



**Proposal
for the
New York Public Service Commission**

**To Provide
Management Audit Services of
Consolidated Edison Company of New York, Inc.**

March 13, 2008

March 13, 2008

Ms. Jaclyn A. Brillling, Secretary
New York State Department of Public Service
3 Empire State Plaza
Albany, New York 12223-1350

***Regarding: Comprehensive Management Audit Services of Consolidated Edison
Company of New York, Inc., Case 08-M-0152***

Dear Ms. Brillling:

Schumaker & Company, Inc.(Schumaker & Company) is pleased to submit this proposal to assist the New York Public Service Commission (NYPSC) in its efforts to conduct a comprehensive management audit of Consolidated Edison Company of New York, Inc. (CECONY). This audit will not be performed using the organizational unit (silo) approach; however, it will 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 and performance of the company's operations as required by Public Service Law.

Schumaker & Company is currently engaged in, and has been involved in the recent past, with a series of directly relevant client projects that encompass electric and gas management, operations, service quality, and other performance elements.

- ♦ In Pennsylvania, for instance, Schumaker & Company has recently:
 - Completed a stratified management and operations audit of PECO Energy Company, primarily to determining if appropriate management controls, processes, and systems were efficiently and effectively in place.
 - Performed as *Project Manager* and *Senior Consultants* while conducting a review of Verizon PA performance metrics and related remedies. In this effort, the utility's underlying information and operations support systems that provided data for use in calculating the performance metrics and remedies were examined.
 - Completing the final stages of a stratified management and operations audit of Pennsylvania-American Water Company, where it was intended that the management audit encourage economies, efficiencies or improvements that benefit the utility and its ratepayers, and identify which, if any, cost saving measures could be instituted.
 - Performing a stratified management and operations audit of Philadelphia Gas Works, where it was intended that the management audit encourage economies, efficiencies or improvements that benefit the utility and its ratepayers, and identify which, if any, cost saving measures could be instituted.

- ◆ In New York, Schumaker & Company consultants held *Project Manager*, *Lead Consultant*, and *Senior Consultant* positions to perform a review and evaluation of Verizon NY's efforts to provide retail service quality that consistently met the requirements of the New York telephone service standards, as required by the New York Public Service Commission (NYPSC).

These projects are illustrative of Schumaker & Company's current practice and, we believe, make us uniquely qualified to serve the NYSDPS on this important engagement.

Our proposed consultants have extensive experience performing similar activities for other local and state government entities, utilities, and other public/private organizations. Additionally, our extensive knowledge and experience with proven project management techniques and technology systems throughout North America make our consultants well suited to perform this project. The qualifications of our firm and consultants have significant merit, as follows:

- ◆ ***Management and technical expertise*** – Our consultants bring considerable consulting expertise involving management and operations reviews, workflow and process analyses, information technology and systems, project management and controls, quality assurance, and other aspects of business process improvement projects. Our project management team, plus several consultants, are *Certified Management Consultants* (CMCs)¹ by the Institute of Management Consultants (IMCUSA) and will ensure that we abide by IMCUSA's code of ethics, which is included following this letter. 
- ◆ ***Operational and organizational analysis expertise*** – Our consultants have significant experience in operational and organizational analysis and improvement. Our firm has performed operations assessment and improvement projects for numerous utilities, governmental organizations, and private sector entities. These projects focused on improving operational efficiency and work processes to reduce costs and improve work flow.
- ◆ ***Extensive utility industry experience*** – Schumaker & Company consultants have conducted over 100 utility consulting assignments in more than 33 states. As such, we have a strong working knowledge of challenges that organizations in the utility industry face.
- ◆ ***Project management expertise*** – Our officers have significant background and experience in managing projects. Both Patricia Schumaker and Dennis Schumaker are certified as *Project Management Professional* (PMP)² by the Project Management Institute (PMI). Our firm adheres to the principles of PMI's Project Management Body of Knowledge (PMBOK) in the conduct of our assignments. 

^{1/} "CMC" and CMC logo are certification marks of the Institute of Management Consultants (IMCUSA) registered in the US and other nations.

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- ◆ **Technology expertise** – In addition to our extensive business backgrounds, our project team has direct hands-on experience in providing, developing, and supporting computer technology. Schumaker & Company is also a *Microsoft Certified Partner*. This combined knowledge base of technology, along with operations and management issues, makes our firm uniquely qualified for the most complex and demanding assignments. Our corporate culture is fast moving, technologically advanced, and readily adapted to meet a variety of client needs.
- ◆ **Efficient approach** – We have structured our overall approach to be straightforward and pragmatic to ensure that the environment in which projects are performed will result in high-quality work products and deliverables.
- ◆ **Track record** – We have a proven record for successfully completing similar assignments for state and local government entities; water/wastewater, telecommunications, electric, and gas utilities; and private sector organizations.



We believe that Schumaker & Company's team is unmatched in experience, balance, and dedication to your work, and that our proposal is fully responsive to your needs. As the signator of this letter and individual authorized to legally bind Schumaker & Company, I will serve as the primary contact person and certify that:

- ◆ Schumaker & Company is willing to perform as consultants in providing the required professional consulting services and to enter into a contract with NYPSC and CECONY.
- ◆ All information contained herein is accurate, to the best of my knowledge.
- ◆ Schumaker & Company commits to perform all the work described in this proposal, and certifies that we have assigned resources with the capability to perform it.
- ◆ To the best of our ability Schumaker & Company's proposal complies with all request for proposal (RFP) requirements.

In accordance with the requirements of the RFP we have included one (1) original and nine (9) copies of our proposal, with one (1) electronic copy being sent to henry_leak@dps.state.ny.us on March 13, 2008. The New York Public Service Commission has our commitment to put forth every effort for the successful and timely execution of our scope of work. Please note that this proposal is valid for at least 180 days from the due date of March 13, 2008. If you have any questions about this proposal or Schumaker & Company in general, please feel free to contact me by any method provided below.

Cordially,

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Institute of Management Consultants USA Code of Ethics

All IMC USA members pledge in writing to abide by the Institute's Code of Ethics. Their adherence to the Code signifies voluntary assumption of self-discipline. As the professional association and certifying body for management consultants in the United States, IMC USA requires adherence to this Code of Ethics as a condition of membership and certification. The standards of conduct set forth in this Code provide basic principles in the ethical practice of management consulting. The purpose of this Code is to help IMC USA members maintain their professionalism and adhere to high ethical standards in the conduct of providing services to clients and in their dealings with their colleagues and the public. The individual judgment of Members is required to apply these principles. Members are liable to disciplinary action under the IMC USA Rules of Procedure for Enforcement of this Code if their conduct is found by the IMC USA Ethics Committee to be in violation of the Code or to bring discredit to the profession or to IMC USA. The Code specifies:

Clients

- ◆ Members will serve their clients with integrity, competence, independence, objectivity, and professionalism.
- ◆ Members will mutually establish realistic expectations of the benefits and results of their services.
- ◆ Members will only accept assignments for which they possess the requisite experience and competence to perform and will only assign staff or engage colleagues with the knowledge and expertise needed to serve clients effectively.
- ◆ Members will ensure that before accepting any engagement a mutual understanding of the objectives, scope, work plan, and fee arrangements has been established.
- ◆ Members will treat appropriately all confidential client information that is not public knowledge, take reasonable steps to prevent it from access by unauthorized people, and will not take advantage of proprietary or privileged information, either for use by them, the client's firm, or another client, without the client's permission.
- ◆ Members will avoid conflicts of interest or the appearance of such and will immediately disclose to a client any circumstances or interests that might influence their judgment and objectivity.
- ◆ Members will offer to withdraw from a consulting engagement when their objectivity or integrity may be impaired.
- ◆ Members will refrain from inviting an employee of an active or inactive client to consider alternative employment without prior discussion with the client.

Fiscal Integrity

- ◆ Members will agree in advance with a client on the basis for fees and expenses, and will charge fees that are reasonable and commensurate with the services delivered and the responsibility accepted.
- ◆ Members will not accept commissions, remuneration, or other benefits from a third party in connection with the recommendations to a client without that client's prior knowledge and consent, and will disclose in advance any financial interests in goods or services that form part of such recommendations.

Public and the Profession

- ◆ Members will, if within the scope of an engagement, report to appropriate authorities within or external to the client organization any occurrences of malfeasance, dangerous behavior, or illegal activities.
- ◆ Members will respect the rights of consulting colleagues and consulting firms and will not use their proprietary information or methodologies without permission.
- ◆ Members will represent the profession with integrity and professionalism in their relations with their clients, colleagues, and the general public.
- ◆ Members will not advertise their services in a deceptive manner nor misrepresent or denigrate individual consulting practitioners, consulting firms, or the consulting profession.
- ◆ Members will report violations of this Code to the Institute of Management Consultants USA and will promote adherence to the Code by other member consultants working on their behalf.

The Institute of Management Consultants USA, Inc. (IMC USA) adopted its first Code of Ethics in 1968. Since that time IMC USA has modified the wording of the Code for additional clarity and relevance to clients. The current Code was approved February 3, 2005. It is consistent with the International Code of Professional Conduct published by the International Council of Management Consulting Institute (ICMCI) of which IMC USA is a founding member.

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I. Introduction

The New York Public Service Commission has directed that an independent third-party consultant be retained to conduct a comprehensive management audit of Consolidated Edison Company of New York, Inc. (CECONY). This audit is not to be performed using the organizational unit (silo) approach; however, it should 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 and performance of the company's operations as required by Public Service Law.

A. Electric & Gas Utility Industry Issues Impacting CECONY

The energy industry has changed significantly in the last ten years. With the advent of deregulation, energy companies, both electric and gas utilities, have been forced to rethink and restructure their business models. Previously vertically integrated companies, they have had to separate their business into individual components with generation assets being put into separate entities or divested altogether, the creation and, in many cases, dissolution of energy trading operations, the control of transmission assets being ceded to some form of independent system operator (ISO), the energy distribution and customer service operations of the utility being restructured, and the unbundling of rates into generation (or supply), transmission, distribution, and customer service components. These changes have also brought about the formation of larger utilities (whether adjacent to each other or distant) through company mergers.

