2 | Provide all audited financial reports for past five years (2007-2012) NGrid. |
| 3 | Provide listing of the Internal Audit plan and actual audits completed for 2007 through 2012. |
| 4 | Provide External Auditor's communications for 2007 through 2012. |
| 5 | Provide copies of NGrid's work stoppage and business continuity emergency plans (both strategic and tactical). |
| | Element No. 1: Corporate Mission, Objectives, Goals & Planning |
| 6 | Provide most recent Strategic Plan for NGrid USA and NGrid New York Gas. |
| 7 | Provide a narrative describing in detail the strategic planning process and committee charter. |
| 8 | Provide strategic plan progress reports and committee minutes for the last three years (2008-2011). |
| 9 | Provide list of the strategic planning committee members. |
| 10 | Provide list of members of the BOD for NGrid and NGrid USA including board committee assignments, contact information and capsule resumes. |
| 11 | Provide detailed organization charts for NGrid, NGrid USA and all subsidiary companies. |
| 12 | Provide list and description of major NGrid organizational changes in the since 1/1/2007. |
| 13 | Provide list of key NGrid plc and NGrid USA executives responsible for operations with contact information and capsule resumes. |
| 14 | Provide list of key management personnel for NGrid Gas and its NYS operations with contact information and capsule resumes. |
| 15 | Provide mission and objectives for each department or division NGrid Gas. |
| 16 | Provide the mission statement for the strategic planning function. |

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| 17 | Provide the Key Performance Indicators (KPI) and goals (and results) for the Strategic Planning department/function. |
| 18 | Provide the budget versus actual for the Strategic Planning department/function for the years 2007 through 2012. |
| 19 | Provide a history (manning table) for the NGrid's Strategic Planning department/function for 2007 through 2013, if none, NGrid USA. |
| 20 | Provide job descriptions for all employees involved in strategic planning. |
| 21 | Company and affiliate organizational structure (to include NGrid USA charging business units, if any) |
| 22 | Internal audit reports and annual audit plans |
| 23 | SOX documentation of the processes by which expenses associated with affiliate transactions are identified, accumulated, and assigned |
| Element No. 2: Load Forecasting | |
| 24 | Provide a narrative that describes the gas supply and peak day forecasting process and any changes made since 1/1/2007. Include process flow diagrams and organizations involved. |
| 25 | Provide a narrative that describes any pipeline and/or storage forecast requirements for gas supply and peak day forecast. |
| 26 | Provide a narrative describing how non-traditional forecasting techniques such as sensitivity studies, para-analytics, environmental scanning and emerging trends are considered in the gas forecasting process. |
| 27 | Provide a narrative that describes all models used for gas supply and peak day forecasting and any changes made since 1/1/2007. |
| 28 | Provide a narrative that describes all data/information inputs used in the gas forecasting process. |
| 29 | Provide a narrative that describes how customer choice and fuel switching is estimated and integrated into the gas forecasting process. |
| 30 | Provide a narrative that describes customer research such as load research and/or appliance saturation for each gas customer class. |
| 31 | Provide a narrative that describes how energy efficiency and demand measures are integrated within the gas supply and peak day forecast. |
| 32 | Provide a narrative that describes how distributed generation and other customer measures are integrated within the gas supply and peak day forecast. |
| 33 | Provide a narrative that describes the gas demand side management programs (including distributed generation) since 1/1/2007. |
| 34 | Provide a narrative that describes the gas energy efficiency programs since |

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| | 1/1/2007. |
| 35 | Provide a narrative that describes the review and approval process (including titles or positions involved) for gas supply and peak day forecasting and any changes made since 1/1/2007. |
| 36 | Provide a narrative that describes all statistical testing and validation of the models used for gas supply and peak day forecasting. |
| 37 | Provide a narrative that describes any backcasting or other validation of the models used for gas supply and peak day forecast. |
| 38 | Provide a narrative that describes the weather normalization process for the gas supply and peak day forecast. |
| 39 | Provide a monthly comparison by forecast class (rate, customer, region or other) of the gas supply and peak day forecast to actual. This should be provided for each forecast starting 1/1/2007. |
| 40 | Provide the mission statement for the gas forecasting function. |
| 41 | Provide the KPI and goals (and results) for the Gas Forecasting department/function. |
| 42 | Provide the budget versus actual for the Gas Forecasting department/function for the years 2007 through 2012. |
| 43 | Provide a history (manning table) for the Gas Forecasting department/function for 2007 through 2012. |
| 44 | Provide job descriptions for all employees involved in gas supply and peak day forecast. |
| | Element No. 3: Supply Procurement |
| 45 | Provide a narrative that describes the gas supply procurement process and any changes made since 1/1/2007. Include process flow diagrams and organizations involved. |
| 46 | Provide a narrative that describes the gas supply procurement environment which impacts NGrid operating in New York. Specifically address Federal and State regulatory (utility, environmental, FERC, etc) constricts as well as physical aspects. |
| 47 | Provide a narrative that describes the Company involvement and interactions with FERC, AGA, and Interstate pipeline companies (committee memberships etc.). |
| 48 | Provide the Company Risk policy governing gas supply procurement. Describe any changes since 1/1/2007. |
| 49 | Provide a narrative that describes all data/information inputs used in the gas supply procurement process. |
| 50 | Provide a narrative that describes the current and expected impact of energy |

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| | efficiency and demand measures on gas supply procurement. |
| 51 | Provide a narrative that describes the current and expected impact of distributed generation and other customer measures including demand side management on gas supply procurement. |
| 52 | Provide a narrative that describes the gas procurement process for day ahead and current day. |
| 53 | Provide a narrative that describes the review and approval process (including titles or positions involved) for gas supply procurement and any changes made since 1/1/2007. |
| 54 | Provide a narrative that describes the process by which customers may migrate from and or return to NGrid as their provider of natural gas y including the current and expected impact on supply procurement. |
| 55 | Provide the annual number (2009-2012) of gas customers, their load and demand by class migrating to or from Company natural gas supply in Excel. |
| 56 | Provide gas customer counts and sales (by month) from 1/1/2007 to present and as forecast through 2015 in Excel. |
| 57 | Provide a description of any gas supply procurement functions performed by outside contractors or firms. Note any changes since 1/1/2007. |
| 58 | Provide the Company gas supply hedging guidelines and regulatory requirements. Note any changes since 1/1/2007. |
| 59 | Provide monthly average gas hedge cost vs. average NYMEX or period 2007 to present. If the Company uses a different index for comparison please provide that also. |
| 60 | Provide list of all gas hedge positions, including date executed, period covered, supply quantity and cost for period 1/1/2007 through current. |
| 61 | Provide any benchmarking or gas supply procurement comparisons performed from 1/1/2007 through present. |
| 62 | Provide Service territory maps for each Utility showing major gas supply points and facilities. |
| 63 | Provide a list of gas pipeline, and storage contracts including volumes, delivery point, rates and contract expiration dates. Provide 2007 through 2013 history of actual annual volumes and cost paid for each contract with fixed and variable costs identified. |
| 64 | Provide a list of gas Operational Flow Orders and or Curtailments issued to each Utility from 2007 thought 2013. Provide date, cause and duration. |
| 65 | Provide a list of gas Operational Flow Orders, Curtailments or supply interruptions, issued by the Company to gas customers from 2007 thought 2013. Provide date, cause and duration. |

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| 66 | Provide 2007 through 2013 monthly history of gas storage utilization (injection and withdrawal) by contract in Excel. |
| 67 | Provide a list of all pipeline open season notices (2007 through current) and describe the Company's evaluation, response and participation in each. |
| 68 | Provide details of any gas pipeline penalties assessed. |
| 69 | Provide the mission statement for the gas supply procurement function. |
| 70 | Provide the KPI and goals (and results) for the Gas Supply Procurement department/function. |
| 71 | Provide the budget versus actual for the Gas Supply Procurement department/function for the years 2007 through 2013. |
| 72 | Provide a history (manning table) for the Gas Supply Procurement department/function for 2007 through 2013. |
| 73 | Provide job descriptions for all employees involved in gas supply procurement. |
| | Element No. 4: System Planning |
| 74 | Provide five years (2007-2013) of systems planning studies for the gas business and provide a narrative that describes how they have been integrated with the capital plans. |
| 75 | Provide a narrative that describes the asset management strategy and process for NY gas properties. |
| 76 | Provide three years (2009-2012) of gas asset management plans and results. |
| 77 | Provide a narrative that describes the gas equipment repair-replace decision process. |
| 78 | Provide a narrative that describes NGrid's policy, plan and process for gas system knowledge management. |

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| 79 | Provide 5-year (2007-2013) history of any gas pipeline operating penalties assessed. |
| 80 | Provide 5-year (2007-2013) history of filed pipeline incident or safety related condition reports. |
| 81 | Provide 5-year (2007-2013) history of Safety Performance Measures including infrastructure enhancement, leak management, damage prevention, and emergency response. |
| 82 | Provide Service territory maps for NGrid's noting the NY area and showing major facilities. |
| 83 | Provide the mission statement for the System Planning function. |

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| 84 | Provide the KPI and goals (and results) for the System Planning department/function. |
| 85 | Provide the budget versus actual for the System Planning department/function for the years 2007 through 2013. |
| 86 | Provide a historical manning table for the System Planning department/function for 2007 through 2013. |
| 87 | Provide job descriptions for all employees involved in system planning. |
| Element No. 5: Capital and O&M Budgeting | |
| 88 | Provide five-year (2007-2013) history of NGrid annual capital budgets w/assumptions (in Excel). |
| 89 | Provide five-year (2007-2013) history of NGrid annual O&M budgets w/assumptions (in Excel). |
| 90 | Provide a narrative that describes NGrid USA's and NGrid's Gas capital planning processes for the near- and long-terms. |
| 91 | Provide a narrative that describes NGrid USA's and NGrid's Gas O&M budgeting process. |
| 92 | Provide copies of the information provided to each level within the organization used in the development of capital budgets for 2012 and 2013. |
| 93 | Provide copies of the information provided to each level within the organization used in the development of O&M budgets for 2012 and 2013. |
| 94 | Provide a narrative on how constraints related to allowed revenue/rates and financing opportunities/constraints are considered in developing budget levels and priorities. |
| 95 | Provide a narrative on how rate equity across the three New York territories is considered during the budget process. |
| 96 | Provide a narrative on how new capital construction related O&M is integrated into the O&M budget process. |
| 97 | Provide copies of the information provided to the Board regarding capital budget development and approval for 2012 and 2013. |
| 98 | Provide copies of the information provided to the Board regarding O&M budget development and approval for 2012 and 2013. |
| 99 | Provide copies of Board approvals of the last five years (2007-2013) capital expenditures. |
| 100 | Provide copies of Board approvals of the last five years (2007-2013) O&M expenditures. |
| 101 | Provide five-year (2007-2013) history of NGrid annual capital actuals w/ variance & description (in Excel). |

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| 102 | Provide five-year (2007-2013) history of NGrid annual O&M actuals w/ variance & description (in Excel). |
| 103 | Provide a narrative that describes the capital budgeting variance management process. |
| 104 | Provide a three-year (2007-2013) history of capital budgeting variance driven corrective actions. |
| 105 | Provide a narrative that describes the O&M budgeting variance management process. |
| 106 | Provide a three-year (2009-2013) history of O&M budgeting variance driven corrective actions. |
| 107 | Provide description of financial planning models currently used. |
| 108 | Provide list of capital planning process participants and a description of their role and the "committee's" charter. |
| 109 | Provide three-year (2009-2013) history of the capital planning "committee" minutes. |
| 110 | Provide list of capital projects by year, value (original estimate and as built cost) and whether contracted or built with Company labor for 2007 through 2013 above \$100,000. |
| 111 | Please provide a narrative that describes the roles and relationships between regional and centralized planning and budgeting functions |
| 112 | Provide a narrative that describes the capital project management process. |
| 113 | Provide the mission statement for the capital budgeting department/function. |
| 114 | Provide the mission statement for the O&M budgeting department/function. |
| 115 | Provide the KPI and goals (and results) for the capital Budgeting department/function. |
| 116 | Provide the KPI and goals (and results) for the O&M Budgeting department/function. |
| 117 | Please provide any benchmarking studies of capital and O&M budgeting practices and results with industry and other New York utility performance. |
| 118 | Provide a historical manning table for the capital Budgeting department/function for 2007through 2013. |
| 119 | Provide a historical manning table for the O&M Budgeting department/function for 2006 through 2011. |
| 120 | Provide job descriptions for all employees involved in capital budgeting. |
| 121 | Provide job descriptions for all employees involved in O&M budgeting. |
| 122 | Provide a three year history (2009-2012) of total spend by supplier. |
| 123 | Provide a list of orders which were placed under the stipulated lead time for the last three years (2009-2012). |

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| 124 | Provide total value by year for the last three years (2009-2012) for expedited orders. |
| 125 | Provide a list of inventory turns by spend category. |
| | Element No. 6: Program and Project Planning and Management |
| 126 | Provide a narrative that describes NGrid's management process for outsourced engineering and build services. |
| 127 | Provide a narrative that describes the decision-making process for determining outsourced work. |
| 128 | Provide a narrative that describes the capital project close-out process. |
| 129 | Provide list of all gas O&M programs by Company for the last three years (2008-2010) with annual budget and spend trimming (Gas leak survey, gas emergency response and repair, cathodic protection, regulator and gate station,) and whether contracted or own labor. |
| 130 | Provide a narrative that describes all gas O&M quality control or assurance programs. |
| 131 | Provide five-year (2005-2012) history and forecast (2013-2018) of gas main replacement projects cast iron and other with budgeted and actuals cost in Excel. Provide projection of remaining cast iron pipe, by size, after forecast period. |
| 132 | Provide the mission statement for the program and project planning and management function. |
| 133 | Provide the KPI and goals (and results) for the Program and Project Planning and Management department/function. |
| 134 | Provide the budget versus actual for the Program and Project Planning and Management department/function for the years 2007 through 2012. |
| 135 | Provide a historical manning table for the Program and Project Planning and Management department/function for 2007 through 2012. |
| 136 | Provide job descriptions for all employees involved in program and project planning and management. |
| | Element No. 7: Work Force Management |
| 137 | Provide a narrative that describes the O&M contracting and contractor management process. |
| 138 | Provide a narrative that describes the work force management process for both capital and O&M work. |
| 139 | Provide a narrative that describes the reporting requirements for work force management. |

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| 140 | Provide one year's (2012) copies of all work force management reports. |
| 141 | Provide a narrative that describes how work force management is integrated with the overall performance management process. |
| 142 | Provide list the recipients of the work force management reports. |
| 145 | Provide a list of all organizations with "field crews" assigned. Include the number of employees in each organization. Provide current payroll budget (both capital and O&M) for each organization. |
| 146 | Provide list of all information systems used for work force management. Provide contact information for a person responsible for administration of each system. |
| 147 | Provide a service territory map with the location of each facility where "field crews" are assigned. |
| 148 | Provide a narrative description of all work shifts by department or entity (day, evening, graveyard, 24 X 7 coverage, and weekend coverage) and whether they vary by facility. |
| 149 | Provide the mission statement for the work force management function. |
| 150 | Provide the KPI and goals (and results) for the work force management department/function. |
| 151 | Provide the budget versus actual for the work force management department/function for the years 2007 through 2012. |
| 152 | Provide a history (manning table) for the work force management department/function for 2007 through 2013. |
| 153 | Provide job descriptions for all employees involved in work force management budgeting. |
| | Element No. 8: Performance and Results Measurement |
| 154 | Provide a narrative that describes the overall corporate performance management process as it pertains to the audit elements. |
| 155 | Provide list of Key Performance Indicators (KPIs) for NGrid and each department. |
| 156 | Provide the trend in KPI targets over five years (2007 -2012) in Excel. |
| 157 | Provide five-year (2007 -2012) history of KPIs (actual versus target) in Excel for each entity. |
| 158 | Provide list and description of information and/or support systems used in conjunction with performance management process. |

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| 159 | Provide three-years (2009 – 2012) sample of other management performance reports. |
| 160 | Provide KPI variance reports submitted (2007 through 2012). |
| 161 | Provide a narrative description of the process improvement initiatives over the last five years (2007-2012). |
| 162 | Provide five-year (2007-2012) history of gas leak management by types 1, 2, 3 by main and service. |
| 163 | Provide copy of last 5 years (2007-2012) of Federal DOT annual gas transmission and distribution reports and pipeline integrity related reports. |
| 164 | Provide the mission statement for the performance and results measurement function. |
| 165 | Provide the KPI and goals (and results) for the Performance and Results Measurement department/function. |
| 166 | Provide the budget versus actual for the Work Force Management department/function for the years 2007 through 2012. |
| 167 | Provide a historical manning table for the Work Force Management department/function for 2007 through 2012. |
| 168 | Provide job descriptions for all employees involved in performance and results measurement. |
| | Element No. 9: Information Systems |
| 169 | Provide overall IS strategy or plan for next 3 years. This could include major business imperatives, major IS initiatives linked to business imperatives, IS investment levels, and staffing |
| 170 | Provide overall, high level application architecture of key systems – with emphasis on customer information and billing but also including all major business systems |
| 171 | Provide summary of key goals and metrics. |
| 172 | Provide historical and future budget breakdown. (Past 2 years and next 2 years). Budget should be broken out by non-discretionary (support, operations, maintenance) versus discretionary (new projects). |
| 173 | Provide detailed breakout of all costs for customer information and billing systems. Identify how these costs relate to overall IS costs |
| 174 | Provide high level view of IS staffing levels, including all outsourced or contractor components. |
| 175 | Provide narrative around selected management processes – including joint IS/business planning, IS opportunity identification and prioritization, initiative |

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| | approval and funding, systems development methodology/approach, project planning, etc. |
| 176 | Provide results of any internal or external customer surveys regarding IS “satisfaction”. Provide any prior benchmarking results. |
| 177 | Provide narrative around any major issues or “burning” challenges you feel we need to consider (e.g. results from ERP implementation, critical projects, threats, concerns, etc.) |
| | Miscellaneous |
| 178 | Provide a narrative history of any major personnel and/or staffing initiatives for NGrid. |
| 179 | Provide a five-year (2007-2012) history employee count for NGrid’s NY Gas business units, break each down by department and union and non-union in Excel. |
| 180 | Provide a five-year (2007-2012) history of employee safety performance: OSHA severity, OSHA incident, auto accident rates, and any other employee safety data that is used to measure safety performance. |
| 181 | Provide a narrative description of the supply chain process, including bidding and sole source policies. |
| 182 | Provide five-year history (2007-2012) of spend by major category (in Excel). |
| 183 | Provide five-year spending analysis (2007-2013) by vendor (in Excel). |
| 184 | Provide a narrative description of the engineering computer systems (GIS, AM/FM, CAD) in use. |
| 185 | Provide a narrative description of the operating systems used for the business and system control computers, such as, SCADA, distribution management, meter reading, cathodic protection monitoring, system planning, leak tracking, AMI/AMR, outage management, crew scheduling or other computer aided dispatch. |
| 186 | Provide a list of common services between NGrid plc business units. |
| 187 | Provide a narrative that describes how NGrid plc services are allocated and charged back. |

INITIAL HIGH-LEVEL INTERVIEWS

| Interview Request No. | Position or Person |
|-----------------------|---|
| 1 - 2 | 2 Outside Members of NGrid USA's Board of Directors |
| 3 | Chief Executive Officer |
| 4 | Chief Operating Officer |
| 5 | Executive Director, USA |
| 6 | NGrid USA head of Operations |
| 7 | NGrid USA head of Maintenance and Construction |
| 8 | NGrid USA Head of Shared Services |
| 9 | NGrid USA Head of Customer |
| 10 | NGrid USA Head of Regulation and Pricing |
| 11 | SVP of New York |
| 12 | Current head of LIPA contract |
| 13 | Director Performance & Strategy NY |
| 14 | Director Community & Customer Mgmt NY West |
| 15 | Director Community & Customer Mgmt NY East |
| 16 | Director Community & Customer Mgmt NY Downstate |
| 17 | Head of Engineering |
| 18 | Head of System Planning |
| 19 | Head of Field Forces |
| 20 | Chief Information Officer |
| 21 | Chief Financial Officer |

Notes: Board members can be members of more than one board.

All interviews in this initial round will cover broad topic and will be designed to get an overall sense of the NGrid USA's and NGrid's New York Gas business models.

APPENDIX B

RCG Team Résumés

Robert M. Grant

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| Position: | President Engagement Director |
| Years of Experience: | 40 |
| Education: | B.S./1970/Electrical Engineering/Lowell Technological Institute, Lowell, MA American Management Association for Marketing and Planning, Finance, and Strategic Planning |

Key Qualifications:

Bob Grant has been working in the utility industry for over 40 years. His experience spans a wide variety of consulting engagements, audit, business management and strategy development. He has also helped numerous major utilities redesign their business organizations to reflect the changing regulatory environment. He just completed preparing CH Energy for their 2010 management audit as he did twice before. Mr. Grant has led or participated in a number of full management audits and led numerous more focused management engagements. Between 2008 and 2009 led three major audits of utility performance during major storm events. These audits were all submitted to commissions for review. In one case answered questions posed by the Commissioners. He has also been an officer and/or senior executive consultant for KEMA, Inc., AT&T Solutions, Stone & Webster and Booz, Allen, & Hamilton.

Selected Professional Experience:

Management Audits

Management audits provide a window into the business and operations of a utility. Some audits are required by State Commissions or other government agencies, while others are at the request of executive management as a matter of understanding how to improve its business model.

- Bermuda Electric Light Company, Ltd. - Confidential
- Public Utility District No. 1 of Chelan County - Confidential
- Groton Department of Public Utilities - Confidential
- Electricity Authority of Cypress - Confidential
- Central Electric Generating Board, Great Britain - Confidential
- Louisville Gas & Electric Company - Public
- Orange & Rockland Utilities – Public
- Kansas –Nebraska Natural Gas - Confidential

Pre-Management Audit Counsel

This value-added work typically consists of audit training sessions, high-spot reviews, formulating needed audit policies and procedures, developing audit strategies. Managed pre-management audit engagements with the following companies:

- United Illuminating Company
- Pennsylvania Power & Light Company
- Columbia Gas Company
- Gulf States Utilities
- Central Hudson Gas & Electric Company (three times)
- National Fuel Gas Company
- Central Illinois Public Service Company
- Philadelphia Gas Works (twice)
- Los Angeles Department of Water & Power
- Atlantic Electric Company
- South Jersey Gas Company

Major Emergency Restoration Planning Comprehensive Audits

- For a major Northwestern combination utility, performed an in-depth investigation of its restoration activities as a result of a major winter storm event which impacted a significant portion of its customers for over 11 days. The final report offered recommendations to improve the plan and enhance transmission right of way maintenance. Some of the technology enhancements around metering proved to be problematic at the onset of the restoration effort. The report was used in the very next rate case.
- For a major mid-Western combination utility performed an in-depth review of its restoration activities as a result of a unique set of summer wind events which caused significant outages to a major portion of their system. Working in conjunction with the Commission Staff and the utility, it was determined that the overall strategy was reasonable but there were a number of tactical improvements necessary. Further, it was determined that ARM solutions were less practical during the onset of the restoration effort, but beneficial during the final stage. An oral presentation was made to the PSC Commissioners. The Commission staff and company executives were appreciative of the presentation.
- For a major Texas combination utility led the comprehensive review of the Company's post Ike hurricane restoration efforts. Ike had caused 98% of the Company's customers to be without power for up to 18 days. The final report was used as

evidence in the Commission approval of \$650M in capital expense recovery. In addition the report addressed design and maintenance standards.

Planning

- Directed an island utility in developing its first strategic plan. The plan evolved out of our previously conducted management audit, which I managed. As a result, the plan focused the management team on improving quality and making major improvements in the way it does its business. In addition, the planning efforts led to the formation of two new entities -- an energy services company (ESCO) and a local telephone company. Led their planning efforts for four years.
- Directed the development of an aggressive strategic plan for a major New England municipal electric and water utility. While the plan dealt with improving certain internal processes, its major focus was expansion of its service territory and finding customers for its services. As a result, the Company purchased the last independent electric utility in the state, effectively increasing its revenue by a factor of 1.5. Current planning efforts are directed at creating new sources of revenue. As a result of planning, management has purchased a bottled water business. A key initiative underway is to enter the broadband business. Have led their strategic planning for over ten years.
- Directed the development of a strategic plan for a western combination electric and gas utility. This was an aggressive plan designed to pre-position the utility for open access. In addition, the plan addressed moving into related non-utility businesses.
- Designed a successful strategic plan to aid in reducing the need for additional new generation capacity. This plan enabled the utility to redirect access loads that aggravated its peak load.
- Prepared several energy management plans (EMP) to permit clients to respond appropriately to the changing energy supply situation. For a national retail chain, the EMP permitted the selection of the most effective energy opportunities for reducing operating costs.
- Led a team that evaluated the impact of distribution design and maintenance practice to determine the impact on the level of storm damage. As a result the Company is making changes to their maintenance practices.
- Determined for a major secondary network utility the cause of insufficient response to a major outage restoration. Recommended significant changes to their ERP to promote quicker management restoration decisions. Redesigned the entire underground restoration analysis process.

Business Transformation & Reengineering

- Managed an engagement to develop a comprehensive set of policies and procedures for a medium sized water and electric utility. As part of this engagement, the team

related all policies and procedures to corporate goals and regulations. Developed and built a format database of related policies and procedures to specific regulations at the local, state and federal level. The system also provides a means for tracking proposed legislation and all permitting processes.

- Reengineered a medium-sized municipal utility's entire organization. The company provides natural gas, electric and water service to its customers. As a result, management has been able to reduce its management complement by 35%.
- Managed the reengineering of the operations organization for a major mid-western, combination gas and electric utility. Reduced the number of district offices by 45% while improving overall response time to the customer and eliminating 30% of the management positions. Several customer processes were also reengineered leading to a 30% reduction in clerical personnel.
- Managed an organization redesign of a major island utility's engineering function to be more customer/project driven. The final organization was delivered and now has a wider more effective span of control. In addition, we redesigned the process for estimating generation and T&D projects.
- Managed an in-depth audit of a major Southeastern utility's Environmental Department. This review included the legal function, since the environmental group was part of their legal department.
- Designed a functional organization structure to combine 20 utilities into a single company in Western Saudi Arabia and is now known as SECO in the Western Region.

Operational Engagements

- Completed an assessment of a major first PWR nuclear construction program for Great Britain's government-owned nuclear power generation business.
- Managed a PSC-mandated phase-two management audit for a major combination utility. We focused on the potential economic savings and improved service created by centralizing the customer service function.
- Managed an industrial engineering study to improve a transmission and distribution department's trouble and dispatching operations. Results included consolidation of five dispatching centers into one with more efficient trouble crew operations.
- Managed engagements to identify opportunities for several major gas distribution companies to improve their customer service and marketing activities, resulting in more efficient and cost-effective operations.
- Designed and implemented a reliability-based budgeting system for two large urban electric utilities, one in California and the other in Texas, to improve T&D maintenance and system reinforcement project planning.

Transmission & Distribution

- Managed the development of a major storm restoration plan for a large east-coast utility. The plan focused on storms, which would cause loss of power to 50% of the company's customers for more than 72 hours. It also allows the utility to handle up to 300 foreign crews.
- Led the review of the T&D business unit a major Midwestern combination utility that had been cutting costs for nine years. As a result of this \$500,000 engagement we were able to identify an additional \$13M in savings by restructuring non-core activities of the 740 plus line organization.
- Directed the development of a multi-level storm plan for a major southwestern electric utility. The emergency restoration plan was designed to handle any level of storm that might be experienced by the company. Every role and key decision process was clearly defined. All three divisions and upper management accepted the resulting plan.
- Provided technical and strategic advice for the emergency plan developed for a combination gas and electric utility located in the Mid-West.
- Managed a benchmarking effort for a Canadian utility's transmission maintenance function. Resulted in a reduction of its maintenance costs by \$15M annually.
- Developed a transportation model to estimate the appropriate fleet size for a major utility in Saudi Arabia, which was incorporated into their annual planning exercise.

Work Management

- Managed the development of a uniform work management process for an island utility. The process is now being used in both T&D and generation. It allows for the formal planning and scheduling of work, as well as the monitoring of the work performed.
- For a major Midwestern combination utility, identified business practice improvements to the generation capital budget yielding a ninety-one million dollar savings in construction costs on an nine hundred million dollar construction plan.
- Developed and implemented a simple work management system for a generation department. The system was built in Microsoft Access and designed to be extremely user friendly so that non-technical foremen and management can easily use the system.

Supply Chain

- Directed the first global supplier evaluation effort to help a major utility client select the transformer vendor with the lowest qualified price equipment. The evaluation looked at 18 international vendors and recommended the two that offered the least

risk to the utility. This evaluation prepared the utility to address its vendor selections for a new 500kV transmission line in front of the state commission.

- Directed a \$100,000 engagement to assist a medium sized gas LDC on the East Coast to gain control over its supply chain operations. In this engagement we identified a 33% reduction in inventory levels. The second work stream helped management better align with its major suppliers and form alliance programs.
- Managed a review of the material management function for a major Fortune 100 energy company. The results of the study identified savings approaching \$44M annually.
- Designed a Materials organization for a major Western Saudi Arabia utility. As part of this assignment, designed the material forecasting process and inventory management methodology.
- Directed an engagement to install a mainframe (D&B) materials system in Saudi Arabia. Directed the set-up and implementation of a full-scale training program for all aspects of the system. In addition, we developed all the policies and procedures necessary for using the system.
- Directed an inventory reduction engagement for a major Northeast generation and transmission company that led to recommending a 17% reduction in a \$68M inventory. We developed a custom software-modeling tool to identify slow and obsolete material. In addition, provided direction on how to minimize excess inventory.
- Managed an engagement for a mid-western combination utility that identified a 27% inventory reduction in T&D related materials. As part of this effort, provided the tools needed to reduce the inventory through aggressive inventory practices.

Customer Care & Multimedia Call Centers

- Supported the installation of a new CIS/CRM solution for the deregulated environment for a major Texas utility. Reviewed and modified procedures and processes to reflect the significant changes due to the new software. Developed policies consistent with the regulations and the needs of the business as defined by marketing and customer service functions.
- Directed the transformation of a combination gas and electric Northeast utility's traditional call center into a multimedia contact center for the coming deregulated environment. The company wanted to be more customer-centric while ensuring appropriate controls over cost and quality. Designed high-level architecture for a fully integrated operation using computer telephony integration (CTI) and interactive voice response (IVR) technologies to more efficiently serve the customer. Recommended significant changes to supervisory and agent training efforts and a strategy for web enabling the call center.

- Directed a significant effort to create the first multi-media call center for a Dutch combination distribution utility. This utility had scattered walk-in and small call centers located throughout their service territory and were trying to adequately serve 2,000,000 customers. Our efforts helped them define the future of customer care and provided them with a plan to achieve the desired results using a virtual- multi-media contact center, while saving \$1M annually. The system is now designed to yield a level of customer service, which will become the cornerstone of their differentiation strategy.
- Directed an engagement to help a major Canadian electric utility consolidate 54 call center operations into 6 centers. As part of this effort, we developed a transition plan to move the existing call center operation from a cost centered, inbound operation to a strategic asset providing both inbound and telemarketing services. We identified the most appropriate staffing levels to ensure that customer-driven metrics can be met with a well-managed small work force. The project saved \$2.5M.
- Managed the preparation of a detailed plan for converting a traditional customer service operation into a 21st century, customer-centric operation for a major mid-western gas and electric utility. The plan includes operational and process changes as well as a detailed Change Management program. The Company implemented all the recommendations. According to the CFO, the resulting savings are estimated to improve earnings per share by 20%.
- Managed a centralization of a customer phone contact function for a major western electric utility. The company had 55 phone centers located throughout the state. This consolidation resulted in a 55% reduction in staff with more efficient and effective phone coverage.
- Developed a long-range plan for the Consumer Business Function of a major Northeastern natural gas LDC. The plan detailed the mission, objectives, and goals to be achieved which included the consolidation of several remote offices. The resulting savings exceeded \$20M annually.

Professional Experience:**River Consulting Group, Inc.: Present***President***KEMA, Roswell, Georgia: 2005 to 2010***Vice President Operational Excellence 2008 to Present**Director Field Force Effectiveness & Global Supply Chain 2005 to 2008***River Consulting Group, Inc.: 1999 to 2005***President***James Martin & Company: 1998 to 1999***Vice President, North American Utilities Practice***AT&T Solutions, Utility and Energy Practice: 1996 to 1998***Client Partner, North American Utilities Practice Leader***EDS Management Consulting Services: 1995 to 1996***Principal***Stone & Webster Management Consultants, Inc.: 1980 to 1995***Vice President***Booz, Allen & Hamilton, Inc.: 1978 to 1980***Senior Consultant***Boston Edison Company: 1970 to 1978***Senior Engineer***Professional Affiliations:**

Editorial Advisory Board of Hart's Energy Markets Magazine

Institute of Electrical and Electronic Engineers

American Management Association for Marketing and Planning

North American Society for Corporate Planning, Inc.

Professional Publications:

"From Brick & Mortar To Technology Enabled Strategy," presented at the EEI Annual Convention, June 15, 1999, in Long Beach.

"Using Technology as a Strategy Driver," presented at the EEI Semi-annual Strategic Planning Conference, March 1999, in Tampa.

- “Competitive Marketing Strategies for Utility Companies,” presented at the International Quality & Productivity Center conference, May 1997, in Chicago.
- “Performance Audits As An Improvement Tool,” presented at the Tenth Annual Regulatory Educational Conference, April 1996, in Canada.
- “The Future of Customer Service” Presented at the Reengineering Utility Call Centers Conference, August 1995 in Chicago.
- "Benchmarking- The Second Generation" - Stone & Webster Management Consultants, Utility Executive Course, 1994.
- "Benchmarking Purchasing Case Study" - Stone & Webster Management Consultants, Utility Executive Course, 1994.
- "Planning for Resource Allocation," Stone & Webster Management Consultants, Utility Executive Course, 1993-4
- “AMI’ Role in Emergency Restoration,” Automation 2008 Conference, Atlanta, GA
- “Incorporating Public Communications into your Business Continuity Plan,” EUCI, St. Louis, October 2008
- “Why Forensic Analysis?” 2008 Energy Connections Conference, Florida Municipal Electric Association, Orlando, November 2008
- “Utility Experience Shows AMR Could Support Outage Management,” KEMA publication, April 2008

Industry Expert – Quotes:

- Public Utilities Fortnightly (1999) Subject area Customer Information And Data Warehousing
- Electric Light & Power (1999) Subject Summer of 1999 blackouts and brownouts and how e-commerce solutions can help manage the publics better.
- Chicago Daily Herald (August 14, 1999) Subject on the ComEd Blackout and what utilities should be doing to man

Raymond G. Saleeby

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| Position: | President & CEO SCG Co-Engagement Director |
| Years of Experience: | 45 |
| Education: | B. of Engineering (Marine) 1967 SUNY Maritime College MBA 1977 New York University Graduate School of Business Licensed Marine Engineer |

Key Qualifications:

Raymond Saleeby has been an engineer, construction manager, management consultant, management auditor and top level corporate executive for 45 years. Most recently Raymond Saleeby was the President & CEO and part owner of Remco Maintenance & Restoration, the largest building specialty contractor in the nation. Prior to that he was the Managing Partner of Utilities & Energy Industries at AT&T Solutions, where he headed their Bridgewater, New Jersey office. Prior to joining AT&T Solutions, he was President and principal of EDS Management Consulting Services Utilities & Energy Group General Management Practice. At Stone & Webster Management Consultants Inc. Saleeby was a Executive Vice President and member of the Board of Directors. In addition he held positions as a Principal at Booz-Allen & Hamilton, Inc., Group VP at Oracle, and Project Manager & Senior Engineer at Ebasco Services. During the Dot.Com era, Ray was the President & CEO of MyUtility.com including Utility.Com and First Point Energy.

Saleeby has lectured extensively on utility management issues for the Management Exchange/Public Utility Reports seminars, the American Public Power Association's University of Missouri Management Program and the Northeast Public Power Association, the NY Law Institute, the Edison Electric Institute and the American Gas Association, among others. He led Stone & Webster's Utility Management Development Program which trained thousands of utility executives from all 50 states.

He led or served as a key consultant on some of the most significant management audits since the application of audits within the utility industry and has been credited with helping establish the utility audit process in use today.

Selected Professional Experience:

Management Audits

For three decades he has been a management consulting industry practice and thought leader on utility management auditing. He has managed or conducted scores of voluntary and commission mandated audits, trained hundreds of professionals in management audit processes and skills, developed and implemented formal audit programs for utilities, environmental, safety and insurance groups. In addition he has designed and implemented one of the most highly acclaimed pre-audit preparation and planning programs available to the industry. His video tape entitled "The Audit, How to Conduct, Manage or Prepare for a Management Audit" has been

distributed and sold to chemical, gas & electric utilities and nuclear facilities worldwide. Some of his audit/performance evaluation and improvement clients include:

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| United Illuminating | City of Groton, Department of Utilities |
| Union Carbide | American Nuclear Insurers |
| CEGB | Omaha Public Power District |
| Atlantic City Electric | Connecticut Municipal Electric Exchange |
| Central Hudson Gas & Elect. | UGI Corp |
| Long Island Lighting | Pennsylvania Electric Company |
| AGL Resources | DTE Energy |
| Kansas Gas & Electric | Los Angeles Department of Water & Power |
| Philadelphia Gas Works | Jersey Central Power & Light |
| Washington Gas Light | City of Westfield, Department of Utilities |
| Consumers Power | South Carolina Gas & Electric |
| TVA | Brooklyn Union Gas (KeySpan) |
| Madison Gas | Kansas City Power & Light |
| South Jersey Gas | Central Illinois Electric Company |
| Bermuda Electric | Electric Utility of Cyprus |
| Consumers Gas | Ontario Energy Board |
| General Public Utilities | AEP ...and others |

Pre-Management Audit Counsel

In order to help both the commission and the utility to apply a constructive and accurate management audit Mr. Saleeby developed and implemented the first Management Audit Pre Audit Counsel efforts in the U.S. His work included strengthening the utilities planning for the audit, preparing the data and information required, enhancing its communications with the chosen consultant and the commission, structuring policies and procedures to allow the audit to be conducted efficiently and with all resources made available and generally training the employees to enable an open environment and constructive result. His pre-audit counsel work included gas and electric utilities, major construction projects and water utilities.

Other Major Consulting Projects

- He managed the startup and successful operations of two major management consulting practices and evaluated and planned several new corporate ventures in a variety of industries.
- He was responsible for the major management consulting effort involving the multiyear review of AT&T's network quality, security, reliability and main office infrastructure. This work has become the basis of AT&T's Business Continuity / Disaster Recovery practice.
- He ran the worldwide Marketing and New Business Development Department of a large consulting company yielding an increase in client bookings and company profitability during each of six years in that position. His responsibilities included

pricing, market positioning, strategic planning, sales and marketing, consulting skills training and customer service & client relations.