Although much has changed in the electric and gas utility industry, some of the basics remain – such as gas must still flow through pipes and electricity through wires. The facilities and equipment needed to provide this energy must be built and maintained, meters must be read and bills generated, storms must be addressed, and gas line breaks repaired. New technologies have been developed in the last ten years that have changed the way that a utility can perform some of these functions, but they all still revolve around having an adequate trained workforce to meet the day-to-day needs of the customer. How well CECONY is organized and managed to address these basic business requirements are of particular interest for this comprehensive management audit. Specifically, as per the request for proposal (RFP), the audit will therefore focus on the following elements:

- ◆ Corporate mission, objectives, goals and planning
- ◆ Long-term load forecasting
- ◆ Supply procurement
- ◆ Long-term system planning
- ◆ Capital and O&M budgeting
- ◆ Program and project planning and management
- ◆ Work force management
- ◆ Performance and results measurement



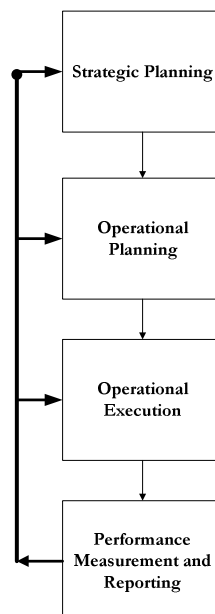
Schumaker & Company consultants recognize that this audit is not to be performed using the organizational unit (silo) approach. At the same time, however, it should include, but not be limited to, an investigation of the company's construction program planning in relation to the needs of its customers for reliable service and an evaluation of the efficiency and performance of the company's operations as required by Public Service Law. The RFP suggests that the scope of this audit be based on the framework of a series of elements or functions that are generally sequential in nature that can be viewed as a flow diagram or feedback loop. The 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 long term. This framework will begin with the element of "corporate mission, objectives, goals and planning" and end with the element of "performance and results measurement." The "end" is actually the means by which the flow of the elements is connected to the first element. This feedback typically facilitates the changes and improvements that will then result in better performance.

The audit will emphasize an assessment of CECONY's effectiveness in meeting its mission, particularly with respect to meeting its performance goals and the extent to which there are opportunities for improvement.

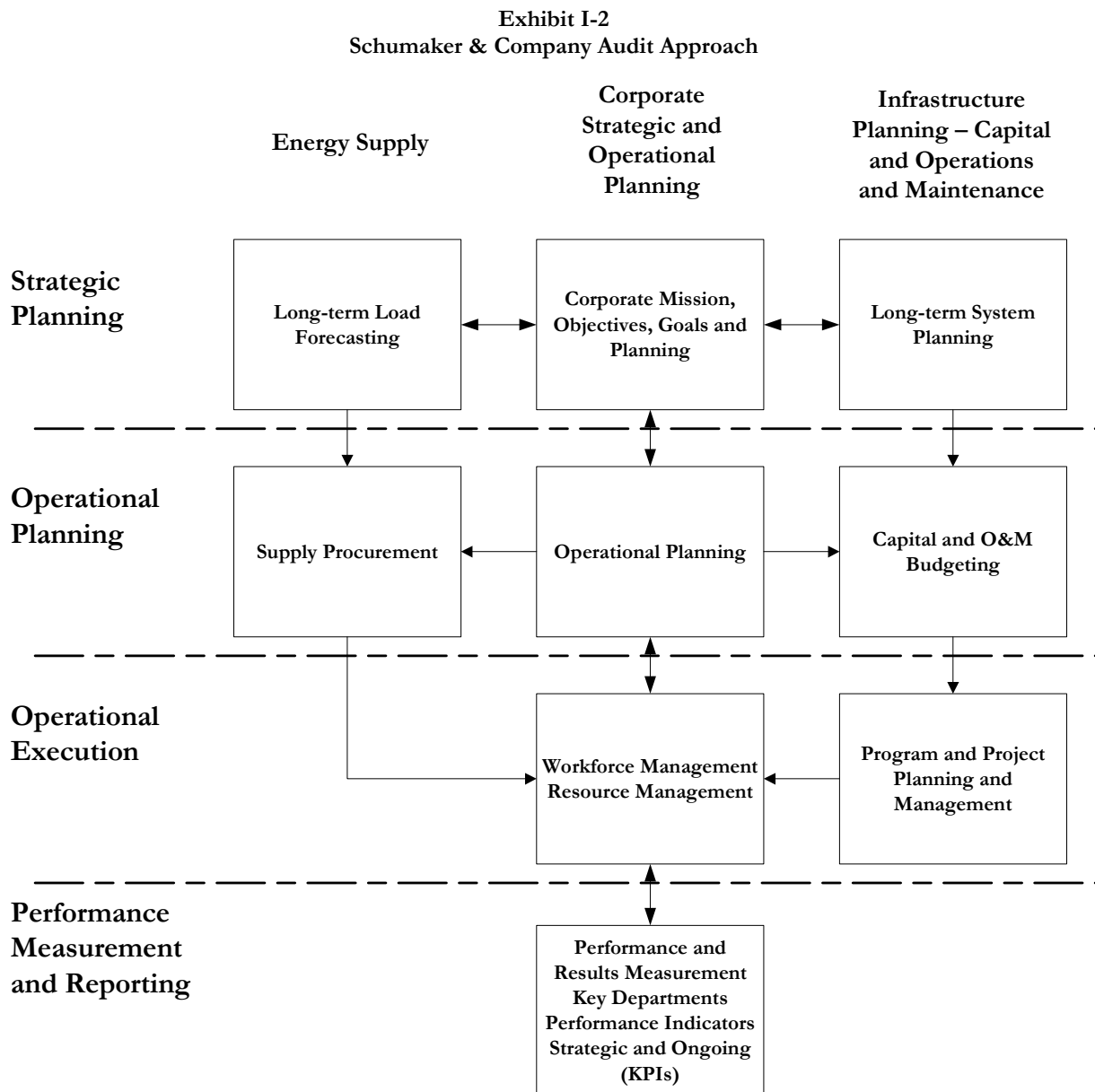
B. Our Approach

Schumaker & Company has organized our approach to the project using a simplified business flowchart process as shown in *Exhibit I-1*.

Exhibit I-1
Schumaker & Company Simplified Approach



Within this simplified approach, we have grouped each of the items mentioned in the RFP into individual work packages that are related in the overall flow process as shown in *Exhibit I-2*.



As part of your proposal, we have also included workshop-type training for New York State Department of Public Service (NYSDPS) Staff. We have allowed for five full-day workshops at the NYSDPS offices in Albany distributed over the audit duration. All of the above items have been considered in the development of our proposal.



II. Scope and Objectives

This chapter presents Schumaker & Company's understanding of the scope and objectives of the forthcoming audit of Consolidated Edison Company of New York (CECONY).

A. Objectives

Generally, the Commission's objectives for audits are to:

- ◆ Determine whether operating and maintenance expenses can be reduced
- ◆ Receive recommendations for instituting changes or undertaking the studies necessary to achieve savings or improvements
- ◆ Obtain a quantification of savings which will result from implementing the consultant's recommendations
- ◆ Receive a written report describing the management and operations of the utility for the information of the Commission, Staff, and the ratepayers
- ◆ Identify specific opportunities for improved business processes, systems, organizational design, planning, employee productivity, customer service, etc.

We recognize that this audit is not to be performed using the organizational unit (silo) approach. At the same time, however, it should 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 and performance of the company's operations as required by Public Service Law.

B. Scope

The request for proposal (RFP) suggests that the scope of this audit be based on the framework of a series of elements or functions that are generally sequential in nature that can be viewed as a flow diagram or feedback loop. As per the RFP, the management audit should therefore focus on the following elements:

- ◆ Corporate mission, objectives, goals and planning
- ◆ Long-term load forecasting
- ◆ Supply procurement
- ◆ Long-term system planning
- ◆ Capital and O&M budgeting
- ◆ Program and project planning and management
- ◆ Work force management

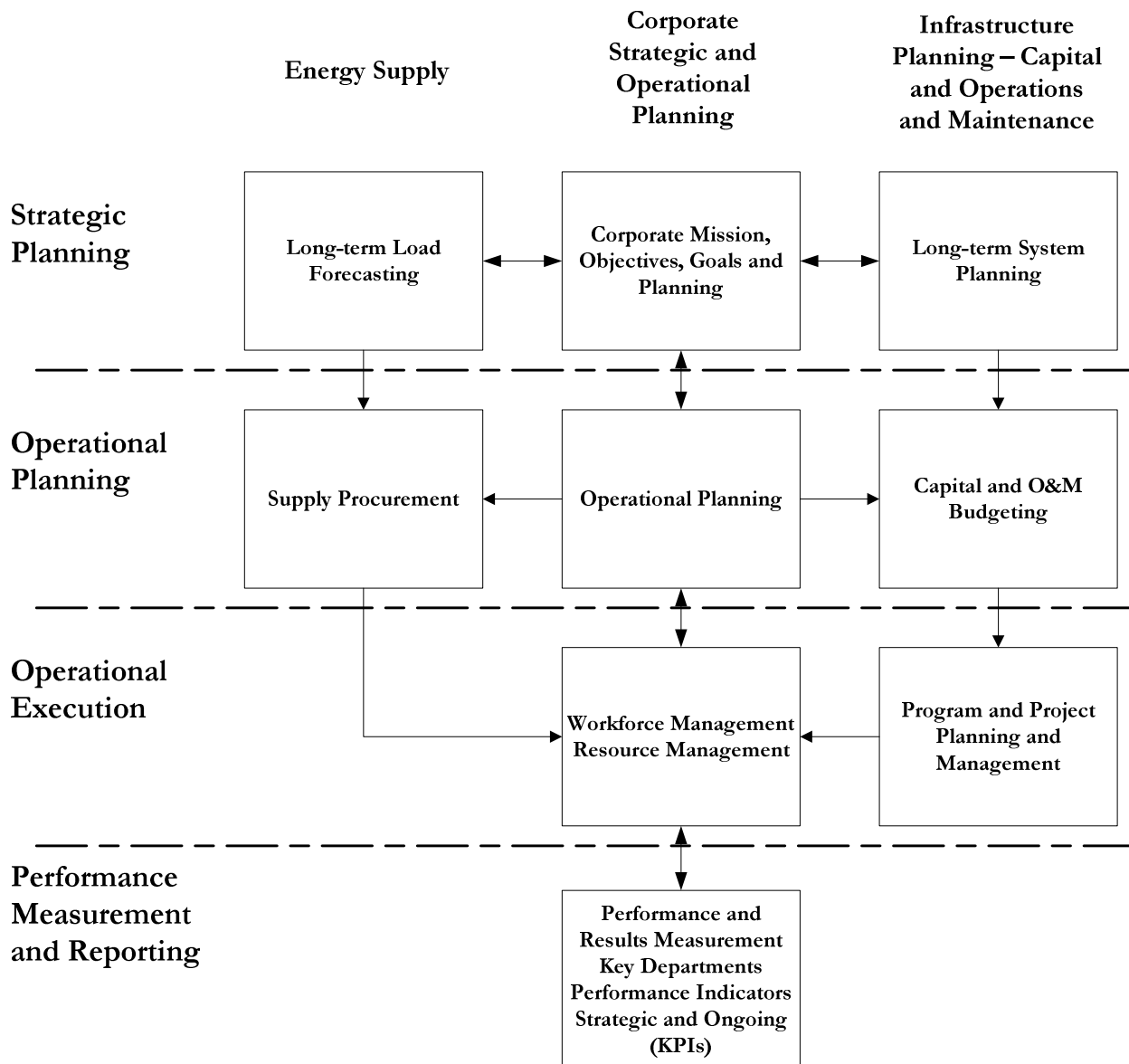


◆ Performance and results measurement

The audit will emphasize an assessment of CECONY's effectiveness in meeting its mission, particularly with respect to meeting its performance goals and the extent to which there are opportunities for improvement.