- He testified, assisted with testimony, or provided analysis and opinions of several major events including his pre-incident analysis of Three Mile Island, his post incident analysis of Union Carbide's management and environmental & safety programs following the leak in Institute, West Virginia, the privatization of the Central Electricity Generating Board (CEGB) in England and the breakup of AT&T. He has run testimony & interview training courses at several companies throughout the United States.
- He was responsible for the development of several new initiatives addressing several clients' significant responses to the evolving deregulated utility business. Issues ranged from the establishment of a national energy brand, the design of utility one stop concepts, the move to customer value management, the development of electronic commerce and internet/intranet strategies, the "smart box on the side of the house", retail energy trading and call center customer care, futurizing for growth and the structure of new paradigm breaking business ventures. He was the responsible for AT&T's involvement with EnergyOne and has AT&T's BMD utility industry issue leadership role.
- Overall responsibility for the development and market acceptance of a fully integrated back office offering to the energy, telecommunications and other industries. This new business became AT&T Solutions' exclusive solution brought to market with CitiBank's Universal Card Services.
- For one of the largest utilities in the United States, he managed a project which involved the development and implementation of one of the first performance monitoring/incentive compensation programs. It was developed using activity based management techniques and has been widely acclaimed and is still in use today as originally formulated. The client has credited this program with savings of more than 50 million dollars in every two-year period.
- At several major management consulting firms, led mandated and voluntary audit projects, pre audit planning efforts, construction audits, organizational and management reviews. Consistently the highest revenue and sales producer for 10 years.
- He served as the Senior Officer-in Charge and the driver for, and a lead participant in the analysis and formation of new utility customer service, energy management, telecom and other products and services ventures. These include ventures involving some of the largest electric and gas utilities in the U.S. as well as those that may also include AT&T.
- He is credited with the invention of a major boiler furnace implosion protection system currently installed and in use by numerous utility operating companies.
- For GPU and its three operating companies, he designed, managed and implemented a benchmarking/best practices effort which was trademarked as the PEER program and used at several other utility companies. The program initially focused on generating facility operations at six client plants, included the visit and analysis of more than 10 best practice plants and resulted in the implementation of 90% of the recommendations. The effort had a payback as high as 120:1.

- He participated in the development and implementation of a major Gas Safety review program applied at LDC and Pipeline Companies in the domestic United States.
- For over a decade, he has led numerous utilities in the development and implementation of a strategic planning process and the evaluation and creation of strategic values and vision statements. He served as a trainer, facilitator and catalyst for change and worked with clients to develop creative strategic plans, supportive projects and implementation and control methodologies. Among his clients include one that was considered the best managed companies in the United States, another that was subsequently described by rating agencies as best positioned for competition and another who was cited for courageous cutting edge thinking. His talks on “Managing For A Change” and “Rethinking The Utility Business” have been called “the most delightful and memorable in terms of impact” by utility executives. He has lectured on strategic planning at the Management Exchange/Public Utility Reports Seminars, at the APPA management development Program in the University of Missouri, and at the University of Massachusetts / University of New Hampshire programs for NEPPA Utility executives.
- He taught modern utility management methods/strategic planning and reengineering of the utility business at the IBM Management Consulting utility training program and at the General Electric Utility leadership training program.
- For a major international congeneric conglomerate, he conducted a comprehensive acquisition study which focused on the development of acquisition criteria, the assessment of a wide range of products, market sectors, markets and companies leading to the successful negotiation and acquisition of the target company.
- For the Saudi Arabian Government’s Royal Commission, he developed the entire utility infrastructure management plan as well as the management information systems/communication systems plan for the two industrial cities of Jubail and Yanbu. The plans included Strategic Direction, project management, financing, regulation, utility staffing, information and resource requirements, priority setting, and organizational structure and load and capacity forecasting/targeting.
- He was responsible for the overall conceptual design and operations management philosophy, as well as, the detailed plant operations and instrumentation and control design for a 650m MW coal facility which has since been among the best operating in the United States and was subsequently replicated in another State. His effort included responsibility for a \$350 million dollar budget, the development, engineering and implementation of the plant philosophy and strategies, cost control and evaluation, management, planning and execution of the project, establishment of budgets, forecasts, schedules and resource requirements, allocation of manpower and the review of cost and value implications. He was responsible for the development of proposals for both domestic and international power plants, and the technical and economic evaluation of vendor proposals.
- He conducted numerous significant and highly successful studies related fleet management, generation, transmission & distribution operations and engineering management, nuclear program management, organizational design (involving SBUs, separation of the nuclear function or innovative corporate structures), benchmarking,

process reengineering, emergency planning, maintenance & work force management, facilities management, customer service, environmental management for some of the largest and most progressive companies in the world. Without exception, each effort resulted in the client's expansion of the project, implementation of recommendations and subsequent and accomplishment of savings opportunities.

- Managed a team in the development of a major storm restoration plan for a large east-coast utility. The plan focused on storms which would cause the loss of power to 50% of the company's customers for more than 72 hours. In addition, allows the utility to handle upwards of 300 foreign crews.
- He managed or participated in numerous comprehensive evaluations of materials management, inventory control, ABC/ABM, purchasing and accounts receivable processes and systems resulting in the achievement of considerable savings or service level improvement involving the redesign of processes, reduction of inventory, application of Best Practices and new technology and the selection of and implementation management of new systems. Participated in the review of the material management function in a major Fortune 10 company. The results of that study identified savings amounting to \$44,000,000 annually. His efforts involved utilities, oil companies, manufacturing concerns, airlines and process companies.
- He managed number ground breaking/precedence setting consulting efforts for a variety of industries and worked as an advisor to major law firms, Corporate Boards and executive management on number of highly sensitive and confidential issues.
- He managed a globalization effort for a major international company which included the assessment of various markets and the comprehensive evaluation of nine fossil generating units in Argentina.
- For Philip Morris he designed and implemented an energy audit/ energy conservation review and program resulting in the achievement of significant savings, utility partnership and the design and application of new processes.
- Developed and implemented several cutting edge systems or programs at domestic and international utility client firms aimed at reducing O&M costs and improving performance including a multi-module maintenance and work force management system, a zero-based budgeting system, activity based costing, availability and thermal efficiency monitoring and control program, a corporate-wide internal customer satisfaction measurement program.
- Responsible Officer for numerous business process reengineering, business transformation and activity based costing efforts at both electric and gas utilities covering finance and accounting, utility operations, underground residential distribution, purchasing and materials management, customer service and other cross-functional processes.
- Responsible for the overall strategic advisory assistance and the information and technology strategy for the Board of Directors of the newly formed billion dollar State Owned Energy Company in New Zealand. This new entity has been formed to provide the country with a market-oriented, competitive electric and gas system. He developed and gained acceptance for the terms of reference including: the organization's vision and an organizational design concept which represented a radical

departure from the traditional monopoly utility structure and gained full acceptance of the Board of Directors. He remains a key advisor to the building of this new company.

- For the Ontario Energy Board, he was responsible officer for a review and audit of Consumer’s Gas Strategic Management Information Plan. This assessment resulted in the identification of significant savings opportunities and culminated in providing constructive testimony for the advantage of all stakeholders.

Professional Experience:

Remco Maintenance & Restoration, 2005-2012 **President & CEO and Equity Owner**

- Led the firm to become the only in its industry to be listed by ENR as a Top 50 Specialty Contracting Firm, nationwide and bringing it to a “new level of professionalism and integrity.”

PA Consulting Group 2003-2005 **Partner & CEO of StarCom Wireless**

Oracle Corporation, 2003 **Group Vice President-Strategic Accounts**

Industries: Gas & Electric, Financial Services, Retail, Telecom, and Professional Services

FirstPoint Corporation: (including MyUtility, Inc., Utility.com, 2000-2003 **President & CEO**

Co-Founder of this sustainability & energy conservation firm

AT&T Solutions, 1995 to 2000 Head of the Bridgewater Office, **Managing Partner-Worldwide**

Led the Gas and Electric Management Consulting Practice

EDS, 1994-1995 **President of Strategic & General Management Services Practice**

Led the gas, electric, water and environmental practices

Stone & Webster Management Consultants, Inc. 1979-1994 **EVP & BOD Member**

Led G&E General Management Consulting Practice

Booz-Allen & Hamilton, Inc. 1976-1979 **Principal**

Led major Gas and Electric, Energy & Environment Division projects

Current or Past Professional Affiliations:

- Member of Board of Advisors of ENE, a New England Energy Service Company
- American Society Of Mechanical Engineers—Lifetime Member Status
- American Gas Association
- Edison Electric Institute
- American Nuclear Society
- American Management Association
- Association of Energy Engineers
- Building Owners and Managers Association (BOMA)
- Association of Building Owners (ABO)
- Co-Chairman National Juvenile Diabetes Foundation
- Development Board Member, Mount St. Mary's Academy
- NYU & SUNY Maritime College Alumni Associations
- Foundation Board of LaGuardia College in New York

Professional Publications:

- “The Future is Now: Technology Creates an E-Conomy” subject of this article published in Power Online
- “Business Perspectives on Governance Issues in Alliances and Joint Ventures” published within the PLI book titled “Business Restructuring-Negotiating, Structuring and Documenting the Deal”
- Alliances & Joint Ventures and The Art of Negotiating The Deal”, Practicing Law Institute , Faculty Speaker, 10, 1999
- “E-Conomy – The New Challenge”, Keynote Speaker 12th Annual AMRA Symposium, September, 1999
- “New Alliances in the Energy Industry”, Practicing Law Institute
- “Strategic Marketing For the New Energy Marketplace” and “Lessons Learned From Deregulated Businesses” presented at the EUC/Metzler conference
- Featured in a cover article titled “Consultants With Clout”, Integration Management
- “Building Customer Value and Relationships through Telecom & Energy Company Alliances”, presented as conference co-chair at the Strategic Research Institute Strategic Alliances conference
- “Utility Business Transformation”, “Change Management” and “Value Chain Engineering” lectures at the NEPPA’s *Certificate in Public Utility Management* program at the University of New Hampshire

- “Rethinking and Reengineering Your Business: Strategies for Change & Success Beyond 1995”, presented and keynoted at an AGA/EEI conference
- "Competitive Consulting" interviewed for this article published in Independent Power Magazine
- “Plaudits For Your Audits”, published in AGA Monthly
- “Changing Nature of The Utility Industry”, first presented at the Northeast Public Power Association/ University of Massachusetts Utility management program
- “Partnering”, presented at Stone & Webster’s summer seminar
- “Harnessing Today’s Challenges”, presented at the Utility Risk Management seminar
- “Generating Value In A Competitive Marketplace”, co-authored and presented at the annual American Public Power Association’s Conference,
- “Strategic Planning for a Public Power Company”, presented at the American Public Power Association’s Executive Development Program
- “Rightsizing and Other Approaches To Organizational Efficiency”, presented at the American Public Power Association Annual Human resource Meeting
- “The Environmental Audit-The Process as A Management Tool”, presented at the Annual Environmental exposition
- “The Reality of Our Competitive Environment- Downsizing, Delaying and Process Busting”, presented at the Society of Gas Lighting
- “Environmental Auditing”, presented at USICO’s Risk Annual Management Conference
- “The Management Audit: A Key Risk Reduction Tool”, presented at the AIChE Chemical Risk Management Symposium
- “Utility Strategic Planning”, Symposium leader and instructor for Public Utility Reports and Management Exchange Seminars/Courses
- “Measuring Management Performance”, Stone & Webster Utility Management Development Program
- “Incentive Regulation and Its Impact On Operations”, presented at a Availability, Performance and Capacity Enhancement Seminar
- “Managing Change In Today’s Competitive Environment” Strategic Planning Magazine
- “Managing For A Change”, presented to the Maryland-District of Columbia Utilities Association Fall Conference

- “Market Research, New Technologies and Utility Response: Critical market Plan Elements” presented at the 1984 Utility Marketing Conference, Public Utility Reports & The Management Exchange
- “Market Planning: Identification and Segmentation” and “Planning Under Time and Conflict Pressures”, presented at Public Utility Reports & Management Exchange Conferences
- “Incentive Compensation-A Management Strategy”, co-authored and presented at Stone & Webster’s Executive Conference
- “Improving Electric System Performance & Performance Audits”, presented to the Inter-American Development Bank
- “The Utility Industry: Issues, Impacts & Future Direction”, presented at the National Electric Manufacturers Association Economic Forecast Seminar
- “Strategic Planning-Managing and Applying The Process”, presented at the Public Utility Reports Conference
- “Strategic Planning: A Utility Focus”, presented at the Stone & Webster Executive Conference
- “Incentive Plan Benefits Workers, Utilities”, Electrical World
- “What’s In It For Me? Motivating Plant Management Through Real Incentives”, Booz-Allen & Hamilton Publication
- Numerous presentations on Customer Service & Customer Satisfaction, Organizing For Effectiveness, Cost Containment & Reduction and Current Utility Issues
- Interviewed for or quoted in numerous publications including: The New York Times, Wall Street Journal, Business Week, Public Utilities Fortnightly, Transmission & Distribution, Utility Spotlight, Electrical World, AGA Monthly, Electric Perspectives, Chemical News, Electric Light & Power, Independent Power, and International Finance.

Howard Solganick P.E.

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|------------------------------|---|
| Position: | Project Manager |
| Years of Experience: | Utility Industry 37; Design and Manufacturing 5 |
| Education: | M.S./1978/Engineering Management (minor Law)/Drexel University, Philadelphia, PA B.S./1971/Mechanical Engineering (minor Economics)/Carnegie Mellon University, Pittsburgh, PA Essentials of Emergency Preparedness—PA AWWA Planning, Zoning and Land Use Courses Rutgers University, PA Governor’s Center for Local Government Services Lorman Education Services Arbitration and Mediation Training Courses—American Arbitration Association |
| Professional Licenses | Professional Engineer – Pennsylvania (active) & New Jersey (inactive) Professional Planner – New Jersey (inactive) |

Key Qualifications:

Howard Solganick has been actively engaged in the utility industry for over 35 years. His experience spans consulting engagements, business development and significant utility operating positions. As a Principal at Energy Tactics & Services, Inc. he is responsible for business development, engagement management, and execution. He has led and/or participated in consulting projects to develop, design, optimize and implement both traditional utility operations and e-commerce businesses. Mr. Solganick has structured operating elements and business ventures, negotiated high value medium and long-term contracts, and implemented business systems, operating functions and profit centers. He has assisted new entrants to develop products and services for introduction to the utility and energy marketplace. He has also acted as an expert witness and arbitrator in a number of utility and regulatory areas and has extensive experience in regulatory relations.

Areas of Expertise

- Management audits for regulatory commissions covering forecasting, planning, procurement and operational areas.
- Operating responsibility and expert testimony in utility planning and operations including energy supply, transmission, distribution and customer service operations, capacity and system planning, and regulatory issues such as rate design and cost of service, revenue decoupling, tariff administration
- Operational reviews and expert testimony for outage management and preparation, customer communications, material and support logistics, restoration effectiveness and associated costs
- Regulatory and media relations and management for high profile situations – transmission line siting and approvals, power plant siting and certificate of need processes and potential mass outages
- Pre-audit counseling, management audit planning and implementation and post audit tracking and regulatory relations
- Arbitration and mediation for high dollar value energy dispute resolution

Selected Professional Experience:

Management Audits

Management audits provide a window into the business and operations of a utility. Some audits were required by State Commissions or other government agencies, while others are at the request of executive management as a matter of understanding how to improve its business model.

- CT - Connecticut Light & Power Company (2008)
- OH – Columbia Natural Gas (2008)
- OH – Duke Energy (2008)
- OR - Northwest Natural Gas (2005)
- NJ - Atlantic Electric Company (1985) *Project Manager*

Pre-Management Audit Counsel

This value-added work typically consists of audit training sessions, high spot reviews, formulating needed audit policies and procedures, developing audit strategies. Managed pre-management audit engagements with the following companies:

- PA - Philadelphia Gas Works (2000)
- NY - Central Hudson Gas & Electric (2009)
- NJ - Atlantic Electric Company (1985) **Project Manager**

Rates & Regulatory

- As a consultant for a Midwestern Public Utilities Commission performed regulatory audits related to a filed rate case for three investor owned gas utilities. Covered load and revenue forecasting, capital budgeting and construction management.
- For a major electric and gas utility assisted senior and operating management to prepare for a mandated management audit. Provided a confidential assessment of the major focus areas, interview training and other support.
- For a major municipal gas utility assisted senior and operating management to prepare for a mandated management audit. Provided interview training and other support.
- As a consultant for a New England Public Utilities Commission performed regulatory audits of an electric utility and a focused audit of a new customer service and billing installation. Covered system operations, engineering, capital budgeting, construction management, demand side management programs, marketing and community relations.
- As a consultant for a Caribbean utility examined the utility's performance and costs and provided expert testimony for a regulatory appeal of the costs and rate recovery for a major hurricane under a performance based ratemaking environment. Project Manager
- As an electric utility's special projects manager created the utility's process for responding to the state's first legislatively mandated management audit. Developed a series of processes to coordinate, track, document, and respond to sensitive issues on an expedited basis. Coordinated the pre-audit process throughout the utility. Project Manager
- As an operating manager for a Eastern utility obtained regulatory approvals for a 230 kV transmission line and three major substations during a period of high public concern over EMF.
- As a utility's operational planner coordinated and had significant impact on load forecasting, demand side management, customer generation and its application to utility operations, utility owned and independent generation, transmission and distribution planning, and customer service performance levels. Consulted and provided expert testimony on these interrelated areas.
- As a consultant to the Commissioners and Staff of the Public Service Commission provided analysis, and support covering cost of service, revenue allocation, rate design, the impact of a revenue decoupling mechanism, and considerations needed when equalizing rate of return between classes and other issues for an electric utility. [Three engagements]

- As a consultant to the Staff of the Public Service Commission of an Eastern state provided analysis, rate case testimony and settlement negotiation support covering cost of service, revenue allocation, rate design, the impact of a revenue decoupling mechanism, and considerations needed when equalizing rate of return between classes and other issues for a gas/electric utility. [Three engagements]
- As a consultant to the People’s Counsel of an Eastern state provided analysis, rate case testimony and settlement negotiation support covering cost of service, miscellaneous revenue, the impact on risk of revenue normalization, considerations needed when equalizing rate of return between classes and other issues for a gas utility.
- As a consultant to the Office of Consumer Advocate of an Eastern state provided analysis, rate case testimony and settlement negotiation support covering cost of service, demand analysis, considerations needed when equalizing rate of return between classes and other issues for a water utility.
- As a consultant to the Public Advocate of a New England state analyzed the economic impact and operational aspects of a cast iron gas main replacement program including the development of an economic model and participation in a technical conference proceeding.
- As a consultant to the Attorney General of a Midwestern state provided analysis and testimony addressing the proposed sale of a utility owned cogeneration facility and the long term implications of the sale on customers.
- As a consultant to the Attorney General of a Midwestern state provided analysis and rate case testimony covering cost of service modeling, considerations needed when equalizing rate of return between classes and other issues.
- As regulatory manager for a New Jersey utility was responsible for regulatory liaison and rate design for all customer classes including cost of service and tariff design. Provided expert testimony on rate design, load research, economic impacts, and all PURPA issues. Project Manager
- As a consultant to the Staff of the Public Service Commission of an Eastern state provided analysis and support covering a sales adjustment for price elasticity and the impact of a revenue decoupling mechanism for an electric utility.
- As a consultant to the Attorney General of a Midwestern state provided support in a Commission ordered collaborative addressing cost of service modeling and filing requirements.
- As a utility’s project manager led the filing of New Jersey’s first Notice of Intent for a Certificate of Need for a combined cycle power plant. Working with the regulatory commission, the utility developed its filing as the commission was simultaneously developing its procedures and processes. Project Manager

Operations and Customer Service

- For a million+ customer North American public power company managed (and acted as a subject matter expert) a call center performance review leading to a major consolidation of 28 sites into 4 physical call centers. A follow-on engagement developed the implementation plan covering emergency response issues, human resources, customer care, new infrastructure, and network integration. Project Manager
- As a lead consultant for an Eastern electric utility supported a two year effort to maintain and grow large key commercial and industrial accounts. Allied responsibilities included the development of business models, negotiating positions, operations and support services for field forces, and regulatory support. This project resulted in the long-term retention of a significant majority of the client's top 20 customers for periods of from 5 to 12 years.

Energy Supply

- For four years performed a process review and developed and executed a procurement process for electric supply in a deregulated environment for a residential real estate holding company. Project Manager
- For a commercial real estate management company performed an evaluation of a distributed generation proposal including a site survey, cost benefit analysis and detailed operational and contract review.
- For an independent power producer developed new projects and acquisitions, negotiated power purchase agreements, energy services agreements, fuel supply issues, site leases and analyzed project financial positions. Successfully negotiated one of the first competitively bid power sales agreements with a public power entity and obtained the first IRS private letter ruling for a tax-exempt independent power financing. Project Manager
- As operating manager for a New Jersey utility negotiated over 800 MW of power purchase agreements with an aggregate value of over \$9 billion, including developing significant dispatchability provisions. Obtained required regulatory approvals in record time. Project Manager
- As an operating manager for a utility managed PJM Interconnection power purchase (interchange) pricing, performance testing of power plants and contract management of the company's unregulated cogeneration contract with the DuPont Company.
- Working in conjunction with a major energy producer and refiner acted as project manager for a cogeneration facility study for a major refinery, which led to the construction of a 60 MW facility. Project Manager
- For a public power utility consortium examined forward looking marketing and financial plans, confirmed direction with the Board of Directors, assisted senior management to revise its strategic and operational plans and presented a recommendation for the future actions of the enterprise for consideration by the Board of Directors. Specific results

included the revitalization of the existing management team, the Board of Directors' adoption of that team's strategic plan with a commitment to move forward and the immediate authorization of bonuses for the management team for its efforts.

Major Emergency Restoration Planning Comprehensive Audits

- For a major Northwestern combination utility, performed an in-depth review of its restoration activities as a result of a major winter storm event which impacted a significant portion of its customers for over 11 days. The final report offered recommendations to improve the plan and enhance transmission right of way maintenance. Some of the technology enhancements around metering proved to be problematic at the onset of the restoration effort. The report was used in the next rate case.
- For a major mid-Western combination utility performed an in-depth review of its restoration activities as a result of a unique set of summer wind events which caused significant outages to a major portion of their system. Working in conjunction with the Commission Staff and the utility, it was determined that the overall strategy was reasonable but there were a number of tactical improvements necessary. Further, it was determined that ARM solutions were less practical during the onset of the restoration effort, but beneficial during the final stage. Made an oral presentation to the PSC Commissioners. The Commission staff and company executives were appreciative of the presentation.
- For a major Texas utility managed and participated in the comprehensive review of the Company's post hurricane Ike restoration efforts. Ike had caused 98% of the Company's customers to be without power for up to 18 days. Provided testimony supporting the final report that was used as evidence in the Commission approval of \$650M in capital expense recovery. In addition the report addressed design and maintenance standards. Project Manager
- For an electric utility developed and justified the conversion of emergency operations from a decentralized to a centralized model that funded a company-wide digital communications system entirely from operating savings and efficiency.

Arbitration

- As the sole arbitrator presided over an issue of energy price escalation with a value of over \$1,000,000 annually. The arbitration included case management, discovery, depositions, extensive document exchange, six witnesses and a full briefing process. As defined in the parties' initial power purchase agreement, the arbitrator had to render a fully detailed decision in order for the parties to continue their business relationship for the nine years remaining under the agreement.

- As chairman of a panel of three arbitrators was instrumental in the parties resolving a landlord tenant dispute over electrical sub metering. The amount in question exceeded \$750,000.

Business Planning and Implementation

- For two utility clients acted as project manager and subject matter expert on a joint client-consultant team comprised of 40 people. The engagement included customer management systems, contact (call) centers, new products and services, technology planning, and financial modeling of the venture. This project resulted in the creation of a new business entity for the energy industry. Project Manager
- For an energy conservation company assisted the internal staff in defining their business model, implementing their Internet based marketing and service delivery platform, defining the relationship with key allies, negotiating performance contracts and performing design reviews as needed. Key issues included a timely implementation plan.

Vendor Services

- For the export development agency of a European government developed and presented a symposium on the North American utility industry and means and methods to approach and succeed in the marketplace. Project Manager
- For an Asian utility developed and presented a symposium on the valuation and acquisition of North American generation assets and means and methods to approach and succeed in the marketplace.
- For a high technology transmission and distribution equipment supplier supported an effort to accelerate market acceptance of the product. Analyzed the technology, application and marketing approach. Results included an in-depth analysis of a key stumbling block inhibiting early entry into a key candidate utility. Project Manager
- For a major financial institution acted as project manager and subject matter expert to refine and implement a new inclusive consumer billing medium for energy retailers. The engagement included the definition of the value chain, regulatory impacts, and the development of a marketing strategy and marketing implementation plan. Project Manager
- For a major call center provider acted as the liaison with energy retailers seeking to outsource their call and contact center function. Also established business models, performance standards, fulfillment arrangements, pricing, emergency operating response and contractual arrangements.

Professional Activities:

- Past member of New Jersey Board of Regulatory Commissioners Advisory Council on Electricity Planning and Procurement
- Past member of the Electric Power Research Institute's Planning Methods Committee
- Commercial Arbitrator - American Arbitration Association

- Past President of the Mid Atlantic Independent Power Producers, a trade organization
- Chairman (past) Middletown Township (PA) Planning Commission
- Chairman (past), Egg Harbor Township (NJ) Zoning Board of Adjustment
- Member (past), Raritan Township (NJ) Zoning Board of Adjustment
- Author, Energy Pulse Article – Why Won't You Listen to the Actresses?

Professional Experience:**Energy Tactics & Services, Inc: 1994 to Present***President/Principal***James Martin & Company: 1998 to 1999***Consultant, North American Utilities Practice***AT&T Solutions, Utility and Energy Practice: 1996 to 1998***Managing Consultant, North American Utilities Practice***Cogeneration Partners of America: 1990 to 1994***Vice President Business Development***Atlantic City Electric Company: 1978 to 1990***Manager Contract Capacity**Manager Corporate Planning and Performance**Manager Corporate Performance**Manager Rates Design**Supervisor Production Technical and Economic Services**Senior Engineer***DeLaval Turbine: 1975 to 1978***Senior Engineer***Bickley Furnaces: 1974 to 1975***Senior Engineer***Soabar: 1973***Engineer***Univac: 1971 to 1973***Engineer*

Testimony:**Arizona Corporation Commission**

Case – Arizona Public Service Company Docket No. E-01345A-11-0224 (November 2011)

Client - Staff of the Arizona Corporation Commission

Scope - Testimony covered cost of service, revenue allocation, rate design and other related issues including revenue stabilization (decoupling).

Public Service Commission of Delaware

Case - Delmarva Power & Light Company Docket No. 09-414 (February 2010)

Client - Staff of the Delaware Public Service Commission

Scope - Testimony covered cost of service, revenue allocation, rate design and other related issues including revenue stabilization and weather normalization.

Case - Delmarva Power & Light Company Docket No. 09-277T (November 2009)

Client - Staff of the Delaware Public Service Commission

Scope - Testimony covered an analysis of a straight fixed variable rate design for small gas customers and implementation issues.

Case - Delmarva Power & Light Company Docket No. 06-284 (January 2007)

Client - Staff of the Delaware Public Service Commission

Scope - Testimony covered cost of service, revenue allocation, rate design and other related issues including revenue stabilization or normalization.

Georgia Public Service Commission

Case – Atlanta Gas Light Company Docket No. 31647 (August 2010)

Client – Public Interest Advocacy Staff of the Georgia Public Service Commission

Scope - Testimony covered revenue forecast, cost of service, revenue allocation, rate design and other related issues.

Case – Atmos Energy Corporation Docket No. 27163 (July 2008)

Client – Public Interest Advocacy Staff of the Georgia Public Service Commission

Scope - Testimony covered rate design and other related issues.

Jamaica (West Indies) Office of Utility Regulation

Case - Electricity Appeals Tribunal (August 2007)

Client - Jamaica public Service Company, Ltd.

Scope - “Witness Statement” on behalf of the Jamaica Public Service Company Limited. This Statement covered issues relating to recovery of expenses incurred due to Hurricane Ivan.

Maine Public Utilities Commission

Case - Northern Utilities, Accelerated Cast Iron Replacement Program Docket No. 2005-813 (2005)

Client - Public Advocate of the State of Maine

Scope - Testimony covered an analysis of the program's economics and implementation.

Public Service Commission of Maryland

Case - Chesapeake Utilities Corporation Case No. 9062 (August 2006)

Client - Office of the Maryland People's Counsel

Scope - Testimony covered cost of service, rate design and other related issues.

Case - Baltimore Gas & Electric's (1993)

Client - As president of the Mid Atlantic Independent Power Producers

Scope - Testimony covered BG&E's capacity procurement plans.

Michigan Public Service Commission

Case - Consumers Energy Company Case No. U-15245 (November 2007)

Client - Attorney General Michael A. Cox (Don Erickson, Esq.)

Scope - Testimony covered cost of service, rate design and revenue allocation.

Case - Consumers Energy Company Case No. U-15190 (July 2007)

Client - Attorney General Michael A. Cox (Don Erickson, Esq.)

Scope - Testimony covered issues related to Consumers Energy's gas revenue decoupling proposal.

Case - Consumers Energy Company Case No. U-15001 (June 2007)

Client - Attorney General Michael A. Cox (Don Erickson, Esq.)

Scope - Testimony covered issues related to Consumers Energy and the MCV Partnership.

Case - Consumers Energy Company Case No. U-14981 (September 2006)

Client - Attorney General Michael A. Cox (Don Erickson, Esq.)

Scope - Testimony covered issues relating to the sale of Consumers interest in the Midland Cogeneration Venture.

Case - Consumers Energy Company Case No. U-14347 (June 2005)

Client - Attorney General Michael A. Cox (Don Erickson, Esq.)

Scope – Testimony covered cost of service and revenue allocation.

Missouri Public Service Commission

Case – AmerenUE Storm Adequacy Review (July 2008)

Client – KEMA/AmerenUE

Scope – Oral testimony covered KEMA's review of AmerenUE's system major storm restoration efforts.

New Jersey Board of Public Utilities

Case - Cogeneration and Alternate Energy Docket # 8010-687 (1981)

Case - PURPA Rate Design and Lifeline Docket # 8010-687 (1981)

Case - Atlantic Electric Rate Case - Phases I & II Docket # 822-116 (1982)

Case - Power Supply Contract Litigation – Wilmington Thermal Systems Docket # 2755-89 (1989)

Case - NJBPU Atlantic Electric Rate Case - Phase II (1980-81) Docket # 7911-951 (Before the Commissioners of the New Jersey Board of Public Utilities)

Client - Employer was Atlantic City Electric Company.

Scope - The cases listed above covered load forecasting, capacity planning, load research, cost of service, rate design and power procurement.

Public Utilities Commission of Ohio

Case - The Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company Case 07-551-EL-AIR (January 2008)

Client - Ohio Schools Council

Scope - Testimony covers issues related to rate treatment of schools.

Case - The Application of the Columbus Southern Power Company 08-917-EL-SSO and the Ohio Power Company Case 08-918-EL-SSO (October 2008)

Client - Ohio Hospital Association

Scope - Testimony covers issues related to rates for net metering and alternate feed service and related treatment of hospitals.

Pennsylvania Public Utilities Commission

Case - York Water Company Docket No. R-00061322 (July 2006)

Client - Pennsylvania Office of Consumer Advocate

Subject - Testimony covered cost of service, rate design and other related issues, also supported the settlement process.

Case – Pennsylvania- American Water Company Docket No. R-2008-232689 (August 2010)

Client – Municipal Sewer Group

Subject - Testimony covered capacity planning, construction, treatment of future load and associated revenue, cost of service, rate design, capacity fee and other related issues.

Case – Pennsylvania- American Water Company Docket No. R-2008-232689 (August 2008)

Client – Municipal Sewer Group

Subject - Testimony covered cost of service, rate design, capacity fee and other related issues, also supported the settlement process.

Public Utilities Commission of Texas

Case – Determination of Hurricane Restoration Costs Docket No. 36918 (April 2009)

Client – CenterPoint Energy Houston Electric, LLC

Subject – Testimony covered the reasonableness of the client’s Hurricane Ike restoration process for an outage covering over two million customers and a restoration period of 18 days.

Edward T. Novak

Position: Independent Executive Consultant
Years of Experience: 36
Education: MBA 1982/Marketing, Finance & Information Systems/Harvard Business School, Cambridge, MA
 BS Degree 1975/ Biology/Bucknell University, Lewisburg, PA

Key Qualifications:

Experience as CIO and leader of world-class IT strategy and business transformation consulting practice. Specialize in helping companies achieve dramatically improved business process and information technology improvements. Recent engagements have focused on IT strategy for the health care industry as well as helping companies understand opportunities to improve sustainability and environmental concerns. Currently, delivering customized executive business and IT strategy education and workshops to several Fortune 100 global companies.

Selected Professional Experience:

- **PPL CORPORATION**, Allentown, PA: Lead all information technology activities for PPL Corporation, one of the ten largest domestic energy utility holding companies. PPL operates both regulated utility and merchant energy businesses with 11,000 employees, 4 million customers in the U.S. and U.K., and operating revenues of \$6.5 billion for 2007. Directly responsible for approximately 500 IT personnel and an annual budget of \$200M. Also, a member of the company's Senior Business Planning Committee. During the past five years, have focused on establishing business-driven IT strategies, overhauling core systems, transforming core IT management processes, and upgrading staff capabilities. Instilled a business focus to IT and dramatically turned around the reputation and credibility of the IT organization. Implemented a strategy to reduce operational and production support costs and re-invest savings into key capital projects. Also, negotiated major outsourcing contracts for company-wide help desk, network, and workstation support.
- **ACCENTURE**, Philadelphia, PA: Lead Partner for Strategic IT Effectiveness Practice across several industry sectors. Industry experience includes energy, health and life sciences, manufacturing and distribution, communications/high tech, and insurance. Client work focused on IT strategy, IT transformation and restructuring, IT governance and organization improvement, and leveraging IT to achieve business process change. Provided leadership for several of the firm's largest global clients and frequent speaker on IT transformation and effectiveness issues. Produced benefits for over 30 major clients resulting in improved business performance, enhanced client relationships and several hundred million dollars of consulting revenue. Representative accomplishments:
 - Served as interim CIO for one of the world's leading consumer electronics companies at special request of the Vice Chairman. Directed over 1000 employees and led

development of the overall IT strategy and supply chain improvement plan, implemented a comprehensive IT transformation program, and helped to rebuild the IT executive team.

- Developed a global, corporate-wide IT strategy across 20 business units for one of the world's largest life sciences and chemicals companies. Recommended specific actions for IT enabled supply chain and marketing improvements, core manufacturing and distribution systems, mergers and acquisitions, and eBusiness.
- Developed a business and IT strategy for a major national distributor identifying key areas of business change and supporting systems to add immediate profit to bottom line.
- **PROVIDIAN CORPORATION:** Directed all information systems activity for Providian's Direct Response Group, a leader in direct marketing of life, health, and auto insurance products. Provided leadership to more than 300 people located in Valley Forge, St. Louis and Atlanta. Primary focus was to overhaul the IT organization and implement new customer management and database marketing systems critical to new business strategy. Also, led the company's business re-engineering task force encompassing several strategic projects and an additional 75 people outside the IT department.
- **ICI AMERICAS (now AstraZeneca):** As Director of IS Strategic Planning, worked with division Presidents to develop IT strategies for major chemical and pharmaceutical business units across North America. This included direction for core supply chain systems as well as advanced use of technology to support sales and marketing efforts. Other accomplishments included establishing consulting and advanced technology groups and developing a long term plan to replace corporate core legacy systems. As Director of Systems Development, led group of IT managers and programmers supporting major business units across North America. Selected accomplishments included implementing new manufacturing and supply chain systems, strengthening executive relationships, and upgrading core systems.
- **CSC Index:** Key role with leading consulting firm specializing in helping companies use IT to achieve business change. Client work focused on strategic business and information systems planning, business re-engineering, management and resource assessment, and executive education.

Professional Experience:

Independent Executive Consultant: 2009 to Present

Owner

PPL Corporation: 2004 to 2009

Vice President and Chief Information Officer

Accenture: 1995 to 2003

Partner, Strategic IT Effectiveness Practice 1999 to 2003

Associate Partner, Strategic IT Effectiveness Practice 1995 to 1999

Computer Sciences Corporation: 1994 to 1995

Partner, CSC IT Management Consulting

Providian Corporation: 1991 to 1994

Senior Vice President and Chief Information Officer

ICI Americas (now AstraZeneca): 1988 to 1991

Director Information Systems

CSC Index: 1982 to 1988

Principal 1987 to 1988

Associate 1982-1987

IBM Corporation: 1977 to 1982

Marketing Representative and Systems Engineer

Thomas S. Hurley

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| Profession: | Consultant |
| Years of Experience: | 27 |
| Education: | M.B.A. Finance / Saint Louis University B.S. Finance / Saint Louis University, <i>Magna Cum Laude</i> |

Key Qualifications:

Tom Hurley has over 27 years of consulting and management experience working with domestic and international utility and energy companies. Tom has significant expertise in the areas of program and project management, strategic and business planning, performance metrics and measurement, organizational and process design, customer care, supply chain management, operational and process improvement, and outsourcing strategy and implementation support.

Key Areas of Expertise:

Program and Project Management:

- Served as Program Manager overseeing over thirty Cisco Intelligent Call Management (ICM) software deployment engagements and ongoing hosting and support over a two-year period. The ICM software managed the routing of all inbound “1-800” phone numbers for our client companies. Hired and developed three internal implementation teams and managed a host of third-party software, hardware, and communications vendors. Developed a standardized implementation framework and methodology, including standardized project scheduling and budget tools, risk management process, communications plan, issue tracking, and a dashboard reporting system. Also responsible for providing ongoing post-deployment support for our clients including a help desk operation and hosting client servers in our data management facility. My Program Office was responsible for managing inbound call traffic for the following corporations:

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| Access Health | American Century | Amer. Home Shield | Apple Computers |
| AT&T | Blue Cross/Shield | Chase Manhattan | Cheap Tickets |
| Citigroup | FedEx | Franklin Resources | Geico Insurance |
| Hilton | Japan Telecom | Marriott | MBNA Bank |
| NTT Japan | Norwest | Protection One | Rosenbluth Travel |
| Staples | Starwood Hotels | T. Rowe Price | TIAA-CREF |
| United Airlines | United Healthcare | West Telemarketing | Worldnet |

- Led over twenty business process reengineering (BPR) and outsourcing reviews for a wide range of functions ranging from hydropower operation and maintenance to

Information Technology. These projects involved working with executive management to identify candidate functions with the greatest potential for outsourcing and then facilitating the “make or buy” decision process. This included the development of a detailed Statement of Work and Quality Assurance Plan to be included in a Request for Proposal to solicit third-party bids. These engagements also involved reengineering the in-house performance of the selected functions to develop and cost a streamlined in-house organization for comparison against external bidders. Staffing requirements were typically reduced in excess of 30 percent on average.