Schumaker & Company has organized our approach to the project using a simplified business flowchart process. Within this simplified approach, we have grouped each of the items mentioned in the RFP into individual work packages that are related in the overall flow process as shown in *Exhibit I-2*.

Exhibit II-1
Schumaker & Company Audit Approach



As part of your proposal, we have also included workshop-type training for New York State Department of Public Service (NYSDPS) Staff. We have allowed for five full-day workshops at the NYSDPS offices in Albany distributed over the audit duration. All of the above items have been considered in the development of our proposal.

C. Audit Approach Highlights

The Schumaker & Company project team's policy of conducting high quality audits within established time frames entails the coordination of several aspects of the project, as summarized below:

- ◆ *Active Participation and Involvement by NYSDPS and CECONY* – The Schumaker & Company project team embraces a close working relationship with NYSDPS and CECONY management and staff in conducting this audit. We believe that we have demonstrated this in our previous work. This type of relationship supports the NYSDPS's full understanding of the basis for our findings and ensures their satisfaction that all pertinent issues have been addressed. We have operated under these requirements in previous audits and found that this high degree of participation leads to a superior work product. We accomplished this in past audits in Indiana, Kentucky, Massachusetts, Maine, Michigan, New Jersey, New York, Ohio, Pennsylvania, South Carolina, and Texas.
- ◆ *Logical, Efficient Methodology* – There are three phases of our audit methodology. All of the phases, which are each composed of several tasks (*Step I – Project Orientation and Final Work Plan*, *Step II – Detailed Review and Analysis*, and *Step III – Report Preparation*), and discussed in detail in *Chapter III–Approach, Methods, Procedures, and Audit Management*, with their completion dates and the anticipated due dates for major project deliverables. Our proprietary project management system, Project Management Information Application (PMIA), has been developed specifically to support and facilitate our investigations and analysis, based on our past experiences with other audits of utility operations and performance, management audits, and code of conduct reviews.
- ◆ *Generally Accepted Auditing Standards* – This audit must be conducted on an independent, objective basis, adequately supported by proper working papers, and reported constructively with due consideration of pertinent comments on findings, conclusions, and recommendations. Our procedures are in accordance with the standards as defined in the request for proposal and set forth in the National Association of Regulatory Utility Commissioners' "Consultant Standards and Ethics for Performance of Management Analysis," dated November 15, 1989, and with the U.S. General Accounting Office's "Standards for Audit of Government Organizations, Programs, Activities, and Functions," as applicable to public utilities. PMIA has been specifically developed to meet the requirements of these standards.
- ◆ *Straightforward, Concise Final Report* – The final report will contain detailed, meaningful findings and well-developed conclusions. It will clearly address the level of compliance desired by the NYSDPS.



- ◆ *On-Site Presence* – Approximately 60% of the staff time will be spent on-site. We believe this degree of involvement is essential to perform a thorough investigation and provide a high degree of interaction with the NYSDPS and CECONY management and staff.
- ◆ *Rationale for Findings* – The Schumaker & Company project team’s findings will be based on facts that are correct and true and, when combined with professional experience, will provide a complete perspective of the services under review. Furthermore, substantiation (audit trail) for each finding will be evident in the project’s working papers. To ensure that an adequate audit trail is established and maintained, we adhere to generally accepted auditing standards, as described previously. These standards provide guidance in the formulation of objective, independent audit findings supported by proper working papers and reported constructively. The final report will be fair and equitable in addressing the results of the evaluations in each area of investigation.
- ◆ *Quantification of Recommendations* – Every attempt is made to categorize and quantify the cost and benefits of each recommendation. Additionally, each of the functions or issues will be rated based on its operating or performance level relative to its optimum as of the time of the audit.
- ◆ *Project Management and Control* – A project must be well planned and managed to ensure that NYSDPS’s objectives are realized and to prevent disruption of utility operations. In the conduct of this audit, Schumaker & Company’s project management procedures will address both technical and administrative issues. We are committed to ensuring that the project’s scope is identified, agreed upon, and controlled. We are committed to establishing project administrative procedures that will facilitate conduct of the audit without placing undue burdens on any of the involved staff.
- ◆ *Project Automation* – Various analysis and graphics software will be used by the Schumaker & Company project team consultants to perform many of the analyses for the development of findings and conclusions during the audit. In addition, several computerized project management and administrative techniques provided by Schumaker & Company will be used during the project. Our word processing systems facilitate footnoting of all written products to the appropriate working papers. All working papers will be maintained in PMIA, a proprietary Schumaker & Company database system for organizing and managing interviews, information requests, and final work papers on stratified or focused management audits. In addition, graphics and other software will facilitate the communication of our findings, conclusions, and recommendations to the NYSDPS and CECONY in situations where “pictures speak louder than words.” Draft task reports are typically transmitted electronically to the NYSDPS and company for review.
- ◆ *Independence and Objectivity* – We recognize that, although the Commission has ordered this audit, CECONY has a vested interest in the results. Furthermore, CECONY will be able to use the results of this audit for initiating positive change within its organization. Therefore, we have tailored our audit approach to facilitate the involvement of CECONY management and staff, and their input into the process, while carefully maintaining Schumaker & Company’s independence and objectivity.

The preceding principles will help us to focus our resources in conducting this audit of Consolidated Edison Company of New York.

Synopsis of Study

We propose to conduct this audit based on a three-step review process, which has been custom tailored to meet the objectives of the NYSDPS. This process will provide the Schumaker & Company project team with a structured approach that is comprehensive and logical, as well as interactive and participative with NYSDPS and CECONY. The process was originally designed to establish and sustain vital, interactive working relationships among NYSDPS, CECONY, and Schumaker & Company project team during the course of a management and operations audit. We have refined this three-step process over many reviews, audits, and studies conducted with the same team members proposed for this project.

We have assembled a project team with a strong working knowledge of utility company operations, as well as current industry issues. Each individual has been carefully selected according to his or her experience, technical expertise, and education in those areas for which he or she is proposed. Schumaker & Company consultants are mature and experienced, with advanced degrees and practical business management experience. They consistently meet high standards of professional competence within their disciplines and have the team skills needed to work collaboratively with client organizations. They continue to earn and maintain various professional qualifications and certifications relevant to their managerial and technical expertise as demonstrated in *Chapter V – Consulting Staff Organization*.

D. Audit Deliverables and Benefits

This section summarizes project deliverables and benefits resulting from our conduct of the proposed audit. The project deliverables that can be expected by the NYSDPS *Project Coordinator* during the course of this assignment include those tabulated in the following table:



Deliverable	Content	Format
- Weekly notice of upcoming interviews and site visits - Informal meetings	Each week, we provide written notice of the interviews and site visits for the following two to four weeks, for review and approval from PMIA, our project management database system. We can provide a copy of this software to all parties and update it on a periodic basis, allowing both parties the opportunity to produce reports as often as they wish. In addition, we hold frequent informal meetings meant to facilitate NYSDPS <i>Project Coordinator</i> input and project team communication.	- Written reports - Informal meetings
Monthly written status report	Monthly written status reports will be submitted to the NYSDPS <i>Project Coordinator</i> by the 5th business day following the month's end. Part I will provide a brief, general narrative describing the project's progress, its status to date – ahead, on, or behind schedule – and the reasons for any discrepancies between its progress and the task plan schedule. Part II of the monthly written status reports will consist of status sheets indicating actual hours logged, by individual, by task, as well as other costs (i.e., material and supplies). These status sheets will contain both actual dollars and the percentage of costs compared to budget.	Written report
Interview summaries	A formal interview summary will be prepared within five days of each interview, and will include the consultants' observations and conclusions, information requests generated, issues identified, and required follow up.	Written interview summaries
Progress meetings	To promote optimum participation by, and interaction among, representatives of CECONY, the NYSDPS, and the Schumaker & Company team, we recommend three formal progress meetings during this project. Our project schedule identifies the time intervals of these progress meetings.	Formal progress meetings
Final detailed work plan	At the end of <i>Step I – Project Orientation and Final Work Plan</i>, a revised work plan will be prepared and submitted to the NYSDPS for approval. This revised work plan will encompass changes that should be made based on new information acquired from CECONY during this step.. The revised work plan will then be used for both <i>Step II – Detailed Review and Analysis</i> and <i>Step III - Report Preparation</i>. This information will be included in a resource-loaded critical path method (CPM) schedule for the project, which will be updated, at a minimum, on a monthly basis. This project schedule will be maintained in our offices.	- Paper copies - First progress meeting
Draft task reports	The results of our investigations in each functional area will first be drafted as task reports for review first by the NYSDPS staff, and after NYSDPS approval, by CECONY. A three-party meeting will be held for discussion and to obtain CECONY's written comments which will be incorporated, as appropriate, into the final report.	- Electronic files or paper copies - Second progress meeting

Deliverable	Content	Format
♦ Comprehensive first draft report	The results of our investigations in each functional area will be compiled into a draft report to the NYSDPS <i>Project Coordinator</i> . After NYSDPS approval, the draft report will be released to CECONY. CECONY will be permitted to review the applicable report and provide written comments, which will be incorporated, as appropriate, into the final report. These draft reports, after consideration of comments from the NYSDPS staff and CECONY, will form the basis for the final report. The report will be indexed to related supporting working papers. Such working papers will be submitted to the NYSDPS <i>Project Coordinator</i> upon request for up to three years following issue of the final report.	♦ One (1) unbound, copy-ready draft report to both the NYSDPS and CECONY.
♦ Final report	Schumaker & Company will prepare the final report based on the draft report, comments received from the NYSDPS <i>Project Coordinator</i> and CECONY and the requirements of the RFP. The final report will be in narrative form, written in terminology meaningful to management and others generally familiar with the subject areas. The report will be fully footnoted.	♦ One (1) electronic copy
♦ Working papers	A working-paper system will be provided that enables the NYSDPS staff to trace a statement of fact in a finding, conclusion, or recommendation to the original source document (such as an interview, document, calculation, or analysis). It includes a computerized, cross-referenced database of all pertinent information collected during the course of the project. These working papers will be available to the NYSDPS during the course of the audit and retained by the Schumaker & Company project team for three years following the release of the final report by the NYSDPS so that the working papers can be provided to the NYSDPS upon request. Also, duplicate working papers and supporting data will be provided to the NYSDPS <i>Project Coordinator</i> and filed in a locked cabinet on CECONY's premises. These documents will also be retained on site for three years following release of the final report	♦ PMIA database records and paper copies
♦ Workshops	We have also included <u>workshop-type training</u> for NYSDPS Staff. We have allowed for five full-day workshops at the NYSDPS offices in Albany distributed over the audit duration.	♦ Five days workshops



III. Approach, Methods, Procedures, and Audit Management

This chapter summarizes the approach, review methodology and procedures, and project management tools and techniques that Schumaker & Company, Inc.(Schumaker & Company) will apply to the comprehensive management audit of Consolidated Edison Company of New York (CECONY). This audit will not to be performed using the organizational unit (silo) approach; however, it will 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 and performance of the company's operations as required by Public Service Law.