- Served as Program Manager for a two-year initiative to reengineer the budget development, execution, and monitoring methodology for the \$1.7 billion U.S. Army Corps of Engineers (CoE) Civil Works Operations and Maintenance appropriation. A critical component of this new budgetary process was a methodology to level-set the funding of detailed O&M project requirements at disparate CoE projects including hydropower operations, flood control and recreation projects, and navigation operations. Wrote the budget development guidance for the program, developed a communication and implementation plan, and provided extensive field training to assist in the implementation and acceptance of the new guidance.
- Managed an outsourcing study of the 261 position Information Resource Management organization for the Bonneville Power Administration; developed streamlined in-house organizational design, staffing requirements and operating procedures; wrote a statement of work for a request for proposal for the data center operations, applications management, customer service, and communications functions.

Supply Chain Management:

- Performed numerous Supply Chain Management engagements to identify specific opportunities for the clients’ supply chain management programs to improve their ability to meet the procurement and material handling needs of internal customers at the lowest cost, highest quality, and minimum risk. These engagements provided an external perspective on “best practice” supply chain management in the power industry and other industries. A key aspect of these engagements was an assessment of the degree to which existing supply chain performance metrics, data sources for these metrics, and performance levels effectively support the overall goals of the utility. Recommendations for improvements were developed along with a cost/benefit estimates to assist in the prioritization for implementation for the following areas:
 - Purchase Order Transaction Support: Work Management / Supply Chain Interface
 - Strategic Sourcing: Supplier Qualification, Selection, and Contracting
 - Contract Administration and Management: Technical and Commercial
 - Inventory Management and Control
 - Performance Monitoring and Metrics
 - Policy, Process and Procedure Development

- Staff Development and Training
- Performed an audit of the supply chain operations for a major utility in support of their fossil and nuclear generation, and transmission organizations. The assessment identified gaps in their current practices and identified specific actionable recommendations for improvements. Estimates as to the expected costs and benefits of each recommendation were developed to facilitate the evaluation and prioritization process.
- Performed an assessment of supply chain processes and activities in support of the fossil and wind generation operations for a large multi-state utility. The particular focus was to identify standard supply chain processes and activities that were not being performed and identify the resources required to support a fully-functioning supply chain function. Additional requirements included the development of an organizational structure to best support the supply chain requirements of the company's various operating groups. Key concerns included a lack of standardized supply chain practices and staffing levels across their fossil fleet as a result of piecemeal acquisitions over time. In addition a new supply chain organization and procedures needed to be developed to support wind generation operations as the warranty support period from the initial vendor/installer expired.

Customer Care:

- Lead a Customer Care Research Consortium (CCRC) engagement to define the role of core customer service operations in successfully developing and delivering energy management and environmental programs. The CCRC is an executive forum consisting of fifteen leading utilities for discussing strategy, co-funding research and acting collectively on select issues. Members include AEP, APS, ComEd, Dominion, Duke, Entergy, First Energy, PECO, Pepco Holdings, PSE, and Xcel Energy. This engagement identified a framework for customer operations, marketing/Energy Efficiency/product development, and IT services to collaborate on new service offerings. This study made the case that the new generation of EE/DR/Smart Grid programs will transform the utility customer service model and necessitate difficult decisions regarding the acquisition of back-office systems that can handle production-scale delivery of the new programs. High-level “process maps” were developed which showcased the role of—and impacts on—customer operations in the development and delivery of these new services. This effort also highlighted the role of third-party solutions providers and the need to determine their role in a production-scale delivery environment for new EE/DSM service offerings.
- Led a customer service center consolidation and customer management strategy engagement for a 2 million customer Dutch electric and gas utility. Developed and modeled various consolidation alternatives to drastically reduce the number of service centers. The result was a recommended reduction from 54 contact centers to 3 operating in a virtual fashion. Not only did this generate a considerable reduction in operating cost, but it allowed the company to build a differentiated competitive brand

based upon the ability to deliver a consistent high level of customer service across all of its geographic regions.

- Developed the customer segmentation and call routing strategy for a major U.S long distance carrier. High value customer segments were targeted for improved call handling and customer service to protect revenue through reduced customer churn. In addition, customer segments with high repeat call propensities were identified and recommendations were implemented to reduce repeat and transferred call volumes through improved call handling, agent empowerment, and root cause analysis. As a result many non-value-added calls were eliminated entirely resulting in improved customer satisfaction and significant cost savings.
- Managed a U.K. call center integration engagement for Lloyds TSB Bank Card Services following the merger of the two banks. Developed recommendations for operational efficiencies, and developed and implemented high level functional requirements to support infrastructure improvements, including ACDs, IVR, and desktop integration to support future CTI initiatives.
- Launched an offshore Contact Center offering for a leading knowledge processing outsourcing provider seeking to leverage their extensive offshore outsourcing expertise and facilities both in the US and in India. Served as primary subject matter expert in developing all aspects of the new Contact Center business unit, including facilities requirements, operations, staffing and marketing. Lead the successful proposal development team for the firm's first Contact Center customer. Sourced key contact center management staff to manage the new business unit.
- Developed the requirements and deployment plan for a green-field customer service/contact center operation to support an online eCommerce trading portal being developed by the Hong Kong branch of a major UK bank. Worked extensively with client to develop their customer contact strategy, the infrastructure requirements to support it, and sourced a local third-party contact center operation for initial turn-up.

General:

- Recently led several American Recovery and Reinvestment Act (ARRA) funding application initiatives for a range of Smart Grid and renewable energy projects. The rigorous ARRA application process required developing detailed project scope narratives detailing the technical requirements, proposed infrastructure, and implementation plan, budgets, and metric and data reporting and compliance plans for each initiative.
- Developed a methodology to integrate the customer satisfaction impact into the capital budgeting process for a large utility client. The resulting capital project ranking process allowed the client to maximize the potential to increase customer satisfaction ratings in addition to the traditional reliability and ROI metrics used in the annual capital budgeting process.

- Developed a Compensation Benchmark Analysis for a major municipal utility. The CEO felt that his pay scale was inflated in comparison to similar functions performed for other like utilities in the region. Functional requirements and compensation comparisons for several positions under study were performed across several similar regional utilities. The study resulted in a mix of recommendations for modifications to the compensation structure for several of the functional positions, including both increases and decreases depending upon the analysis. Served as an expert witness to present the methodology and results of the study during a subsequent hearing before a union dispute board which upheld the results of the analysis.
- Served as President and General Manager for a home services firm with an emphasis on residential and light commercial energy efficiency and maintenance programs. The programmatic approach focused on reducing energy consumption and related costs, while increasing client comfort and safety. Service features included routine inspections and repairs of weather stripping, insulation, doors and windows, filters, ducts, and HVAC equipment, balancing HVAC systems, humidity management, and installing programmable thermostats and compact fluorescent light bulbs. The firm also served as a market aggregator and intermediary between homeowners and preferred contractors for HVAC repairs and equipment upgrades/replacement, window and door replacement, and insulation upgrades.

Professional Experience:**River Consulting Group, Inc.: 2010 to Present***Associate***Navigant Consulting, Inc., Atlanta, Georgia: 2007 to 2010***Associate Director, Utilities and Energy Practice***Home Management Services, LLP: 2003 to 2007***President***KPMG Consulting, Inc.: 2000 to 2003***Director, Customer Management Practice***AT&T Solutions, Utility and Energy Practice: 1996 to 2000***Director***EDS Management Consulting Services: 1995 to 1996***Senior Manager, Utilities and Energy Practice*

Professional Presentations and Publications:

- Mr. Hurley is a frequent speaker at industry conferences, including numerous presentations for the American Gas Association, Edison Electric Institute, and the Electric Power Research Institute, the American Council on Renewable Energy, and the Solar Energy Industries Association.
- Authored the “Activity-Based Accounting” chapter for Introduction to Public Utility Accounting, published jointly by the Edison Electric Institute/ American Gas Association.

Donna H. Mullinax, CPA, CIA, CFP

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| Position: | Vice President and CFO, Blue Ridge Consulting Services, Inc. |
| Years of Experience: | 31 Clemson University, B.S. Administrative Management with honors, 1978 |
| Education: | Clemson University, M.S. in Management, 1979 College for Financial Planning, 1994 NARUC Utility Rate School, 32 nd Annual Eastern |

Key Qualifications:

Mrs. Mullinax has over thirty-one years of financial, management, and consulting experience. She has extensive experience in financial and management audits analysis, and systems implementation; regulatory and litigation support; financial, administrative, and human resources management; and project management.

Mrs. Mullinax is a skilled financial and management auditor. She has performed numerous financial and compliance audits for governmental entities, businesses, and public utilities. She has also conducted several detailed base rates revenue requirements and rider compliance audits. She has analyzed financial information and budget projections, performed risk identification, and evaluated industry benchmarking. Her extensive professional experience allows her to effectively analyze and evaluate methods and procedures and to thoroughly document her findings. She has successfully testified to her audit findings.

Selected Professional Experience:

Financial and Management Auditing

Mrs. Mullinax is a skilled financial and management auditor. As a CPA and CIA, she is knowledgeable about sound internal control processes and procedures and has made numerous recommendations in prior audits for modifications to provide reasonable assurance regarding the achievement of objectives related to (1) effectiveness and efficiency of operations; (2) reliability of financial records, and (3) compliance with laws and regulations. She has performed various financial and compliance audits. Mrs. Mullinax has served as project manager for numerous due diligence reviews in connection with various mergers and/or acquisitions. She has reviewed financial information and budget projections, performed risk identification, and industry benchmarking. Her extensive professional experience allows her to effectively analyze and evaluate methods and procedures and to thoroughly document her findings. Additionally, she has successfully testified to her audit findings.

- On behalf of the Staff of the Public Utilities Commission of Ohio (PUCO), Case No. 12-2855-EL-RDR: In the matter of the application of Delivery Capital Recovery (DCR) Rider Contained in the Tariffs of Ohio Edison Company, The Cleveland Electric Illuminating

Company, and The Toledo Edison Company (collectively, Companies), December 2012 - present. Project Manager and Lead Auditor. Led the review to ensure the accuracy and reasonableness of the Companies' compliance with its Commission-approved Rider DCR filings. The review included a detailed mathematical verification of the model, development of sensitivity analysis that supported the PPS sampling techniques used to isolate specific plant work order for further testing. Detailed variance analyses performed on historical data with investigations into any significant changes. Developed the report including documenting findings, conclusions, and recommendations and coordinated the accumulation of work papers to thoroughly document all findings.

- On behalf of the Staff of the Public Utilities Commission of Ohio, Case No. 11-5428-EL-RDR: In the matter of the application of Delivery Capital Recovery (DCR) Rider Contained in the Tariffs of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company (collectively, Companies), November 2011 - May 2012. Assistant Project Manager and Expert Witness. Led the review to ensure the accuracy and reasonableness of the Companies' compliance with its Commission-approved Rider DCR filings. The review included a detailed mathematical verification of the model, development of sensitivity analysis that supported the PPS sampling techniques used to isolate specific plant work order for further testing. Detailed variance analyses were performed on historical data with investigations into any significant changes. Developed the report including documenting findings, conclusions, and recommendations and coordinated the accumulation of work papers to thoroughly document all findings.
- On behalf of the Massachusetts Department of Public Utilities, Case No. D.P.U. 08-110, regarding the Petition and Complaint of the Massachusetts Attorney General for an Audit of New England Gas Company (NEGC), Retained by NEGC, February - August 2010. Senior Technical Consultant and Assistant Project Manager. Conducted a management audit on how NEGC manages its accounting and financial reporting functions and whether sufficient controls are in place to ensure that the information included in the company's filings can be reasonably relied upon for setting rates – areas reviewed included general accounting, financial reporting, and internal controls; plant accounting; income tax; accounts receivable; accounts payable; cash management; payroll; cost allocations; and capital structure. Developed the report including documenting findings, conclusions, and recommendations and coordinated the accumulation of work papers to thoroughly document all findings.
- Before the Connecticut Public Utilities Regulatory Authority (PURA), Docket 07-07-01: Diagnostic Management Audit of Connecticut Light and Power Company, On behalf of the Staff of the PURA, July 2008 - June 2009, Lead Auditor and Assistant Project Manager. Performed an in-depth investigation and assessment of the company's business processes, procedures, and policies relating to the management operations and system of internal controls of the company's executive management, system operations, financial operations, marketing operations, human resources, customer service, external relations, and support services. In addition, supported an in-depth review of the development and implementation process of the company's new customer information system. Developed

the report including documenting findings, conclusions, and recommendations and coordinated the accumulation of work papers to thoroughly document all findings.

- Before the Public Utilities Commission of Ohio (OHPUC), On behalf of the Staff of the OHPUC:
 - Case # 08-0072-GA-AIR Columbia Gas of Ohio for an increase in gas rates, April-August 2008;
 - Case # 07-0829-GA-AIR Dominion East Ohio for an increase in gas rates, November 2007-July 2008; and
 - Case # 07-0589-GA-AIR Duke Energy Ohio for an increase in gas rates. November 2007-February 2008.

Auditor, Section Lead, and Assistant Project Manager. Lead auditor in a comprehensive rate case audit of company's gas rate filing to validate the companies' filings, provide conclusions and recommendations concerning the reliability of the information, and support Staff in its evaluation of the reasonableness of the filing. Developed the report including documenting findings, conclusions, and recommendations and coordinated the accumulation of work papers to thoroughly document all findings.

- Before the Oregon Public Utilities Commission (ORPUC), Docket No. UP 205: Examination of NW Natural's Rate Base and Affiliated Interests Issues, Co-sponsored between NW Natural, ORPUC Staff, Northwest Industrial Gas Users, Citizens Utility Board, August 2005-January 2006, Lead Auditor and Assistant Project Manager. Examined NW Natural's Financial Instruments, Deferred Taxes, Tax Credits, and Security Issuance Costs to ensure Company compliance with orders, rules, and regulations of the ORPUC and with Company policies. Developed the report including documenting findings, conclusions, and recommendations and coordinated the accumulation of work papers to thoroughly document all findings.

Regulatory Support

She has presented or supported civil or regulatory testimony in Arizona, Colorado, Connecticut, Delaware, Illinois, Maryland, Michigan, New York, North Carolina, South Carolina, Utah, and Texas. She has also served as an advisor to public service commissioners in the District of Columbia and Connecticut. In addition to providing analytical support, she has served as an expert witness and routinely works with other highly specialized expert witnesses. She has developed defensible analyses and testimony in connection with rate cases, audit findings, and other regulatory issues. She has also supported various civil litigations including delay and disruption construction claims and financial fraud. She has supported counsel with interrogatories, depositions, and hearings/trials support.

- Before the District of Columbia Public Service Commission (DCPSC), Formal Case No. 1093: In the Matter of the Application of the Washington Gas Light Company (WGL) for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service, On Behalf of the Commissioners and Staff of the DCPSC, July 2011 - Present. Lead Consultant Advised Commissioners and Staff of the Office of Technical and Regulatory Analysis

regarding Company's proposed rate base, net operating income and revenue requirements. Developed "what if" revenue requirement model used during Commission deliberations to analyze the impact of various adjustments. Reviewed and commented on the Commission's draft Order and supplied the revenue requirement schedules to support the final decision when issued shortly.

- Before the District of Columbia Public Service Commission (DCPSC), Formal Case No. 1087: In the Matter of the Application of the Potomac Electric Power Company (Pepco) for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service, On Behalf of the Commissioners and Staff of the DCPSC, September 2011 - December 2012. Lead Consultant and Assistant Project Manager. Advised Commissioners and Staff of the Office of Technical and Regulatory Analysis regarding Company's proposed rate base, net operating income and revenue requirements. Developed "what if" revenue requirement model used during Commission deliberations to analyze the impact of various adjustments, and supported the Commissioners' legal team in the drafting of the final order and addressing motions for reconsideration.
- Before the Missouri Public Service Commission, Case No. HR-2011-0241: Veolia Energy Company 2011 and 2012 Request for Authority to Increase Electric Rates in Missouri, On behalf of the City of Kansas City, July-September 2011. Senior Technical Consultant. Analyzed Company's proposed net operating income, rate base, and revenue requirements. Supported testifying witness with drafted testimony and development of a model to calculate an alternative revenue requirement incorporating recommended adjustments.
- Before the North Dakota Public Service Commission, Case No. PU-10-657/PU-11-55: Northern States Power Company (NSP) 2011 and 2012 Request for Authority to Increase Electric Rates in North Dakota, April 2011 - present. Lead Consultant and Assistant Project Manager. On behalf of the Commission Staff, led the analysis of NSP's rate increase filings and supported adjustments for the Commission's consideration. Developed a model to calculate the appropriate revenue requirements and exhibits to support Staff recommended adjustments.
- Before the Connecticut Public Utilities Regulatory Authority (PURA), Docket 10-02-13: Application of Aquarion Water Company to Amend its Rate Schedules, On behalf of the PURA, April - August 2010. Senior Technical Consultant and Assistant Project Manager. Reviewed the expense component of the company's revenue requirement and recommended adjustments for Staff consideration.
- Before the Delaware Public Service Commission (DEPSC), Docket No. 09-414: On behalf of the Staff of the Delaware Public Service Commission in the Matter of the Application Delmarva Power & Light Company for Approval of Modifications to its Electric Base Rates, On behalf of the Staff of the DEPSC, September 2009 - May 2010. Expert Witness and Assistant Project Manager. Analyzed the company's rate increase filings and provided testimony offering adjustments for the Commission consideration related to the rate base and revenue requirements.

- Before the DCPSC, Formal Case No. 1076: In the Matter of the Application of Pepco for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service, On Behalf of the Commissioners and Staff of the DCPSC, July-December 2009. Senior Technical Consultant and Assistant Project Manager. Advised Commissioners and the Staff of the Office of Technical and Regulatory Analysis regarding Company’s proposed rate base, net operating income, and revenue requirements. Developed “what if” revenue requirement model used during Commission deliberations to analyze the impact of various adjustments, and supported the Commissioners’ legal team in the drafting of the final order and addressing motions for reconsideration.
- Before the Michigan Public Service Commission (MIPSC), Case No. U-15506: In the matter of the Application of Consumers Energy Company (CECO) for Authority to Increase its Rates for the Distribution of Natural Gas and for Other Relief, On behalf of the Michigan Attorney General (MIAG), May - November 2008. Expert Witness and Assistant Project Manager. Analyzed the company’s rate increase filings and provided testimony offering adjustments for the Commission consideration related to the rate base and revenue requirements – proceeding was settled through negotiations.
- Before the MIPSC, Case No U-15244: In the Matter of the Application of Detroit Edison (DetEd) for Authority to Increase its Electric Base Rates, On behalf of the MIAG, September 2007 - October 2008. Senior Technical Consultant and Assistant Project Manager. Analyzed the Company’s filings, checked the mathematical accuracy of the Company’s revenue requirements calculations, and provided analytical support to testifying witness.
- Before the MIPSC, Case No. U-15245: In the Matter of the Application of CECO for Authority to Increase its Rates for the Generation and Distribution of Electricity and for Other Relief, On behalf of the MIAG, July 2007 - April 2008. Senior Technical Consultant and Assistant Project Manager. Analyzed the Company’s filings, checked the mathematical accuracy of the Company’s revenue requirements calculations, and provided analytical support to testifying witness.
- Before the DCPSC, Formal Case No. 1053: In the Matter of the Application of Pepco for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Services, On Behalf of the Commissioners and Staff of the DCPSC, February 2007 - June 2008. Senior Technical Consultant and Assistant Project Manager. Advised Commissioners and the Staff of the Office of Technical and Regulatory Analysis regarding Company’s proposed rate base, net operating income, and revenue requirements, Developed revenue requirement model used during Commission deliberations to analyze the impact of various adjustments, supported the Commissioners’ legal team in the drafting of the final order and addressing motions for reconsideration.
- Before the Maryland Public Service Commission (MDPSC), Case No. 9092: In The Matter of the Application of Pepco for Authority to Revise Its Rates and Charges for Electric Service and for Certain Rate Design Changes, On behalf of the Staff of the MDPSC, December 2006 - June 2007. Expert Witness and Assistant Project manager. Analyzed Company’s

rate increase filings and provided direct and rebuttal testimony offering adjustments for the Commission consideration related to the rate base and revenue requirements.

- Before the DEPSC, Docket No. 06-284: In the matter of Delmarva Power and Light Company's Request for an Increase in Gas Base Rates, On behalf of the Staff of the DEPSC, October 2006 - March 2007. Senior Technical Consultant and Assistant Project Manager. Analyzed the Company's filings, checked the mathematical accuracy of the Company's revenue requirements calculations, and provided analytical support to testifying witness.
- Before the MDPSC, Case No. 9062: In the Matter of the Application of Chesapeake Utilities Corporation for Authority to Increase its Existing Natural Gas Rates and Services, On Behalf of the Maryland Office of People's Counsel, May 2006 - August 2006. Expert Witness and Assistant Project Manager. Analyzed Company's rate increase filings and provided testimony offering adjustments for the Commission consideration related to the rate base and revenue requirements – participated in settlement negotiations that were ultimately accepted by all parties.
- Before the MIPSC, Case No. U-14547: In the matter of the Application of CECO for Authority to Increase Rates for the Distribution of Natural Gas and for Other Relief, On Behalf of the MIAG, December 2005 - April 2006. Expert Witness and Assistant Project Manager. Analyzed Company's rate increase filings and provided testimony offering adjustments for Commission consideration related to the rate base and revenue requirements.
- Before the Illinois Commerce Commission, Case No. 05-0597, On behalf of the Illinois Citizens Utility Board, Cook County State Attorney's Office and City of Chicago, November 2005 - May 2006. Senior Technical Consultant and Assistant Project Manager. Analyzed the Company's filings, checked the mathematical accuracy of the Company's revenue requirements calculations, and provided analytical support to testifying witness.
- Before the Hawaii Public Utilities Commission (HPUC), Docket No. 05-0075: Instituting a Proceeding to Investigate Kauai Island Utility Cooperative's Proposed Revised Integrated Resource Planning and Demand Side Management Framework, On behalf of the Staff of the HPUC, June-November 2005. Senior Technical Consultant and Assistant Project Manager. Conducted and reported on the results of an industry survey of other cooperatives and Commissions to obtain an overview of how other entities approach the specific issues identified within this docket.
- Before the DCPSC, Formal Case No. 1032: In the Matter of the Investigation into Pepco's Distribution Service Rates, On Behalf of the Commissioners and Staff of the DCPSC, January-March 2005. Senior Technical Consultant and Assistant Project Manager. Review and evaluation of Company's compliance filings for class cost of service and revenue requirements for distribution service pursuant to a settlement approved in May 2002. Provided analysis and recommended adjustments to Staff. Proceeding was settled in anticipation of a full rate case for rates to be effective August 8, 2007.
- Before the Public Utilities Commission of the State of Colorado (COPUC), Docket No. 04A-050E: Review of the Electric Commodity Trading Operations of Public Service Company of

Colorado, On behalf of the COPUC Staff, March-September 2004. Expert Witness and Assistant Project Manager. Performed a transaction audit of PSCo's electric commodity trading operations and submitted testimony describing the process used to conduct the investigation, a summary of the audit findings, and discussion on the significance of the findings.

- Before the DCPSC, Formal Case No. 1016: In the Matter of the Application of Washington Gas Light Company, District of Columbia Division, for Authority to Increase Existing Rates and Charges for Gas Service, On Behalf of the Commissioners and Staff of the DCPSC, June-December 2003.
 - Senior Technical Consultant and Project Manager. Review and evaluation of company's depreciation study filed with the Commission.
 - Senior Technical Consultant and Assistant Project Manager – analyzed and recommended adjustments regarding the company's proposed increase to base rates – advised the Commission on party positions during deliberations
- Before the New York Public Service Commission, Case No. 00-E-0612: Proceeding on Motion of the Commission to Investigate the Forced Outage at Consolidated Edison Company of New York, Inc.'s Indian Point No. 2 Nuclear Generation Facility, On behalf of Consolidated Edison Company of New York, Inc., October 2000-September 2003. Project Manager. Supervised cross functional teams to assist scheduling and nuclear engineering experts with responses to interrogatories and the development of three comprehensive rebuttal testimonies on the prudence of extended outages at the Indian Point 2 nuclear power plant. The proceeding settled prior to filing of testimony.

Civil Litigation Support

- ADF Construction vs. Kismet, On Behalf of ADF Construction, December 2003-February 2004. Assistant Project Manager for a delay and disruption construction claim related to a large hotel complex in North Carolina – worked with scheduling experts to determine schedule delay and disruption and calculated related damages.
- On behalf of New Carolina Construction, July 2002-January 2003:
 - New Carolina Construction vs. Atlantic Coast
 - New Carolina Construction vs. Acousti

Project Manager for a delay and disruption claim related to construction of a large high school complex in South Carolina – worked with scheduling experts to determine schedule delay and disruption and calculated related damages. Claim was settled out of court.
- State of Nevada Bureau of Consumer Protection, September-December 2003. Assistant Project Manager for damage assessment project related to potential litigation regarding the Western Market Manipulation.
- Oakwood Homes, On behalf of Oakwood Homes, February 1999-May 2000. Assistant Project Manager for a delay and disruption claim related to the construction of a large manufacturing facility in Texas – worked with scheduling experts to determine schedule

delay and disruption and calculated related damages. Dispute was settlement through mediation.

- McMillan Carter, On behalf of McMillan Carter, June-September 2002. Project Manager for a delay and disruption claim related to construction of a large high school complex in North Carolina – worked with scheduling experts to determine schedule delay and disruption and calculated related damages. Claim was settled out of court.
- Fluor Daniel Inc. vs. Solutia, Inc., On behalf of Fluor Daniel, May 2000-August 2001. Assistant Project Manager for a delay and disruption construction claim related to large chemical processing facility in Texas – worked with scheduling experts to determine schedule delay and disruption and calculated related damages. Dispute proceeded through mediation.
- First National Bank of South Carolina vs. Pappas, On Behalf of First National Bank of South Carolina, 1991-1992. Civil litigation, deposed during pre-trial discovery on analytical findings related to check kiting and fraudulent loan applications. Supported counsel and expert witnesses during civil proceeding.
- First Union vs. Pappas, On Behalf of First Union, 1991-1992. Civil litigation, deposed during pre-trial discovery on analytical findings related to check kiting and fraudulent loan applications. Dispute was settled out of court.

Testimony

- Before the Colorado Public Utilities Commission
 - Public Service Company of Colorado - Docket No. 04A-050E
- Before the Delaware Public Service Commission
 - Delmarva Power & Light Company - Docket No. 09-414
- Before the Maryland Public Service Commission
 - Potomac Electric Power Company - Case No. 9092
 - Chesapeake Utilities Corporation - Case No. 9062
- Before the Michigan Public Service Commission
 - Consumers Energy Company - Case No. U-15506
 - Consumers Energy Company - Case No. U-14547

Project Management

Mrs. Mullinax has successfully managed numerous projects controlling cost, schedule, and scope. These projects included management, financial, and compliance audits, M&A due diligence reviews, economic viability studies, prudence reviews, and litigation/regulatory support for construction claims and regulatory proceedings. She works well with diverse team members and has an excellent ability to reconcile various viewpoints and establish and maintain effective working relationships among cross-functional teams.

Financial, Administration, and Human Resource Management

As Chief Financial Officer and Vice President she has been responsible for all aspects of financial, administration, and human resources. Her responsibilities include accounting, cash management, budgeting, tax planning and preparation, fixed assets, human resources, and employee benefits. Records under her control have been subject to an IRS compliance audit with no findings.

System Implementation

Mrs. Mullinax has worked with various business and local governmental entities to design and implement accounting and business systems that addressed real world problems and concerns. She has developed accounting policy and procedure manuals for county governments, a library, and a water utility.

Professional Experience:

Blue Ridge Consulting Services, Inc.: 2004 – Present

*Vice President and Chief Financial Officer
Senior Technical Consultant / Expert Witness*

Hawks, Giffels & Pullin, Inc.: 1993 – 2004

*Vice President and Chief Financial Officer
Executive Consultant
Controller*

Cherry, Bekaert& Holland, CPAs, 1991 – 1993

*Accounting Supervisor
Senior Accountant
Staff Accountant*

Smith, Kline and French Pharmaceutical Company, 1988 – 1991

Professional Sales Representative

Milliken & Company, 1980 – 1988

*Quality Assurance Manager
Department Manager*

Professional Certification:

Certified Public Accountant (CPA), State of South Carolina – 1993
Certified Financial Planner (CFP) – 1994
Certified Internal Auditor (CIA) – 2006
Chartered Global Management Account - 2012

Professional Affiliations:

Member of the American Institute of Certified Public Accountants (AICPA)
Member of the South Carolina Association of Certified Public Accountants (SCACPA)
Member of the Institute of Internal Auditors (IIA)
Member of the Western Carolinas Chapter of the Institute of Internal Auditors(WCIIA)

Julius (Chip) Wright, Ph.D.

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| Position: | President of J. A. Wright and Associates, LLC Regulatory Support Consultant |
| Years of Experience: | 35 |
| Education: | B.S. in Chemistry from Valdosta State College in Valdosta, Georgia MBA in finance from Georgia State University in 1978 Master of Economics from North Carolina State University in 1991 Ph.D. in Economics from North Carolina State University, focusing on regulatory and environmental economics |

Key Qualifications:

Julius (Chip) Wright, Ph.D., Dr. Wright specializes in regulatory issues, business and strategic planning, and economic analysis. With a Ph.D. in Regulatory and Environmental economics, he served eight years as a Utility Commissioner in North Carolina and before that he was a fiber optics process engineer for Corning Glass. While with Corning he served three terms as a state senator in North Carolina. Dr. Wright's practice focuses on economic studies, utility strategy, and regulatory policy. Dr. Wright has led management related audits and investigations for both utilities and for public agencies including the California State Senate, the Georgia General Assembly, the North Carolina Public Staff, and the Attorney General of Illinois. He frequently works with Fortune 500 investor owned electric and gas utilities in various roles including developing economic studies, long term resource planning, strategic and economic issues, regulatory and management policies, and basic research on a variety of topics. In addition, Dr. Wright has presented numerous papers, reports and expert testimony on issues related to the energy industry, both gas and electric, including regulatory policy, electric price forecasting, generation dispatch modeling, avoided cost issues, stranded cost valuation and recovery, performance based ratemaking, metering, rate-setting, and unbundling. In addition, he has been a Visiting Professor at the University of the Virgin Islands teaching both Micro and Macro economic courses. He received his Ph.D. and Masters from North Carolina State University in environmental and regulatory economics. He also has an MBA in finance and a BS in Chemistry.

Selected

Professional Experience:

Management Audits

Economic and Regulatory Studies, Affiliate Relationships, Competition and Regulatory Strategy

- Provided an analysis of electric vehicle economics and the legislative, engineering, and regulatory issues that regulated electric utilities should address in both residential and commercial installments of electric vehicle charging stations. Studied performed for Fortune 500 Southeastern investor-owned utilities, 2011-2012.

- Helped develop a regulatory strategy and presented testimony on behalf of South Carolina Pipeline. In this case, an economic analysis prepared by Dr. Wright and Dr. Frank Cronin (from EDS Economic Planning and Analysis Consulting Group) was presented along with recommendations. The analysis and recommendations were generally accepted by the Commission staff.
- Review of Review of affiliate cost structure relative to compliance with FERC Order 707, conducted for a major SE utility, 4th quarter, 2008.
- Review of Affiliate Cost for Service Company Charges to a Regulated Utility, study conducted for SCANA Corporation, May, 2008.
- Provided analysis for Entergy Mississippi that was presented to the Mississippi Public Service Commission related to the valuation of services that Company provided to an unregulated affiliate, November 2002.
- Presented testimony before the North Carolina Public Utilities Commission on behalf of SCANA Corporation regarding issues related to market power in its merger with Public Service Company of North Carolina, Docket No. G-5, Sub 400; G-3, Sub 0.
- Presented testimony to Louisiana Legislative Committee on behalf of Entergy Corporation regarding the various regulatory and technical issues that need to be addressed in the transition to competition.
- Testified before the Mississippi Public Service Commission on issues related to the establishment of retail electric competition, including ISO establishment, regional power exchanges, legislation, taxes and regulatory polices.
- Was a panelist on a Southern Gas Association national televised forum on performance based regulation for the natural gas industry.
- Provided a Fortune 500 large Southeastern based investor-owned electric utility an economic, engineering, and environmental evaluation of a proposed renewable fuel alternative including the provision of an assessment and the design for a large-scale pilot test in one of that utility's fossil-fired facilities, 2012.
- Review of Electric Utility Formula Rate Plans and specific Entergy formula rate plans, conducted for Entergy Mississippi, Jan-May, 2008.
- Was the principal author of a report and investigation titled "*An Analysis of Commonwealth Edison's Planning Process For Achieving Reliability of Supply,*" which was an investigation of the Company's planning process to meet its statutory obligation for supplying electricity as Illinois transitions to a competitive retail electric market, Illinois Commerce Commission Docket No. 98-0514.

- Co-authored a national study that used computer modeling techniques to quantify the impact of electric competition on the aggregate economy in each of the 48 continental United States.
- Presented testimony For Virginia Power with regard to its transition to competition plan.
- Presented testimony for Entergy Corp. in both Louisiana and Arkansas in support of its transition to competition filing.
- Worked with three major southeastern utilities on developing business and regulatory strategy as they prepare for competition.
- Filed a report with the South Carolina Legislature that studied the impact of electric competition on the state of South Carolina.
- Was the lead policy witness for South Carolina Electric and Gas on obtaining regulatory approval to transfer depreciation reserve from a nuclear plant to T&D depreciation reserve. This is a critical issue in preparing for competition and limiting stranded investment.
- Developed regulatory and marketing strategy for ENTERGY with regard to its telecommunications initiatives. In these efforts he worked with the EDS Telecommunications Consulting Group.
- Led an analysis of the prudence of Central Vermont Public Service Company's power and resource acquisitions over a five year period. The prudence of this utility's power supply strategy was under investigation in a rate case proceeding. Dr. Wright's team filed testimony supporting the Company and their efforts were instrumental in undermining the charges of imprudence brought by the Company's opposition.
- Developed an EDS intra-company task force to address the issues related to FERC's Transmission NOPR. This task force subsequently filed three responses to FERC's Open Access NOPR which provide a basis for EDS to maintain a leadership position as the electric utility industry undergoes restructuring to a competitive market.

Resource Planning & Economic Analysis

As a Commissioner he has been involved in a variety of resource planning issues including chairing the last North Carolina Resource Planning hearing that involved Duke Power Company, Carolina Power and Light, Virginia Power Company and the North Carolina Electric Membership Corporation.

He was also selected by the states of North Carolina and New York and the Department of Energy to be one of five representatives on a peer review panel overseeing a Resource

Planning project being conducted by the Oak Ridge National Laboratories. In addition to these initiatives Dr. Wright has:

- Provided an analysis of electric vehicle economics and the legislative, engineering, and regulatory issues that regulated electric utilities should address in both residential and commercial installments of electric vehicle charging stations. Studied performed for Fortune 500 Southeastern investor-owned utilities, 2011-2012.
- Provided a study to a Fortune 500 large Southeastern investor-owned utility related to the use of regulated electric rates designed to help retain current large industrial customers, 2012.
- Provided a Fortune 500 large Southeastern based investor-owned electric utility an economic, engineering, and environmental evaluation of a proposed renewable fuel alternative including the provision of an assessment and the design for a large-scale pilot test in one of that utility's fossil-fired facilities, 2012.
- Provided testimony for Entergy Mississippi related to whether the Mississippi Public Service Commission should adopt some proposed Federal standards related to integrated resource planning and energy efficiency, Docket No. 2008-AD-477, February 2009.
- Provided a report to Entergy Mississippi on fuel cost recovery mechanisms that included a nationwide survey of fuel adjustment mechanisms, 2008.
- Provided testimony in North Carolina for Duke Energy related to whether the North Carolina Public Utility Commission should approve the recovery of nuclear generation project development costs, Docket No. E-7-Sub 819, April, 2008.
- Provided a review for Duke Energy of the cost assumptions and regulatory initiatives related to new nuclear plant construction nationwide, April, 2008.
- Provided analysis for Entergy Mississippi related to new nuclear plant applications and any new regulatory mechanisms adopted by various states related to the approval or cost recovery associated with these new nuclear plants, April, 2008.
- Presented testimony on behalf of Entergy Mississippi on its IRP or electric resource plan and demand side initiatives, June, 2008, Docket No. 2008-AD-158.
- Provided testimony in Georgia for Georgia Power Company supporting that Company's Integrated Resource Planning process, the appropriate methods for evaluating demand side energy options, and supporting that Company's planned demand side programs, Docket No. 24505-U, June, 2007.
- Provided testimony in North Carolina for Duke Energy and Progress Energy related to the regulatory and economic rationale and appropriateness for using the "peaker"

methodology and other methodologies for the establishment of avoided cost rates, Docket No. E-100-Sub 106, June, 2007.

- Provided analysis for Entergy Mississippi that was presented to the Mississippi Public Service Commission related to the valuation of services that Company provided to an unregulated affiliate, November 2002.
- Was the principal author of a report and investigation titled “An Analysis of Commonwealth Edison’s Planning Process For Achieving Reliability of Supply,” which was an investigation of the Company’s planning process to meet its statutory obligation for supplying electricity as Illinois transitions to a competitive retail electric market, Illinois Commerce Commission Docket No. 98-0514.
- Was the lead policy witness for South Carolina Electric and Gas on obtaining regulatory approval to transfer depreciation reserve from a nuclear plant to T&D depreciation reserve. This is a critical issue in preparing for competition and limiting stranded investment.
- Was instrumental in acquiring a large engagement for a major southeastern utility examining their competitive position as it relates to a competitive electric market. During the engagement he provided input and guidance on regulatory issues related to the deregulation of the electric industry.
- Assisted Carolina Power and Light Company in their integrated resource planning process by advising and facilitating a Commission directed public policy panel.
- Developed an overview of Niagara Mohawk Gas’ integrated resource planning efforts. This engagement was under a contract from Oak Ridge National Laboratories.