A. Project Approach

Schumaker & Company brings a results-based (as opposed to a process-based) philosophy to management audits such as this one. We also place considerable emphasis on New York State Department of Public Service (NYSDPS) participation, as well as CECONY participation, during the audit. These factors will enable NYSDPS and CECONY to derive maximum benefit from this review.

Schumaker & Company recognizes that this management audit will not be a functional audit. In the course of well over 50 similar audits/reviews, Schumaker & Company team members have developed an approach that has produced consistently sound, constructive results that are generally accepted by all involved parties. Therefore, we have modified our typical approach to ensure that it will be a more business process oriented approach.

We are proposing that the project team follow a three-step study process designed to achieve vital, interactive working relationships among the NYSDPS, CECONY, and our project team. Specifically, the three steps will be as follows:

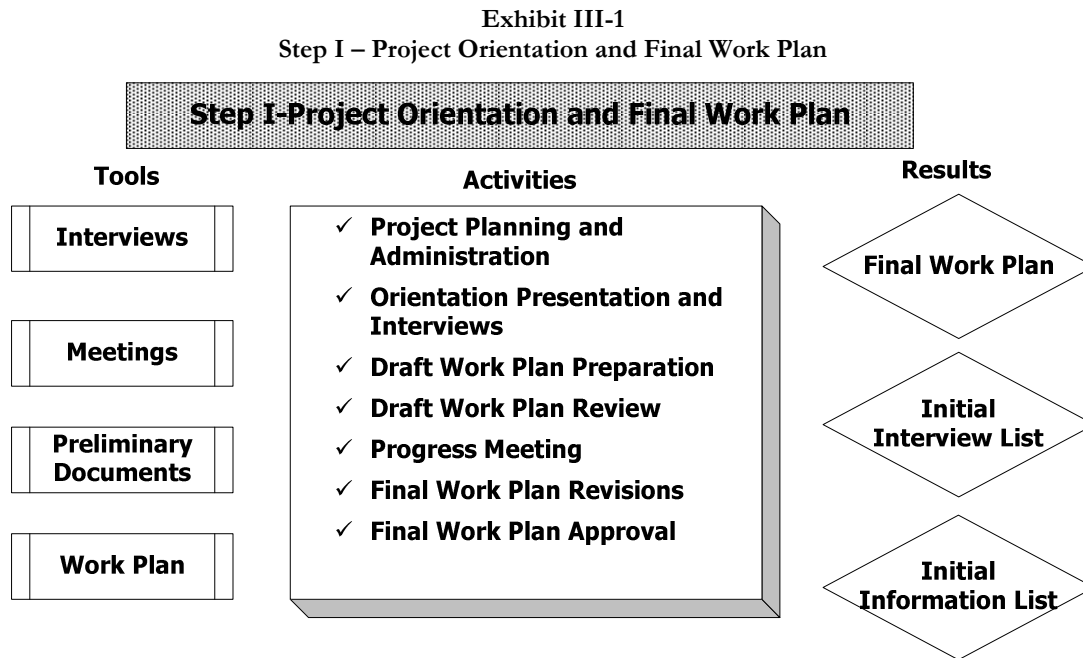
- ◆ Step I – Project Orientation and Final Work Plan
- ◆ Step II – Detailed Review and Analysis
- ◆ Step III – Report Preparation

The review methodology for each of these steps is provided on the following pages.



Step I – Project Orientation and Final Work Plan

Exhibit III-1 illustrates the tools used, activities performed, and results achieved during *Step I*.



The specific activities we will perform during this step are discussed in detail in the following paragraphs.

Project Planning and Administration

Upon award notification, our *Engagement Manager* and *Project Manager* will initiate project kick-off with a teleconference meeting to include the NYSDPS and CECONY coordinators. The primary objectives of this project planning meeting are to finalize and schedule our investigations, to review and obtain NYSDPS and CECONY concurrence on our project management and administrative procedures, and to set up a timeframe when our consultants can be on-site for a kick-off presentation and to conduct orientation interviews. Specifically, activities to be performed during this step are identified as follows:

- ◆ Establishment of administrative procedures for the project with the NYSDPS *Project Coordinator*, and CECONY *Project Coordinator(s)* including:
 - Interview scheduling procedures
 - Information request procedures
 - Progress reporting procedures

- ◆ Introduction of Schumaker & Company project management administrative procedures and computer capabilities for use on the project (see *Appendix A*)
- ◆ Familiarization of personnel with the use of Schumaker & Company's interview and information request tracking systems, referred to as our *Project Information Management and Administration* applications or PMIA
- ◆ Identification and scheduling of orientation interviews
- ◆ Submittal and review of initial information requests

Orientation Presentation and Interviews

Based on our experience on prior audits, it has proved to be beneficial for CECONY to make a kick-off presentation to our project team. This kick-off presentation should at a very high level present the following information:

- ◆ Overall organization charts for CECONY
- ◆ Key business processes to be investigated regarding the key process areas identified in RFP
 - *Corporate mission, objectives, goals and planning* – organizational unit responsible for performing the business processes, key management personal that we might interview, and key business process or systems (computer or manual) used in support of business process
 - *Long-term load forecasting* – organizational unit responsible for performing the business processes (electric, gas, and steam), key management personal that we might interview, and key business process or systems (computer or manual) used in support of business process
 - *Supply procurement* – organizational unit responsible for performing the business processes (electric, gas, and steam), key management personal that we might interview, and key business process or systems (computer or manual) used in support of business process
 - *Long-term system planning* – organizational unit responsible for performing the business processes (electric, gas, and steam), key management personal that we might interview, and key business process or systems (computer or manual) used in support of business process
 - *Capital and O&M budgeting* – organizational unit responsible for performing the business processes (electric, gas, and steam), key management personal that we might interview, and key business process or systems (computer or manual) used in support of business process
 - *Program and project planning and management* – organizational unit responsible for performing the business processes (electric, gas, and steam), key management personal that we might interview, and key business process or systems (computer or manual) used in support of business process
 - *Work force management* – organizational unit responsible for performing the business processes (electric, gas, and steam), key management personal that we might interview, and key business process or systems (computer or manual) used in support of business process



- *Performance and results measurement* – current key performance indicators (KPIs) used within each functional area of the organization, including both strategic and operational KPIs; organizational unit responsible for performing reporting of KPIs; key management personnel that we might interview; and key business process or systems (computer or manual) used for reporting KPIs

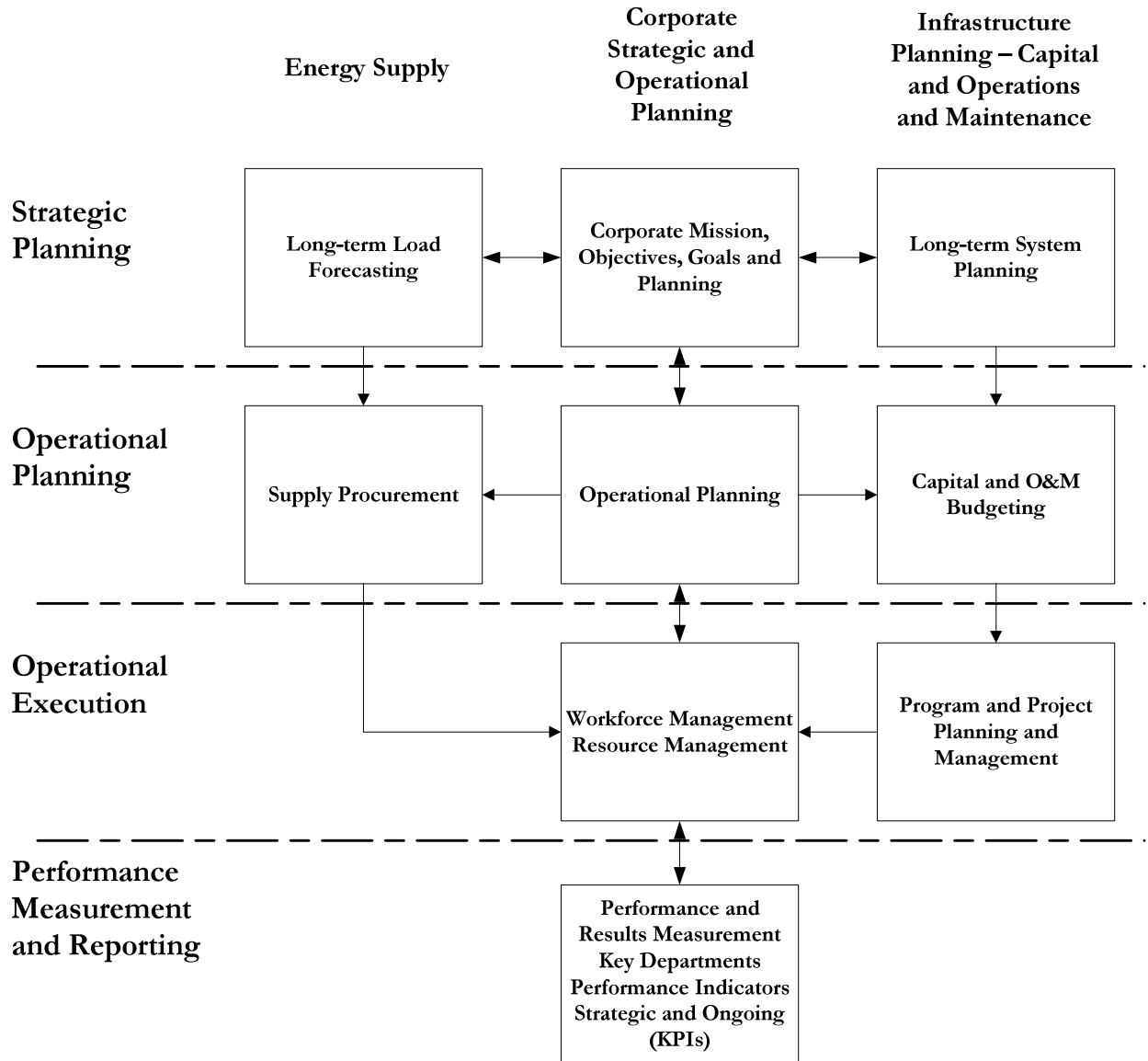
In addition, the individual consultants will conduct brief follow-up interviews with key management personnel involved in the specific business processes to get a better understanding of the processes and systems involved. We will investigate each of the areas in our preliminary work plan, shown in *Chapter IV*. Schumaker & Company's *Engagement Manager*, *Project Manager*, and *Senior Consultants* will conduct these interviews and analyses as a means to more fully understand the issues involved in this project and to determine the extent to which interviews, documentation requests, and sampling of data must be conducted.

Prepare Draft Work Plan

The primary purposes of the above subtask is to develop a deeper understanding of the specific business processes and systems used by CECONY and to provide further technical definition and direction to our project team for preparing a draft work plan for the remainder of the project. Each of the key consultants will be involved in the development of the draft work plan. We will use the scope of work identified in the RFP and our preliminary work plan in *Chapter IV*, combined with our understanding of the business processes and systems within CECONY, as learned from the kick-off presentations and orientation interviews and combined with our consultants' knowledge and the integration of the relevant parts of other management audit work plans that we have developed over the last five years, to draft a detailed work plan for the remainder of this project. This work plan will be aligned our interpretation of the business process flows identified in the RFP and modified slightly in the process diagram in *Exhibit III-2* shown on the following page. Our work plan for each of the identified areas will be presented in detail in the following task area sections:

- ◆ **Introduction** – An overall description of a process' functions or activities.
- ◆ **Proposed Staffing** – An identification of the consultants assigned to the work area and hours.
- ◆ **Work Plan Areas** – The specific steps and activities we will take in assessing each work plan area are further described, as follows:
 - *Key Business Processes and Indicators* – Key business processes to be investigated and KPIs identified.
 - *Work Steps* – A detailed listing of the principle work steps to be completed and questions to be answered.
 - *Interviews* – Key CECONY personnel to be interviewed
 - *Information Required* – A preliminary list of the information requests required to evaluate this work plan area.

**Exhibit III-2
Management Audit Process Flow**



The draft work plan will be prepared and submitted to the NYSDPS for review and comment.

First Progress Meeting Final Work Plan Approval

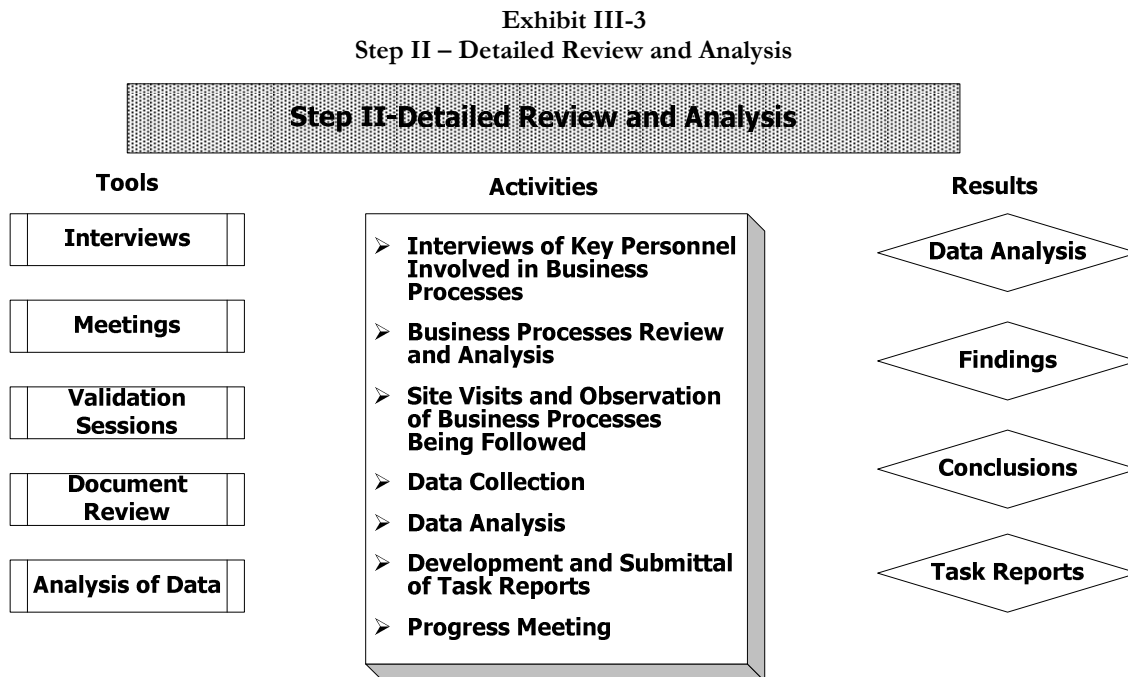
Our project team will meet with the NYSDPS *Project Coordinator* and others, as appropriate, to discuss the draft work plan. Also, additional input from attendees on the work plan will be gathered at this time



and revisions made, as appropriate. As an outcome of this meeting, the specific areas of focus in the final work plan will be confirmed.

Step II – Detailed Review and Analysis

Exhibit III-3 illustrates the tools used, activities performed, and results achieved during *Step II*.



Interviews, Documentation, and Data Collection Review and Analysis

The Schumaker & Company project team consultants will visit CECONY's major facilities, conduct interviews with key NYSDPS and CECONY personnel (and others, as appropriate), and gather a variety of information and documents regarding the specific business processes and associated systems. The interviews with key management personnel typically consist of reviews of the organization and processes for which each employee is responsible and discussions of any areas of particular interest or concern. The need for detailed research or analysis by CECONY employees will be identified at this time.

This step will result in the development of findings and conclusions by the consultants, which will be verbally presented to the NYSDPS and CECONY coordinators. In overall terms, this step consists of several principal activities: interviews, information and document reviews, and field observations of representative operations. The following paragraphs describe what each process encompasses.

- ◆ *Interviews* – Interviews are conducted with the personnel responsible for the management and direction of processes and activities in each of the issue areas.
- ◆ *Information and document reviews* – During the course of these interviews, information and documents relevant to the evaluation of each area are identified and collected for analysis.
- ◆ *Field observations* – We will visit CECONY facilities to provide an opportunity for visual inspection of the site, discussions with management and staff personnel, observations of procedures, and other information gathering techniques.
- ◆ *Data summaries* – Interview notes, results of reviews of relevant documents, and any numerical data collected for the purpose of quantitative analysis is organized and summarized by the project team members who have conducted the initial data collection in each area.
- ◆ *Development of findings and conclusions* – Based on the results of the data collection and analysis activities, findings and conclusions will be formulated that reflect our summary evaluation of the subject practices.

Task Reports Development

Task Reports Review

The input from the task briefing is compiled into the draft task reports, which will be submitted to the NYSDPS for review and comment. After comments are discussed and incorporated, the task reports will be submitted to CECONY for similar review. CECONY's comments should be provided to both the NYSDPS and the Schumaker & Company project team in writing. The Schumaker & Company project team addresses any concerns raised by the NYSDPS *Project Coordinator* and the CECONY *Project Coordinator(s)*.

Draft Findings and Recommendations

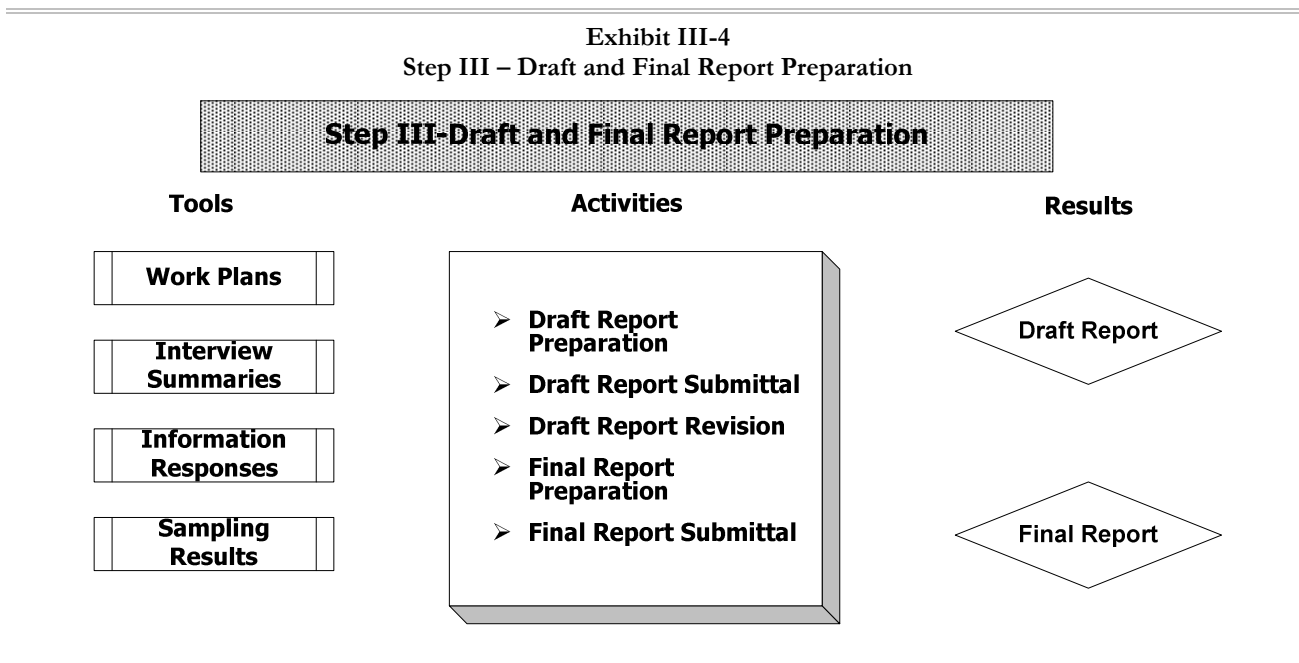
Progress Meeting

Prior to completing our draft report, we will prepare a summary presentation of our findings and conclusions for review with the NYSDPS and CECONY coordinators. Our draft findings and conclusions with input from these coordinators will form the basis for our draft report preparation.