Renewable Fuels, Demand Side, Energy Efficiency

- Provided an analysis of electric vehicle economics and the legislative, engineering, and regulatory issues that regulated electric utilities should address in both residential and commercial installments of electric vehicle charging stations. Studied performed for Fortune 500 Southeastern investor-owned utilities, 2011-2012.
- Provided a Fortune 500 large Southeastern based investor-owned electric utility an economic, engineering, and environmental evaluation of a proposed renewable fuel alternative including the provision of an assessment and the design for a large-scale pilot test in one of that utility’s fossil-fired facilities, 2012.
- Provided testimony for Entergy Mississippi related to that Company's proposed new demand side initiatives Docket No. EC-123-0082-00, February 2009.

- Provided testimony for Entergy Mississippi related to whether the Mississippi Public Service Commission should adopt some proposed Federal standards related to integrated resource planning and energy efficiency, Docket No. 2008-AD-477, February 2009.
- Presented testimony on behalf of Public Service of North Carolina supporting that Company's proposed demand side initiatives as well as the cost recovery of those initiatives, Docket No. G-5, Sub 495, March 2008.
- Provided testimony in South Carolina for Duke Energy, South Carolina Electric and Gas, and Progress Energy related to whether the South Carolina Public Service Commission should adopt some proposed Federal standards related to smart metering and energy efficiency rate setting procedures, Docket No. 2005-386-E, April, 2007.
- Provided testimony in South Carolina for South Carolina Electric and Gas related to Integrated resource Planning and that Company's demand side initiatives, June, 2007.
- Provided testimony in Georgia for Georgia Power Company supporting that Company's Integrated Resource Planning process, the appropriate methods for evaluating demand side energy options, and supporting that Company's planned demand side programs, Docket No. 24505-U, June, 2007.
- Provided testimony in North Carolina for Duke Energy and Progress Energy related to whether the North Carolina Public Utility Commission should adopt some proposed Federal standards related to smart metering, energy efficiency, and electric resource planning, Docket No. E-100-Sub 108, November, 2006.

Cost of Service, Rate Design, Forecasting

While serving more than eight years on the North Carolina Commission, Dr. Wright was involved in several cost of service and rate design analyses, testimonies, and orders. This included work in electric, telephone, gas, and water utilities. Additionally, he has presented testimony on performance based ratemaking and he has been involved in analyzing electric utility forecasting models, including end-use models, regression analysis (both linear and nonlinear) and customer discrete choice modeling forecasts. Furthermore, Dr. Wright's Ph.D. is in environmental and regulatory economics with special research into nonlinear minimal cost optimization procedures for electric utility production models. This work included optimizing investments, optimal regulatory regimes, pricing, cost recovery, and rate of return issues.

In addition, he has:

- Provided a study to a Fortune 500 large Southeastern investor-owned utility related to the use of regulated electric rates designed to help retain current large industrial customers, 2012.
- Presented testimony on behalf of Public Service of North Carolina related to the establishment of a formulary type rate setting mechanism for this natural gas LDC, August, 2008, Docket No. G-5, Sub 495.
- Provided testimony in Georgia for Georgia Power Company supporting that Company's methodology for pricing fuel and its use of marginal replacement fuel cost procedures in its intra-company resource sharing arrangement with the Southern company, Docket No. 191142-U, April, 2005.
- Provided an economic analysis of the proper regulatory regime for South Carolina Pipeline Company. In this analysis he presented testimony supporting performance based rate making and his recommendations were generally accepted by the Commission staff.
- Developed forecasted rates for two New York state utilities. These rates were developed to support a bond filing by a cogenerator.
- Provided a forecast of power payments from New York State Electric and Gas (NYSEG) to two independent power producers (IPPs). This forecast was used to estimate the level of overpayments by NYSEG to these IPPs, under PURPA regulations, which he used in a filing before FERC supporting the company's claim of unlawful overpayments.

Professional Experience:

J. A. Wright and Associates, LLC, 1996 - Present

President

AT&T Solutions, 1995 to 1996

Client Partner, Regulation, Strategy & Economics

EDS, 1993-1995

Principal, Regulation, Strategy & Economics

North Carolina Public Utilities Commission, 1985-1993

Commissioner

North Carolina State Senate, 1980 - 1985

Senator

Corning Glass Works, 1978 -1985

*Senior Project Engineer - Optical Wave Guide***Current or Past Professional Affiliations:**

- Member of the Southern States Energy Board Task Force on Restructuring the Electric Utility Industry
- Served on National Association of Regulatory Utility Commissioners (NARUC) Electricity Committee
- The Keystone Committee on Externalities
- The North Carolina Radiation Protection Committee
- Oversight Committee for a joint North Carolina/New York/ Department of Energy (DOE) project.

Testimony:

- Provided a study to a Fortune 500 large Southeastern investor-owned utility related to the use of regulated electric rates designed to help retain current large industrial customers, and developed proposed testimony in support of this issue, 2012.
- Provided an affidavit in support of Progress Energy Carolinas to the North Carolina Utility Commission in a proceeding considering the appropriate avoided cost rates that should be paid to an independent power producer, Sept., 2010, Docket No. E-2, Sub 966.
- Presented testimony on behalf of Entergy Mississippi in an investigation of the Commissions procedures concerning confidentiality, August, 2010, Docket No. 2010-AD-259.
- Presented testimony before the Mississippi Public Service Commission on behalf of Entergy Mississippi, Inc., in support of the formula rate plan annual evaluation, Docket No. 2002-UN-526, March, 2009.
- Presented testimony before the Mississippi Public Service Commission on behalf of Entergy Mississippi, Inc., in support of an energy efficiency pilot program and cost recovery mechanism, Docket No. 2009-UN-064, February, 2009.
- Presented testimony before the Mississippi Public Service Commission on behalf of Entergy Mississippi, Inc., in a proceeding to review statewide energy generation needs, Docket 2008-AD-270, August 2008.

- Presented testimony on behalf of Public Service of North Carolina related to the establishment of a formulary type rate setting mechanism for this natural gas LDC, August, 2008, Docket No. G-5, Sub 495.
- Presented testimony on behalf of Entergy Mississippi in an investigation of that utility's fuel charges and its fuel cost recovery, July, 2008, Docket No. 2008-AD-270.
- Presented testimony on behalf of Entergy Mississippi on its IRP or electric resource plan and demand side initiatives, June, 2008, Docket No. 2008-Ad-158.
- Presented testimony for Duke Energy in North Carolina related to the approval to incur pre-construction costs for the proposed Lee Nuclear Station, Docket No. E-7, Sub 819, May, 2008.
- Presented testimony for Duke Energy in South Carolina related to the approval to incur pre-construction costs for the proposed Lee Nuclear Station, Docket No. 2007 -440-E, June, 2008.
- Presented rebuttal testimony for Duke Energy in North Carolina related to the recovery of costs incurred by Duke related to GridSouth and why these expenses should be fully recoverable at this time, Docket No. E-7, Sub 828, October, 2007.
- Provided testimony for Georgia Power in its 2007 Integrated Resource Plan reviewing the plan filed by the Company and discussing how its demand-side proposals were reasonable, compared the Company's demand-side proposals to those found in neighboring states, and discussed the application of the various tests used to evaluate demand-side programs (TRC, RIM, PTC), Docket number 24505-U, May, 2007.
- Presented two testimonies before the South Carolina Public Service Commission on behalf of South Carolina Electric and Gas, Duke Energy and Progress Energy Carolinas in the investigation of adoption of energy efficiency and generation standards related to the Energy Policy Act of 2005, Dockets No. 2005-385-E and No. 2005-386-E, April, 2007.
- Presented testimony before the North Carolina Public Utilities Commission on behalf of Duke Energy and Progress Energy Carolinas in the investigation of adoption of energy efficiency and generation standards related to the Energy Policy Act of 2005, Docket No. E-100, Sub 108 November, 2006.
- Presented testimony before the North Carolina Public Utilities Commission on behalf of Duke Energy in the investigation of Duke Energy's 2006 Integrated Resource Plan, Docket No. E-100, Sub 103, June, 2006.
- Provided testimony for Georgia Power in its 2005 Fuel Adjustment Hearing on the issue of the appropriate pricing methodology for the dispatch and sale of electricity in the Southern Company system, Docket number 19142-U, April, 2005.

- Presented testimony on behalf of South Carolina Electric and Gas Company before the South Carolina Public Utility Commission for South Carolina Pipeline Company related to the inclusion of a generating plant in rate base and to the recovery of RTO (Gridsouth) related costs, Docket No. 2004-178-E, October, 2004.
- Presented testimony on behalf of Entergy Mississippi before the Mississippi civil court dealing with maintaining the confidentiality of special use contracts, August, 2004.
- Presented rebuttal testimony before the South Carolina Public Utility Commission for South Carolina Pipeline Company related to the reasons for continuing a program that allows flexible, competitive based pricing for large, interruptible customers that have alternative fuels, Docket No. 2004-6-G, May 29, 2004.
- Presented testimony before the Georgia Public Service Commission on the appropriate range for a return on equity earnings band (a form of performance based regulation) to set in a Savannah Electric & Power Company rate case, Docket No. 14618-U, April, 2002.
- Presented testimony before the Georgia Public Service Commission on behalf of Scana Energy Marketing related to affiliate relationships and the appropriate affiliate rules between Atlanta Gas Light Company's regulated and unregulated affiliates. Docket No. 146060-U, August 24, 2001.
- Presented testimony before the Georgia Public Service Commission on the appropriate range for a return on equity earnings band (a form of performance based regulation) to set in a Georgia Power Company rate case, Docket No. 14000-U, November 19, 2001.
- Presented testimony before the North Carolina Public Utilities Commission on behalf of SCANA Corporation regarding issues related to market power the appropriate affiliate relationship protections necessary in its merger with Public Service Company of North Carolina, Docket No. G-5, Sub 400; G-3, Sub 0.
- Presented testimony before the South Carolina Public Service Commission on behalf of South Carolina Pipeline Corporation regarding issues related to its annual review of gas costs as reflected in its purchase gas adjustment charge, Docket No. 1999-007-G, September, 1999.
- Presented testimony before the Arkansas Public Service Commission on behalf of Entergy Arkansas, Inc. regarding regulatory policies related to the definition of public utilities as it impacts citing requirements of non-utility owned generating facilities, Dockets No. 98-337-U, March 9, 1999.
- Presented Rebuttal and Surrebuttal testimony before the Louisiana Public Service Commission on behalf of Entergy Louisiana, Inc. and Entergy Gulf States regarding regulatory policies related to stranded cost recovery and on the issue of whether

investors have been compensated for the risk of not recovering stranded costs, Dockets Nos. U-22092SC and U-20925, September, 1998.

- Presented testimony to the South Carolina Public Utility Commission for South Carolina Pipeline Corp. related to acquisition adjustments and regulatory policies related to performance based regulation, Docket No. 90-588-G, June, 1998.
- Testified before the Mississippi Public Service Commission on issues related to the establishment of retail electric competition, including ISO establishment, regional power exchanges, legislation, taxes and regulatory polices, April 16, 17, 1997.
- Support of Transition Proposals filed by Virginia Power Corporation, March, 1997.
- Entergy Arkansas testimony in support of Transition to Competition Filing, 1997.
- Entergy Louisiana testimony in support of Transition to Competition Filing, 1997.
- Support of Performance Based Regulation for GTE South Inc., Docket No. P-19, Sub 277, before the North Carolina Utility Commission, filed Nov. 22, 1995.
- Stranded Cost Regulatory Policy and Recovery Testimony before the South Carolina Public Service Commission, the Commission approved the request Dr. Wright was advocating, Docket No. 95-1000-E, October 27,1995.
- Performance based rate making mechanism and rate levels, testimony on behalf of South Carolina Pipeline Corporation, Docket No. 90-588-G, filed August 3, 1995.
- Prudence Review of Power Resource Planning for Central Vermont Public Service Company, Docket No. 5724, September 7, 1994.
- Rebuttal testimony on behalf of Central Vermont Public Service Company, Docket 5724, September 7, 1994.
- Surrebuttal testimony on behalf of Central Vermont Public Service Company, Docket No. 5724, September 9, 1994.

Professional Publications:

- *“Energy Deregulation,”* March 2001, report of the California State Auditor on the causes of the problems related to high electric prices and blackouts (from May, 2000 through June 2001, and ongoing) in California’s restructured electric marketplace. Dr. Wright was one of three consultants who essentially researched and prepared the State Auditor’s report.

- “Low Cost States and Electric Restructuring - The Issue is the Price!” presented to the 1999 Miller Forum on Government, Business and the Economy, University of Southern California, April 19, 1999.
- *An Analysis of Commonwealth Edison’s Planning Process For Achieving Reliability of Supply*, Illinois Commerce Commission Docket No. 98-0514.
- *The Impact of Competition on the Price of Electricity*, author, published by L. A. Wright and Associates, November, 1998.
- “Retail Competition in the Electric Industry: The Impact on Prices,” presented at the 18th Annual Bonbright Center Energy Conference, Atlanta, Georgia, Sept. 10, 1998.
- *Potential Economic Impacts of Restructuring the Electric Utility Industry*, co-author, published by the Small Business Survival Committee, Washington, DC, November, 1997.
- “How Deregulation Will Affect Power Quality and Energy Management,” presented at the Power Quality and Energy Management Conference co-sponsored by Entergy and EPRI, New Orleans, LA, Nov. 14, 1997.
- “Deregulation of the Electric Industry,” *Proceedings: National Business Energy Forum*, June 26, 1997, New Orleans, LA.
- “A Different View of the Market,” presented at the Southeastern Electric Exchange Conference, June 25, 1997, Charlotte, N.C.
- “Restructuring The Electric Utility Industry: Theory vs. Reality,” presented at the American Bar Association Restructuring Conference, Raleigh, NC, Dec. 5, 1996.
- “Restructuring: The Best Approach for Virginia,” presented at the Virginia State Corporation Commission Electricity Restructuring Forum, Charlottesville, VA, Nov. 15, 1996.
- “Alternative Rate Making for the Natural Gas Industry: State Issues,” presented at the Tenth Annual NARUC Biennial Regulatory Information Conference, Columbus, Ohio, Sept. 12, 1996.
- “RetailCo: To Regulate or Not?” presented at the 9th Annual Automatic Meter Reading Symposium, New Orleans, La., Sept. 10, 1996.
- “Convergence: The Competitive Revolution Comes To Electric Power,” presented to the Southeastern Association of Regulatory Commissioners Annual Convention, Point Clear, Alabama, June 4, 1996.
- “Stranded Assets Recovery Issues,” presented at the Western Electric Power Institute: Financial Forum, Tucson, Arizona, March 8, 1996.

- “The Deregulation of the Electric Utility Industry : Current Status,” presented at the North Carolina Economic Developers Association Midwinter Conference, Pinehurst, N.C., February 23, 1996.
- “Performance Based Regulation for The Natural Gas Industry,” panelist on Southern Gas Association’s Televised Regulatory Forum, Dallas, Texas, Jan. 18, 1996.
- “Industry Structure Should Meet Stakeholder Objectives,” *Electric Light and Power*, Jan., 1996.
- “Quantifying the Value of Stranded Investment: A Dynamic Modeling Approach,” *Proceedings: Implementing Transmission Access and Power Transactions Conference*, Denver, Colorado, Dec. 14, 1995.
- “Quantifying the Value of Stranded Investment: A Dynamic Modeling Approach,” at the 15th Annual Bonbright Center Electric and Natural Gas Conference, October 9-11, 1995, Atlanta, Georgia.
- Comments to FERC in the matter of Notice of Proposed Rulemaking on Open Access, Docket No. 95-9-000, 1995.
- “The Road to Competition for Re-Regulated Industries,” presented at the 1995 PROMOD users Forum, St. Petersburg, Florida, May 1, 1995.
- “Comparing New York State Electric and Gas Corporation’s Non-Utility Generator Payments to Current Avoided Cost Rates,” report submitted in support of affidavit filed before FERC in Docket No. EL 95-28-000.
- “A Solution To The Transmission Pricing and Stranded Investment Problems” *Public Utilities Fortnightly*, January 1995.
- “Electric Utility Competition: The Winning Focus,” presented at 1994 Southeastern Electric and Natural Gas Conference, Atlanta, Georgia, October 1994.
- “Gas Integrated Resource Planning: The Niagara Mohawk Experience,” for Martin Marietta Energy Systems, Inc., under contract to the United States Department of Energy, ORNL/SUB/93-03369.
- “Future Regulation In the Water Industry - Can We Solve the Problems Before They Happen?” *Water*, Vol. 29, No. 2, pp. 14-17, Summer 1988.
- “The Regulatory Process - Historical and Today,” presented at Carolina Power and Light Company’s IRP Public Participation Committee Seminar, June 1994.

George M. Fandos

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| Profession: | Lead Consultant |
| Years of Experience: | 25+ |
| Education: | Bachelor of Science from Vanderbilt University |

Key Qualifications:

George Fandos brings over 25 years experience as an executive level management consultant and service as an operational executive. His passion and focus have always been on the customer; from marketing to selling to post-sale support, he has built and consulted with organizations whose aim is to delight their customer in a profitable manner.

Consulting projects undertaken for his clients have focused on design and deployment of centralized customer service operations; multiple contact center improvement engagements focused on people, process and technology; process and organizational change management; customer experience design; development of multi-channel customer strategies; and analysis of trends in consumer buying behaviors and satisfiers.

He has helped utility customer service and corporate communications organizations define long range strategies, create messaging goals, and develop comprehensive metrics and processes to track progress toward those. A sampling of his clients include DTE Energy, Entergy, SCANA, NIPSCO, and AEP.

Mr. Fandos has helped utility organizations better understand customer expectations and use this insight to design both employee experiences and the experiences customers have through outage communications, the use/pay experience and service initiation. He has worked with utility companies in the development of a channel strategy that optimizes both customer interactions and shareholder returns.

Selected Professional Experience:

- Facilitated and led the development of a cross channel strategy for this large, Southern utility with nearly 3 million customers across channels that include call centers, IVR, web, text, social media and interactive billing statement. This effort assisted the utility in developing a plan to raise JD Powers customer satisfaction levels while at the same time optimizing O&M costs.

- Worked on the development of a customer strategy with a mid-western, gas utility focused on the re-design of billing statements, increase energy efficiency programs and other factors and/or messaging influencing customer behavior.
- Led a multi-year effort with a Southeastern electric & gas utility in a re-design and consolidation of their call centers; including process design, organizational improvements and a refreshing of the major technology systems.
- Worked with a large public utility on a post-storm assessment where over 2 million customers' power was lost. Lead the efforts in evaluating their customer service and communications execution.
- Led a multi-year change initiative with a Western U.S. gas utility in the re-design of their service center and customer facing operational environment. The project resulted in consolidated operations and highly improved, more efficient business processes through the introduction of new information technology, all while improving customer satisfaction.
- Led a multi-year effort to assist a major appliance manufacturer consolidate multiple operating call centers into a single center. Efforts included re-design of management operating systems, organizational and staffing models, process/call handling activities and a re-architecture and custom development of a new technology platform including desktop, IVR, CTI, database integration, and knowledge management. Project resulted in 50%+ productivity improvements.
- Worked with a leading distribution company to develop and deploy a corporate strategy and infrastructure in support of multiple channels including call center, the web and chat. This included a feedback mechanism to assess customer turnover, satisfaction and revenue growth.
- Worked with a major regional bank to assess and understand various customer segments buying and servicing requirements. Assisted in the deployment of various product changes, service strategies and infrastructure developments to achieve objectives.
- Led a multi-year effort to assist a major appliance manufacturer consolidate multiple operating call centers into a single center. Efforts included re-design of management operating systems, organizational and staffing models, process/call handling activities and a re-architecture and custom development of a new technology platform including desktop, IVR, CTI, database integration, and knowledge management. Project resulted in 70%+ productivity improvements.
- Led an activity-based costing engagement for a multi-billion dollar retailer in their customer service function identifying change opportunities to reduce 50% of operating costs. Prior to the engagement, projections for accommodating growth were to triple the size of the staff. The majority of the benefits were realized through detailed route cause analysis and call avoidance or the movement of inquiries to a self service platform.
- Worked with a large, mall retailer in gaining an understanding of their customers' experience from marketing through in-store purchases, including product usage and

service. Helped them gain insight into the customer's view of their product and how it impacts their lives in order for the retailer to design an organization, processes and measurements that exceed customer's expectations.