Step III – Draft and Final Report Preparation

Exhibit III-4 illustrates the tools used, activities performed, and results achieved during *Step III*.



This step will result in the preparation of the draft and final reports, which serve as the final result of the project, unless testimony is requested.

Draft Report Preparation

The results of our investigations will be summarized in a draft report that will be submitted to the NYSDPS and CECONY for review and comment. The draft report will be indexed to related supporting working papers, and will consist of the following information:

- ◆ Executive summary
- ◆ Brief overview of project
- ◆ Individual chapters for processes investigated, including:
 - Background and perspective
 - Findings and conclusions
 - Recommendations

Our report will reflect an objective and balanced appraisal of CECONY's processes, systems, and resource allocations. We will fully document any deficiencies/problems and provide improvement opportunities in the form of practical recommendations, associated quantified costs and benefits, and their implementation priorities. We will also point out the strengths, good practices, and sound

procedures associated with the service delivery. We will identify and recommend areas for adoption of industry best practices.

Draft Report Submittal and Review

Progress Meeting

Draft Report Revision

The draft report will be submitted to the NYSDPS *Project Coordinator* (and other staff as desired) for review and comment. After performing their review, the NYSDPS *Project Coordinator* will discuss resultant comments with the Schumaker & Company consulting team. The Schumaker & Company team will address all concerns raised by the NYSDPS *Project Coordinator*. Schumaker & Company will then submit the draft report to the CECONY *Coordinator(s)* for review and comment. A third progress meeting will be held with NYSDPS, CECONY, and key Schumaker & Company consultants to verify the material facts in the draft report and obtain written comments. All analyses and hypotheses must be continually assessed within the framework of the focus of the study, the status and structure of the CECONY, and the current utility environment. After incorporation of these comments into the report, as appropriate, the final report will be prepared and submitted.

Final Report Submittal

NYSDPS and CECONY must be satisfied that the end product is supported by accurate analyses. For this reason, Schumaker & Company places heavy emphasis on ensuring, to all participants' satisfaction, that project results are based on facts. Verification is done throughout the project to minimize open questions that may occur at its end.

The final report will consist of the following information:

- ◆ Executive summary
- ◆ Brief overview of project
- ◆ Individual chapters for processes investigated, including:
 - Background and perspective
 - Findings and conclusions
 - Recommendations

Finally, Schumaker & Company does not consider an engagement to be completed satisfactorily until CECONY has recognized the value of proposed recommendations and agreed to begin implementation.



B. Work Shops

As part of our proposal, we have also included workshop-type training for NYSDPS Staff. We have allowed for five full-day workshops at the NYSDPS offices in Albany distributed over the audit duration. We expect that the number of Staff participants in the workshops will range from five to ten. The subjects for these work shops will be determined after the audit starts. One workshop, for example, may be focused on optimum (or “best”) practices and processes that utilities use to assess operational risks associated with the delivery of the commodity, how risk assessment impacts the long-term corporate construction and O&M decisions, and how budgeting priorities are managed. We are particularly interested in developing in-house Staff skills that will allow NYSDPS to analyze these practices and processes as part of its regulatory oversight responsibilities.

C. Project Management Techniques

An operations and performance audit is a complicated consulting project requiring appropriate project management control techniques. The substantial experience of Schumaker & Company in conducting such studies has enabled us to develop effective techniques to control the project, enhance communications among project team members, and among the team, NYSDPS Staff, and CECONY representatives, and assure a quality end product. These techniques have been used in a large number of audits and other reviews, and the experienced team we are proposing is adept at their use. We will modify these techniques as necessary to conform to the specific requirements of this engagement.

We believe the key element to a successful consulting assignment rests on the caliber and qualifications of the project team members. However, the right quality and mix of personnel is necessary, but not sufficient to ensure maximum benefit from an assignment. Effective project management is required to provide for the orchestration of activities, for ongoing feedback and adjustment mechanisms, and for the judicious use of time. Without strong project management and controls, a consultant’s time may not be used effectively. Therefore, effective project management is a key element in implementing our approach and is required to:

- ◆ Coordinate the activities and schedules of Schumaker & Company project team members with NYSDPS Staff and CECONY personnel.
- ◆ Provide a focus for communication and control among the consulting team, NYSDPS Staff, and key individuals within CECONY
- ◆ Provide ongoing monitoring of project activities. Unforeseen developments or changes in circumstances may warrant changes in emphasis, revisions to the approach in certain areas, or other modifications to work activities. Active project management provides greater assurance that such refinements or redirections will happen when circumstances warrant.

- ◆ Ensure the optimum management of the time available to complete the project. Effective time management is a skill required of experienced professionals. Sound project management can optimize the overall effectiveness of the project team's use of time and provide greater assurance of meeting deadlines and budgets.
- ◆ Provide for the continuous reinforcement of project objectives. In addition, the role of project management is to ensure that the consulting team consistently adheres to the proper perspective in conducting the study.

Beyond these, project management will carry the responsibility for integrating the results of the review into a report that is clear, concise, and relevant. Our project staff will be composed of talented individuals who are experienced in performing and successfully managing these types of projects. Three important lead positions exist in our project team, those being:

- ◆ The *Engagement Manager* provides general oversight and performs a quality assurance role during the assignment.
- ◆ The *Project Manager* is responsible for ensuring that the consultant team is provided with the appropriate resources for completing its activities on a timely basis. This individual is also responsible for ensuring that the work is progressing within planned budget and schedule parameters, and that the work among the various areas is integrated and coordinated. The *Project Manager* is the day-to-day contact for the Schumaker & Company project team.
- ◆ A *Lead Consultant* is designated for each area, and he or she is responsible for executing the technical work plan in that area. The *Lead Consultant* is responsible for meeting task schedules and ensuring the completeness and coherence of work in his/her task areas, including:
 - Conducting the orientation and project planning for their designated area
 - Developing the detailed work plan for the area
 - Managing and conducting the investigations of all activities in their work plan areas and presenting the task briefing in their work plan areas
 - Keeping the *Project Manager* apprised of progress in executing the work plan
 - Managing development of complete task briefings, task reports, and a draft report for their areas of investigation
 - Ensuring a successful consulting project

Project Management Tools

We use several project management and control techniques to ensure that budget, schedule, and quality specifications are achieved. These control mechanisms include project meetings, project critical path method (CPM) scheduling, and working papers/audit trails policies, procedures, and systems.

Throughout the course of the operations and performance audit, the project team will conduct numerous



interviews and submit an extensive number of information requests. Managing those interviews, as well as those information requests and the documents received, is crucial to the success of a project.

Audit Trail and Work Papers

The work paper tracking system, used to catalogue key documents, analyses, working papers, and other materials, is a key part of the quality control process. Recommendations made must be in response to specific shortcomings or needs identified in findings and conclusions. Findings and conclusions, in turn, must be based on information collected in interviews, in data requests, or in analyses performed, and these linkages must be clear. In a number of instances we have been called upon to retrieve these files for use by utilities or commissions long after completion of the project.

Our database-oriented *Project Management Information Application* helps our *Project Manager* efficiently and effectively control the scheduling of interviews and tracking of information requests and responses during the audit. We have extensive procedures in place to:

- ◆ Footnote, annotate, and cross reference the draft and final reports to our working papers and the detailed work plan. This capability permits us to completely document the audit trail in preparation of our reports and is tied to the interviews and information requests tracked through PMIA.
- ◆ Schedule and track interviews through PMIA. The numerous summary and detailed reports enable CECONY personnel, NYSDPS Staff, and Schumaker & Company project team consultants to easily determine when and with whom interviews are to be (or have been) held.
- ◆ Track the request and receipt of information requests through PMIA. The numerous summary and detailed reports permit effective project management and allow the client to assess the company's response rate.

The use of footnotes forms the basis for annotating our reports. Footnotes are used extensively to identify the source of information that supports a statement of fact, finding, conclusion, or recommendation. As a policy, we require that every fact, quote, result of analysis, or other statement which can be challenged, be footnoted.

All work papers, interview notes, statistical analyses, and other supporting documents developed or obtained during the course of the audit will be made available to the NYSDPS Staff. At the conclusion of the audit, a copy of the report indexed to the supporting documents will be furnished to the NYSDPS Staff. All supporting documents, with the exception of interview notes, and all documents obtained by Schumaker & Company during the audit will be turned over to NYSDPS Staff at the completion of the audit. Interview notes will be retained by Schumaker & Company (or transferred to NYSDPS for retention) for at least three years after the completion of the report and will be made available to NYSDPS Staff. Schumaker & Company will not copyright any material developed during the course of the project.

PMLA, a software package specifically developed for this purpose by the Schumaker & Company Information Technology staff, is discussed in more detail in *Appendix A* of this proposal.

Work Plans

Well-developed work plans lie at the heart of a well-controlled project. As previously explained, in *Step I – Project Orientation and Final Work Plan*, we will prepare more specific work plans for each study area of *Step II – Detailed Review and Analysis*. The work plans will show:

- ◆ Issues and questions to be addressed and reconciled as part of the technical work
- ◆ Key forms of analysis to be developed
- ◆ Data requirements and sources
- ◆ Interview and facility visit requirements
- ◆ Work plan milestones and key review points
- ◆ Budgets for each element

The detailed work plans we develop during *Step I – Project Orientation and Final Work Plan* will be submitted to the NYSDPS *Project Coordinator* for review and approval. We will use these documents for our own internal control. A preliminary work plan is provided in *Chapter IV – Areas and Issues for Review*.

Project Controls

The standard approach used by the Schumaker & Company project team in performing operations and performance audits is firmly predicated on the recognized need for direct participation of all parties in the audit process, along with an accompanying free and continuous flow of pertinent information among the involved parties. In order to facilitate these activities, a standardized structure and schedule of meetings has been developed and is followed on each project. Descriptions of these meetings are presented in the following paragraphs.

Weekly Project Team Meetings

The consulting team members regularly spend time at the end of each week discussing events and major findings among themselves and with the Schumaker & Company *Project Manager*. This informal process ensures that everyone is aware of the project status, and focuses attention on important issues. These discussions are used to track progress and update the detailed work plan and project schedule. We invite and actively encourage the frequent participation of NYSDPS Staff (or other appropriate personnel) in these discussions.



Monthly Progress Meetings

Schumaker & Company's project management team will meet each month with the NYSDPS and CECONY coordinators (and any other staff deemed appropriate) for purposes of discussing the project and resolving questions or problems.

Progress Meetings

Schumaker & Company's experience in conducting utility management audits in many states has identified the need to have periodic meetings involving appropriate NYSDPS and CECONY representatives. These meetings will be scheduled at the end of each step to facilitate overall communication between the NYSDPS, CECONY, and Schumaker & Company consultants. The meetings are held to discuss any issues that need attention by two or more parties. There will be a midpoint status meeting with Staff that will be scheduled along with any others as needed and will be conducted either at the NYSDPS offices, the CECONY project site, or via teleconference calling, as appropriate. This enables all parties to stay in close contact, including those not as directly associated with the project as the NYSDPS and CECONY coordinators.

Progress and Time Reporting

Each team member will submit monthly time reports indicating the time expended by work area. Actual time expended for the project team will be aggregated by consultant and by focus area for comparison with the project budget. This will provide the basis for progress reporting and an ongoing assessment of project status.

Each month we will provide a written status report to the NYSDPS *Project Coordinator*, consisting of:

- ◆ A general narrative briefly describing progress to date and outlining reasons for any discrepancies between the project schedule and progress actually achieved
- ◆ Report of information requests at CECONY showing requested and received status
- ◆ Report of interviews and site visits conducted and upcoming interviews and site visits, if applicable
- ◆ Report of staff-days expended and costs incurred by each task area

We will also indicate the status of work in each study area in relation to its scheduled duration (i.e., ahead, behind, or on schedule).

Review Standards

Schumaker & Company subscribes to the audit standards set forth by the National Association of Regulatory Utility Commissioners' "Consultant Standards and Ethics for Performance of Management Analysis," dated November 15, 1989, and the U.S. Government Accountability Office's "Standards for Audit of Government Organizations, Programs, Activities, and Functions," (commonly referred to as the "Yellow Book"), as applicable to public utilities. PMIA has been specifically developed to meet the requirements of these standards.



IV. Areas and Issues for Review

Schumaker & Company consultants will approach this management audit from an objective standpoint. Having stated that fact, the RFP requested that we identify the major areas of importance in the audit that offer the greatest potential for cost savings, remedying operating problems, or controlling construction costs. Without conducting the management audit, it would be inappropriate to presume that certain audit areas are more important than others in the management of the utility. Granted some areas within an utility are responsible for the management of more dollars in the day-to-day operations of the utility than others, so the potential for savings would be greater. However, in the past 20 years of performing management audits, we continue to be amazed that our initial perceptions of what a company does well or not before the start of the audit is changed once the in-depth investigations begin.

Most recently, Schumaker & Company and, more specifically, this project team has taken the following approach to identifying benefits and costs when performing management audits. We have not only identified various qualitative and quantitative benefits and costs resulting from our recommendations but, more importantly, have obtained both the company and commission agreement on the benefits and cost savings.

In past audits of this nature, costs have tended to fall into one of three categories:

- ◆ Assigning existing company personnel to implement recommendations, resulting in little or no incremental costs
- ◆ Engaging outside expert resources to implement recommendations, resulting in incremental costs
- ◆ Procuring additional software and equipment, also resulting in incremental costs

Likewise, the benefits associated with recommendations usually fall into one of four categories:

- ◆ Reduction in actual costs of operations within a functional area
- ◆ Increase in a revenue source within a functional area
- ◆ Change in work flow processes used in the provision of services to New York customers on a more cost-effective basis
- ◆ Change in other processes resulting in good business practices being implemented

In addition, on two of our last three management audits (the third audit not being to that stage in the project), we have recommended and obtained agreement, from both the company undergoing the audit and the commission overseeing the audit, to perform a third phase of the project where additional staff hours were expended to further investigate areas offering potential that were identified during the earlier stages of our review. These recent experiences working for the Pennsylvania Public Utility Commission on several recent management audits demonstrates our ability to establish and sustain vital, interactive

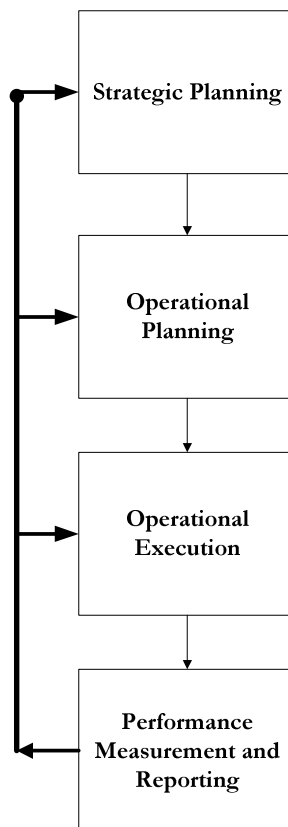


working relationships among NYSDPS, CECONY, and Schumaker & Company project team during the course of a management and operations audit resulting in an agreement on recommendations for change, where appropriate.

A. Work Plan Organization

Schumaker & Company has organized our approach to the project using a simplified business flowchart process as shown in *Exhibit I-1*.

Exhibit IV-1
Schumaker & Company Simplified Approach



The request for proposal (RFP) suggests that the scope of this audit be based on the framework of a series of elements or functions that are generally sequential in nature that can be viewed as a flow diagram or feedback loop. As per the RFP, the management audit should therefore focus on the following elements:

- ◆ Corporate mission, objectives, goals and planning
- ◆ Long-term load forecasting

- ◆ Supply procurement
- ◆ Long-term system planning
- ◆ Capital and O&M budgeting
- ◆ Program and project planning and management
- ◆ Work force management
- ◆ Performance and results measurement

Within the context of each element, we will be prepared to address the generic questions and issues, including:

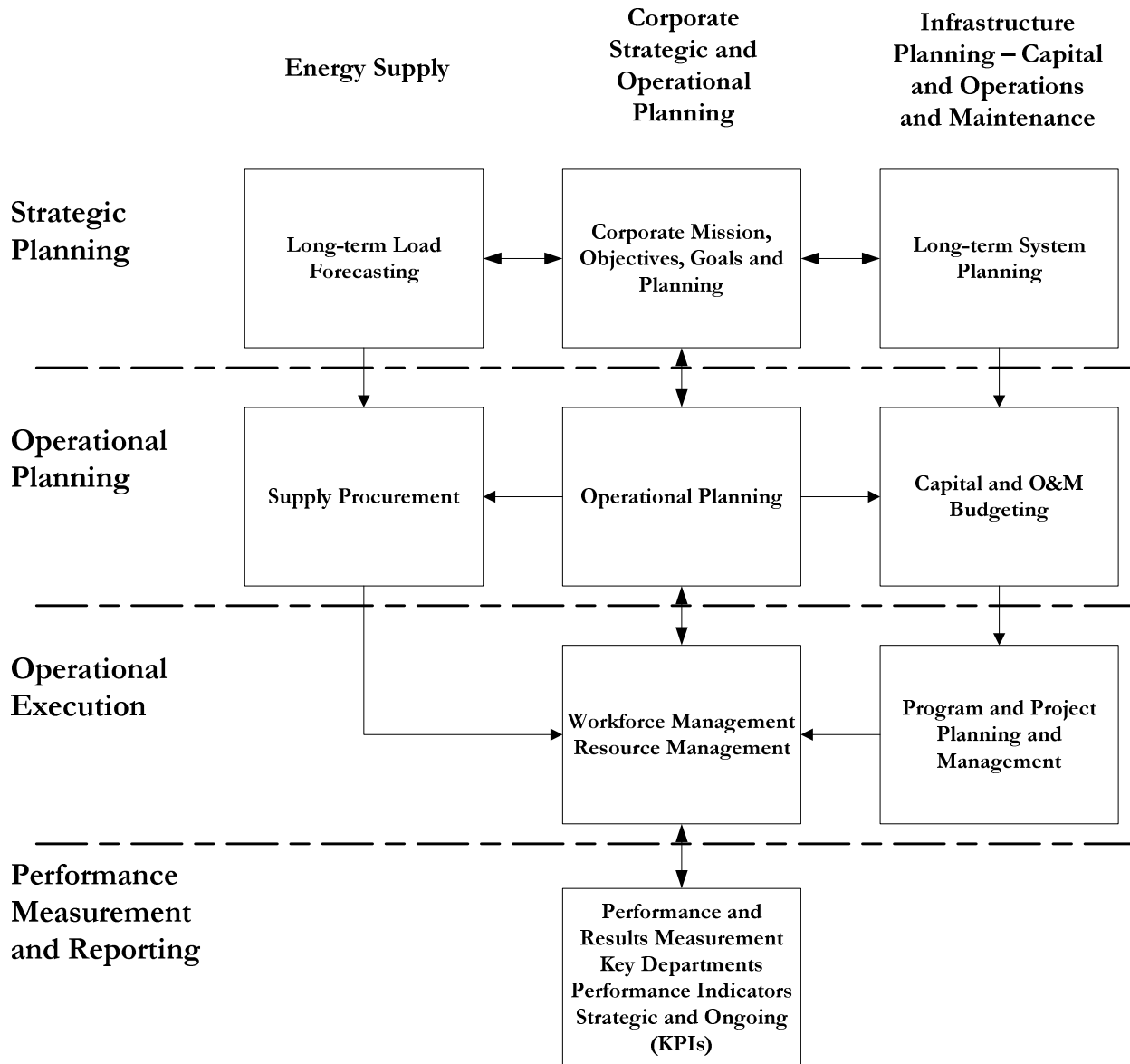
- ◆ What is the purpose?
- ◆ What is the process?
- ◆ What are the inputs and outputs?
- ◆ Are there appropriate policies and procedures and how are they implemented?
- ◆ Who has responsibilities and accountabilities?
- ◆ Is the process efficient and effective?
- ◆ How these elements compare to industry “best practices” based on our past experience.

The audit will emphasize an assessment of CECONY’s effectiveness in meeting its mission, particularly with respect to meeting its performance goals and the extent to which there are opportunities for improvement.