- Worked with a distribution company to develop and deploy a corporate strategy and infrastructure in support of multiple channels including call center, the web and chat. This included a feedback mechanism to assess customer turnover, satisfaction and revenue growth.
- Worked with a major regional bank to assess and understand various customer segments' buying and servicing requirements. Mr. Fandos also assisted in the deployment of various product changes, service strategies and infrastructure developments to achieve objectives.

Work History:

River Consulting Group, Clayton, Georgia: 2010 to Present

Senior Associate

Customer Innovations, Atlanta, Georgia: 2009 to Present

Managing Principal

The James Agency, Atlanta, Georgia, Management Consultants: 2003 to 2009

President

Realeum Corporation, Alexandria, Virginia: 2000 to 2003

Chief Customer Officer

eLoyalty Corporation, Chicago, Illinois: 1996 to 2000

Senior Vice President, Eastern Operations

IBM Corporation, Stamford, Connecticut: 1981 to 1996

Marketing Management,

Principal, Customer Service Practice Leader

Charles A. Fijnvandraat

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|-----------------------------|---|
| Position: | Senior Consultant |
| Years of Experience: | 25 |
| Education: | B.S./1986/Electrical Engineering/University of Hartford, West Hartford, CT |
| | MBA/1990/Finance/Western New England College, Springfield, MA |
| Professional License | Professional Engineer, State of Connecticut and Hawaii |

Key Qualifications:

Selected Professional Experience:

Charlie Fijnvandraat, P.E., proposed senior consultant, has been working in the utility industry for over 25 years as an engineer, supervisor, and consultant; he also served two utilities (Northeast Utilities and NSTAR) in these roles. His management consulting experience includes work with SCE, PacifiCorp, AEP, Con Edison, Exelon, Entergy, PPL, and others. His direct utility experience includes roles in operations and engineering involving maintenance, project management, performance, planning, design, and FERC/NERC compliance. As a consultant, he has assisted clients to optimize restoration processes, prioritize O&M and capital budgets, create reliability standards and metrics, and increase field force utilization and performance. Recent regulatory (consulting) engagements involve supporting reviews of capital trackers for natural gas utilities, leveraging his experience of the planning process, scheduling, and measuring the efficiency of field operations in removing/replacing underground assets.

Direct Operations and Engineering Experience

- Testified before State Regulatory Boards on Storm Performance, Accelerated Distribution Capital Recover and Rate cases for both Gas and Electric asset replacement strategies
- Involved in over 50 plus storm events, in roles such as leading field restoration efforts, performing back office analysis and dispatch, and conducting post storm audits along with responding to regulatory and public inquires
- Working member of the IEEE committees on “Distribution System Design” and “Distribution Networks Task Force”. Including contributing member for writing and publication of P1366 Guide for Electric Power Distribution Reliability Indices, and the IEEE Underground Network Tutorial

- Project management experience for fast track multi-million dollar Transmission, Substation and Distribution upgrades and new construction
- Utility Management experience creating procedures and controls to measure compliance to FERC/NERC/NPCC Protection and Control Reliability Standards

Sample Experience – as a utility consultant

- Served as the Technical subject matter for the State of Massachusetts Attorney General's office, for
 - Docket 12-38 (2013) NGRID Gas Capital tracker
 - Docket 11-85/119 (2012) NGRID Irene and October 2011 Storm performance audit
 - Docket 11-36 (2012) NGRID Capital Tracker for Cast Iron Main and Bare Steel accelerated replacement Docket 11-03 (2011) NGRID December 26' 2010 Storm Performance audit
 - Docket 11-01 (2011) Unutil Electric Rate Case asking for 2008 Storm Cost recovery
 - Docket 11-02 (2011) Unutil Gas Rate Case for Cast Iron Main and Bare Steel accelerated replacement
 - Docket 10-79 (2010) Distribution Capital Tracker filing
- On behalf of PPL's Emergency Restoration department, improve the accuracy and reach of the Estimated Time of Restoration published during major storm events and outline the process to measure and achieve same
- Served as the Technical and Regulatory subject matter expert to support a client to develop organizational changes and enhanced work process and linked scorecards to improve storm emergency response times and measure and manage community and regulatory communication
- On behalf of the Indiana Utility Regulatory Commission perform an independent technical review and audit of the IPL underground network system, work practices, emergency response and system investment as a result of recent reliability issues.
- Served as the technical subject matter expert for several clients, responsible to implement a decision-analytic model for prioritizing core Transmission/Distribution capital and maintenance expenditures, including load relief, reliability, service connections, relocations, failures, preventive maintenance and information technology

Sample Experience – as a utility manager

- Served as the Emergency Response Branch Director responsible for the team that creates pre and current Storm Damage estimates, linking Resource and Material requirements to estimated time of restoration and cost. Tools include leveraging GIS technology (asset

inventory, topography, prior outage/weather patterns), historical expense and capital investments, SCADA, OMS and System Demand Response Curves

- Served as the subject matter expert on the Planned Outage Communication team, implementing tactical changes to the Customer communication outage messages and estimated time of restoration predication algorithms, supporting year over year improvements within the J.D. Powers Customer Satisfaction survey rankings
- Defined and staffed a new Substation Performance and Reliability department. Oversaw the analysis and targeted design changes for control and protection relays, transformers, and circuit breakers/metal clad. Also responsible to support new equipment acceptance testing and updating preventative maintenance procedures
- Created systems and score cards to monitor utilities compliance efforts to FERC/NERC/NPCC Protection and Control (PRC) reliability standards. In particular PRC-002; Regional Disturbance Monitoring and Reporting, PRC-005; Protection System Maintenance and Testing, PRC-008; Under frequency load shedding, and PRC-012; Special Protection Systems
- Served as the Divisional Operations Manager responsible for overall substation and underground distribution (including the Network System) performance and reliability standards and environmental compliance

Professional Experience:

Fijnvandraat Consulting Group Inc.:2010- Present
Principal

NSTAR Electric: 2006 to 2010
Manager of Substation Performance and Reliability 2007 to 2010
Manager of Underground Network Engineering and Special Projects 2006 to 2007

Navigant Consulting, Utility and Energy Practice: 1999 to 2005
Managing Consultant

Northeast Utilities: 1986 to 1998
Manager of Substation Operations – Springfield Division
Engineer Distribution and Transmission
Engineer – Distribution Planning

Professional Affiliations:

Registered Professional Engineer, State of Connecticut and Hawaii

Working member of IEEE groups on Distribution System Design and on Distribution Networks

Edison Electric Institute (EEI) – Former Executive Board Member Transmission/Substation Group

Professional Publications:

- “Achieving Customer Satisfaction with Outage Communication – Getting Your Estimated Time of Restoration Right” , 6th Annual Emergency Preparedness and Service Restoration Conference, Hosted by O’Neill Management Consulting, Memphis TN, March 2011
- “Underground Network Tutorial”, Pre-conference workshop at the IEEE T&D conference Calgary, October 2009 and New Orleans, April 2010
- “Life Cycle Costs of High Pressure Fluid Filled (HPFF) Transmission U.G. Cable at NSTAR Electric”, EEI T&D Conference April 2008
- “Asset Management – Spending Prioritization for the T&D system”, Pre-conference workshop at the T&D World Conference, Indianapolis IN., May 2004
- “Risk and Return on Investment at LIPA”, EPRI Asset Management Conference, June 2003, co-presented with LIPA.
- “LIPA Advances to the Next Level”, Transmission & Distribution World Magazine, March 2002, co-authored with LIPA and KeySpan.
- “T&D Outsourcing Issues at Long Island Power Authority”, T&D World Magazine Outsourcing Conference, December 2001, co-presented with LIPA.
- “Taking Utility Maintenance to the Next Level”, EPRI Substation Diagnostics Conference, February 2001, co-presented with LIPA.
- “Maximizing GIS Benefits for Distribution Reliability”, SmallworldConference, October 1999.

W. Edward Titus

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| Profession: | Supervising Consultant |
| Years of Experience: | 35+ |
| Education: | Master of Business Administration from the University of Arkansas Bachelor of Science from the University of Arkansas |

Key Qualifications:

W. Edward (Ed) Titus has over 35 years' experience with utility companies, both gas and electric, spanning a wide variety of management positions and consulting engagements. He has extensive experience in Supply Chain, Asset Management, Work Management, Quality Management, and Change Management for utility company applications. He has worked with several large companies to transform their supply chain organizations from functional focused suppliers of equipment, material, and services to ones with broad authority to develop oversight and governance of all contracts and corporate spend.

He has helped supply chain organizations define long range strategies, set goals, and develop comprehensive metrics to track progress toward those goals in addition to metrics to monitor compliance with regulations, directives, and internal policies.

Mr. Titus has helped supply organizations develop methods for determining that they are getting optimum pricing, quality, and delivery performance from their suppliers. He has helped develop procedures for qualifying and selecting suppliers. He has developed methods for supplier management through a system of supplier performance metrics, benchmarking, and use of market intelligence to assure that selected suppliers remain the best choice for the duration of long term contracts.

Selected Professional Experience:

Supply Chain and Logistics:

- For Piedmont Natural Gas Co. (Charlotte, NC) served on a team to implement MAXIMO as their asset management system. Facilitated a team which planned the integration of asset management functionality with PNG's supply chain system and with other systems, such as customer service, crew assignment, scheduling, mapping, and financial. Developed a Change Management strategy and detailed long range plan to manage the cultural changes required to successfully integrate the new system into the existing organizational structure.

- Served as full time resource to the Chief Supply Chain Officer at Bonneville Power Administration to plan and implement an organization transition project. Duties included planning and implementing organization design, revised policies, redesigned processes, new procedures (in the form of a playbook), and the application of process metrics. The transition involved writing an organization strategy document, creating an employee skills development plan, developing and deploying a change management plan, and designing process interfaces between Supply Chain and its internal and external stakeholders. The purpose was to transition the organization from a functional supplier of equipment, materials, and services to one with broad authority for policy development and governance of corporate spend.
- Completed a Supply Chain transformation for a fleet of 7 coal-fired generating plants owned by Midwest Generating Company, EWE (an Edison International company). The objective was to improve Supply Chain responsiveness to plant construction and maintenance. Revised the work planning processes to better forecast the need for equipment, materials, and contract services. Revised the scheduling processes to reduce non-productive time. The project included developing policy, processes and procedures to align the plant level buying function with newly implemented corporate level strategic sourcing.
- Served as Director of Nuclear Procurement for Beaver Valley Station, a two unit nuclear power station in Pennsylvania. Responsibilities included sourcing, contract administration, warehousing, receiving quality inspection, and procurement engineering. A significant part of this position involved supplier qualification, and the sourcing, contract development, and administration of performance based contracts for services. Specifically, negotiated, created, and administered performance based contracts for plant modifications, maintenance, and outage support. Performed significant audits of contractor performance to support the incentives specified in contracts.
- Evaluated storm restoration response of Supply Chain and Logistics organizations at CenterPoint Energy after hurricane Ike. Reviewed their emergency response plan, reviewed actual response activities and their results, and developed an evaluation report. The report served as an internal improvement document and as the basis for a report to the Texas PUC.
- Facilitated business transition to a new MRPII system for GE Nuclear Energy Division. The effort included developing business process documentation, modifying the system user's guide, training development and training delivery. The project included revising sourcing procedures and the coordination between the sourcing and quality assurance organizations.
- Conducted Lean Manufacturing workshop (Kaizen Event) for Celanese Chemical Corporation, which reduced cost of logistics in handling and storage of acetate product and transportation from the manufacturing facility to import/export logistics center in Vancouver, British Columbia, Canada.

Work Management:

- Revised policy and procedures for maintenance and construction planning at Midwest Generating Company for their fleet of 7 coal-fired generating plants. The purpose was to improve the identification, acquisition, and scheduling of equipment, materials, and services. The improvements reduced the cost of procurement, but more significantly improved work force productivity by reducing time waiting for materials and contractors.
- Reengineered processes for the Power Production Division of Kansas City Power & Light, which consisted of 4 coal-fired electric generating stations. The project was organized into three teams concentrating on Outage Management, Work Planning, and Work Control. The improvements in scheduling and management of the work force allowed redeployment of 30% of plant employees into a central pool of travelling craft people to support both planned and emergency outages at any of the four plants.
- Redesigned Organization, policy, and processes, for maintenance planning and scheduling at Arkansas Nuclear One, a 2 unit nuclear facility owned by Entergy. The organization design integrated maintenance, construction, quality assurance, and materials management into one cohesive unit. The result was over 50% productivity improvement in the maintenance and construction work forces. Employee man hours made available by the improvements were used to perform work previously done by contractors. This organization was recognized by the Institute of Nuclear Power Operators (INPO) as a best practice.
- Served the Project Management Office (PMO) for construction of four coal-fired units in Arkansas. As Manager of Industrial Engineering, my team conducted work force productivity measurement, analysis and reporting. Coordinated with construction management to improve scheduling of crafts for maximum performance. Contributed to the four units starting up on schedule and within budget.

Quality Management:

- Performed an enterprise-wide quality management audit for Lower Colorado River Authority (LCRA). Audited existing quality management processes to the ISO9001:2008 international quality standard. Documented observations and gaps between as-is processes and the standard. Developed an overall assessment and made recommendations for improvement to top management.
- Managed supplier quality audits and quality assurance of received equipment and material for Beaver Valley Station, a two unit nuclear generating station in Pennsylvania. Suppliers were audited to quality standards established by the US Nuclear Regulatory Commission (NRC).
- Served as Principal Consultant on a project to strategically source construction equipment and materials for major construction projects at NV Energy. This project was expanded beyond the scope of typical strategic sourcing in that it involved the verification / revision of engineering specifications to assure the most economical

configuration for equipment application. Also it included an on-site supplier quality audit as a part of the supplier qualification process. One significant result was discovery of a history of bushing failures on high voltage transformers. This allowed the client to negotiate with the supplier to eliminate the source of defective bushings.

Work History:**River Consulting Group, Clayton, Georgia: 2010 to Present**

Senior Associate

KEMA, Inc. Burlington, Massachusetts: 2006 to 2010

Senior Principal Consultant

W E TITUS Inc., Management Consultants: 1995 to 2006

President

Duquesne Light Company, Pittsburgh, Pennsylvania: 1987 to 1995

Director, Nuclear Procurement

Senior Corporate Performance Consultant

Entergy Arkansas, Little Rock, Arkansas: 1977 to 1987

Corporate Manager, Industrial Engineering

Timex Corporation, Little Rock, Arkansas: 1972 to 1977

Materials and Warehouse Manager

Other Background Information:

Mr. Titus retired from the US Air Force Reserve with the rank of Lieutenant Colonel. After 5 years active duty as Fuel Supply Officer, he spent his career as a reservist in the Communications / Computer Systems career field with his last assignment as Staff Communications Officer at Pennsylvania Air National Guard headquarters in Harrisburg, PA. He also served additional duty as Liaison Officer to the Air Force Academy in the Pittsburgh area.

Professional Affiliations:

Senior Member: Institute of Industrial Engineers

Member: Institute for Supply Management

Drew J. McCrossan

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|-----------------------------|---|
| Position: | Consultant Former Senior Military Officer |
| Years of Experience: | 14 |
| Education: | B.A./1999/Pre-Law/West Chester University, West Chester, PA MBA/2010/ NYU Stern School of Business, New York, NY |

Key Qualifications:

Drew McCrossan is an independent consultant who leverages over 13 years of exceptional experience as a senior officer, manager, and leader, in both the government and private sectors. His experience as a senior Officer in the U.S. Navy's Aviation community included assignments as a U.S. European Command's Lead Interagency Military Strategic Planner, Squadron Operations Officer, Department Head, and Helicopter Aircraft Commander. He has been responsible for policy development, organizational and operational planning, operations execution, strategic direction, and program management implementation.

He was the Operations Officer for a U.S. Navy helicopter squadron during the squadron's support of both the Indonesian Tsunami and Hurricane Katrina. He has extensive experience leading the planning, staffing, and operational support for rescue operations, humanitarian relief, and disaster response.

He now works with global senior managers in a variety of industries to help them assess business continuity and disaster recovery plans, to assist in the development of risk mitigation strategies, and to facilitate disaster recovery exercises. He has an MBA from NYU's Stern School of Business with concentrations in Strategy, Change Management, and Leadership.

Selected Professional Experience:

Planning

- Lead planner integrating non-Department of Defense organizations into the U.S. European Command's campaign plans, operations, and joint exercises for FY12 and FY13.
- United States Navy – As the Squadron Operations Officer he led rotary-wing planning, staffing, and operational support for Hurricane Katrina disaster rescue operations and humanitarian relief along the U.S. Gulf Coast.
- United States Navy – Implemented and managed the Fatigue Lifecycle Management (FLM) program designed to safely extend the in-service airframe lifespan of Sikorsky H-60B aircraft beyond manufacturer specifications.

Business Strategy

- Conducted a strategic and operational review of the Orlando Utilities Commission’s Chill Water business. The comprehensive review assessed the alignment between strategy and operations in the context of current and future institutional, regulatory, and competitive environments. After systematically generating a prioritized list of gaps, he developed a coordinated set of recommendations and implementation plans adapted for the company’s commercial and financial objectives to bridge those gaps and transform the company’s approach to Chill Water.

Relevant Utilities Experience

- Lead Analyst for PA Consulting Group’s ReliabilityOne™ benchmarking and certification program, which assess National utilities on their ability to demonstrate sustained leadership, innovation and achievement in the area of electric reliability.
- PSEG – Developed a customized vegetation management model which optimized maintenance investment spending to achieve desired targets for SAIDI and SAIFI. The result of the model’s implementation was the identification and prioritization of areas in the network requiring tree maintenance, as well as a reduction in the number, and severity of, tree-related outages on system reliability.
- Major Mid-Western Combination Utility – Performed an in-depth investigation of its restoration activities. The final report offered recommendations to improve the plan and enhance transmission right of way maintenance. Some of the technology enhancements around metering proved to be problematic at the onset of the restoration effort. The report was used in the very next rate case.
- ConEdison – Conducted an in-depth review of Con Edison’s reliability practices, which included application and performance of ConEdison’s processes, procedures, personnel, and technologies.
- Confidential Canadian Utility – Conducted an extensive review of corporate shared cost allocation procedures, their management, and associated processes in advance of a regulatory commission-mandated audit hearing. Assessed the effectiveness of the corporate management process and suggested changes to the process to better ensure the transparency of the process and linkages to operational plans and budgets.

Professional Experience:

2011 - Present

United States Navy:

Lead Interagency Military Planner, U.S. European Command

Command Operations Officer

Directorate Manpower Officer

2010-2011 **PA Consulting Group:**
Consultant

2000-2010 **United States Navy:**
Squadron Operations Officer
Helicopter Aircraft Commander
Command Division Officer
Safety Officer