Schumaker & Company has organized our approach to the project using a simplified business flowchart process. Within this simplified approach, we have grouped each of the items mentioned in the RFP into individual work packages that are related in the overall flow process as shown in *Exhibit I-2*. We have divided our project team into individual groups of consultant to address each of the groups, as identified in *Exhibit IV-3*, *Exhibit IV-4*, *Exhibit IV-5*, *Exhibit IV-6*, and *Exhibit IV-7*.



Exhibit IV-2
Schumaker & Company Audit Approach



The *Strategic Planning Consultant Team* is shown in *Exhibit IV-3*.

Exhibit IV-3 Strategic Planning – Consultant Team			
Name	Title	Years Exp.	Primary Role
Corporate Mission, Objectives, Goals, and Planning			
Patricia H. Schumaker	Executive Consultant I	31	Strategic and Corporate Planning
Dennis J. Schumaker	Executive Consultant I	31	Strategic and Corporate Planning
Lee E. Burgess	Lead Consultant	23	Strategic and Corporate Planning
Long-term Load Forecasting			
Dennis J. Schumaker	Executive Consultant I	31	Electric, Gas, and Steam Forecasting
Martin H. Skeer	Executive Consultant II	20	Electric Load Forecasting
Julia Bodamer	Executive Consultant II		Gas Load Forecasting
Long-term System Planning			
Dennis J. Schumaker	Executive Consultant I	31	Electric, Gas and Steam Infrastructure Planning
Martin J. Murphy	Executive Consultant II	29	Electric, Gas and Steam Infrastructure Planning
Robert L. Rosenkoetter	Executive Consultant II	25	Other Capital and O&M Planning

The *Operational Planning Consultant Team* is shown in *Exhibit IV-4*.

Exhibit IV-4 Operational Planning – Consultant Team			
Name	Title	Years Exp.	Primary Role
Supply Procurement			
Dennis J. Schumaker	Executive Consultant I	31	Steam Energy Production/Procurement
Martin H. Skeer	Executive Consultant II	20	Electric Energy Procurement
Julia Bodamer	Executive Consultant II		Gas Energy Procurement
Capital and O & M Budgeting			
Patricia H. Schumaker	Executive Consultant I	31	Capital and O & M Budgeting
Dennis J. Schumaker	Executive Consultant I	31	Capital and O & M Budgeting
Martin J. Murphy	Executive Consultant II	29	Capital and O & M Budgeting
Robert L. Rosenkoetter	Executive Consultant II	25	Capital and O & M Budgeting



The *Operational Execution Consultant Team* is shown in *Exhibit IV-5*.

Exhibit IV-5 Operational Execution – Consultant Team			
Name	Title	Years Exp.	Primary Role
Program and Project Planning and Management			
Patricia H. Schumaker	Executive Consultant I	31	Technology Force Program and Project Planning and Management
Dennis J. Schumaker	Executive Consultant I	31	Office/Professional Force Program and Project Planning and Management
Martin J. Murphy	Executive Consultant II	29	Field Force Program and Project Planning and Management
Robert L. Rosenkoetter	Executive Consultant II	25	Office/Professional Force Program and Project Planning and Management
Workforce/Resource Management			
D. Kerry Laycock	Executive Consultant II	21	Overall Workforce/Resource Management
Martin J. Murphy	Executive Consultant II	29	Field Force Workforce/Resource Management
Robert L. Rosenkoetter	Executive Consultant II	25	Office/Professional Force Workforce/Resource Management

The *Performance Measurement and Reporting Consultant Team* is shown in *Exhibit IV-6*.

Exhibit IV-6 Performance Measurement and Reporting – Consultant Team			
Name	Title	Years Exp.	Primary Role
Performance and Results Measurement (KPIs)			
Patricia H. Schumaker	Executive Consultant I	31	Technology KPIs
Dennis J. Schumaker	Executive Consultant I	31	Electric, Gas, and Steam O & M KPIs
Julia Bodamer	Executive Consultant II		Gas Supply KPIs
Lee E. Burgess	Lead Consultant	23	Corporate Planning KPIs
D. Kerry Laycock	Executive Consultant II	21	Human Resources KPIs
Martin J. Murphy	Executive Consultant II	29	Materials Management, Fleet KPIs
Robert L. Rosenkoetter	Executive Consultant II	25	Financial KPIs
Martin H. Skeer	Executive Consultant II	20	Electric, Gas, and Steam Capital KPIs

The *Project Management and Administration Consultant Team* is shown in *Exhibit IV-7*.

Exhibit IV-7 Project Management and Administration – Consultant Team			
Name	Title	Years Exp.	Primary Role
Performance and Results Measurement (KPIs)			
Patricia H. Schumaker	Executive Consultant I	31	Engagement Manager
Dennis J. Schumaker	Executive Consultant I	31	Project Manager
Gail Stopar	Consultant	22	Project Standards and Consultant Support
Jaye Kain	Lead Consultant	20	Project Administration
Hachin Sunid	Technology Consultant	10	Project Technology Support

B. Preliminary Work Plan

As discussed earlier in this proposal, each of the key consultants will be involved in the development of the draft work plan. We will use the scope of work identified in the RFP (repeated in this section), combined with our understanding of the business processes within CECONY learned from the kick-off presentation and orientation interviews, and combined with our consultants' knowledge and the integration of the relevant parts of other management audit work plans that we have developed over the last five years, to draft a detailed work plan for the remainder of this project. This work plan will be aligned our interpretation of the business process flow identified in the RFP and modified slightly in the process diagram in *Exhibit I-2*.

Our draft and final work plan for each of the identified areas include the following information:

- ◆ **Introduction** – An overall description of a process' functions or activities.
- ◆ **Proposed Staffing** – An identification of the consultants assigned to the work area and hours.
- ◆ **Work Plan Areas** – The specific steps and activities we will take in assessing each work plan area are further described, as follows:
 - *Key Business Processes and Indicators* – Key business processes to be investigated and KPIs identified.
 - *Work Steps* – A detailed listing of the principle work steps to be completed and questions to be answered.
 - *Interviews* – Key CECONY personnel to be interviewed
 - *Information Required* – A preliminary list of the information requests required to evaluate this work plan area.



Strategic Planning

Corporate Mission, Objectives, Goals and Planning

- ◆ Review how Con Edison, Inc. (CEI), the parent, affects budgeting priorities and allocations among the electric, gas and steam businesses.
- ◆ Examine CEI budgeting priorities and allocations for CECONY and Orange and Rockland.
- ◆ Examine the role of the Boards of Directors and executive and senior management in the development of budgeting guidelines and periodic budget reviews and approvals.
- ◆ Examine if or how CECONY's financial position and the level of its rates are factored into the budgeting process.
- ◆ Examine how CECONY executive management use measurable goals to achieve the corporate mission and objectives, and how performance process is handled by successive levels of management.
- ◆ Evaluate how CECONY ensures compliance with procedures and practices related to the scope of this audit, e.g., internal controls, Internal Audit function and Sarbanes Oxley Act.
- ◆ Evaluate how management performance and compensation are aligned with the corporate mission, objectives and goals at all levels within the corporation.

Long-term Load Forecasting

- ◆ Assess the models used by CECONY to forecast local and system-wide load requirements.
- ◆ How are demand side management (demand response, etc.) and energy efficiency, and other initiatives considered in the forecasting process.
- ◆ What types of models, inputs and assumptions does CECONY use to forecast load requirements?
- ◆ How are CECONY's forecasting functions organized? Centralized, decentralized?
- ◆ How is planning for electric load integrated with gas and steam planning and CECONY's overall business strategy?
- ◆ Does CECONY have region-specific planning processes?
- ◆ How is forecasted load incorporated into rate cases?
- ◆ Consider the New York Independent System Operator's (NYISO) role in the State's electric forecasting.

Supply Procurement

- ◆ Identify and evaluate supply portfolio principles, goals and objectives for mass market default customers.
- ◆ Identify and evaluate risk management strategies and practices.
- ◆ Review supply procurement strategies, policies, processes, and methods.
- ◆ What are CECONY's financial and physical hedging practices?
- ◆ Examine CECONY use of performance benchmarking with other utilities.
- ◆ Review portfolio performance goals.
- ◆ Evaluate portfolio oversight and controls
- ◆ What is the role of demand management/response, energy efficiency, and migration of retail customers to competitive suppliers in the portfolio and procurement processes?

Operational Planning

Long-term System Planning

- ◆ Assess infrastructure planning and engineering functions.
- ◆ Examine the priorities, guidance and other instructions for evaluations, tradeoffs and decision making.
- ◆ Examine the development of forecasts for local area networks and infrastructure requirements.
- ◆ How are alternative resources such as distributed generation and demand response initiatives considered in the planning process?
- ◆ How are other load and infrastructure factors, such as advanced metering, smart grid, and energy efficiency initiatives considered in the planning process?
- ◆ How are the needs developed for major projects (e.g., substations, breakers, switches, transmission feeders, secondary system, etc.)?
- ◆ What is the process and criteria for making decisions regarding replace versus repair, including how the overall construction program planning (CPP) process is affected?
- ◆ What are the effects on the planning process of: (a) network versus radial systems, (b) underground versus overhead systems, (c) reliability versus new business tradeoffs, and (d) regional (e.g., Bronx/Westchester) versus central planning dynamics?
- ◆ To what extent are benefit/cost analyses and risk analysis considered in the decision-making process including whether the level of consideration is appropriate and effective? Include an examination of the specific types of benefit/cost and risk analysis methodology being used.



- ◆ How are trade-offs being optimized 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?

Capital and O&M Budgeting

- ◆ What are the roles of Consolidated Edison, Inc. and CECONY Boards of Directors and executive and senior management? At what point and to what extent do they get involved in the capital and operation and maintenance budgets? What level of detail do the Boards see? What are the Boards responsibilities? What is the relationship between CECONY and O&R regarding budget priorities?
- ◆ Evaluate the construction/capital priority setting process.
- ◆ How does optimization of repair versus replace decisions impact infrastructure/capital expenditures?
- ◆ How is incremental O&M associated with new construction factored into the budgeting process?
- ◆ How do allowed revenues/rates and financing opportunities or constraints affect budget levels and priorities?
- ◆ Compare planned/budgeting expenditures, rate case proposed expenditures, and actual expenditures.
- ◆ Define and evaluate the capital budgeting process, including project authorization, project appropriation, increase/decrease of authorization/appropriation, capital budget status reporting, validation in advance of appropriation, funding control, etc.
- ◆ Evaluate CECONY's use of budgeting guidelines, practices and procedures, including "zero-based" and other alternative methods.
- ◆ Examine the roles of and relationships between regional and centralized planning and budgeting functions.
- ◆ What is CECONY's methodology for prioritizing and determining which capital projects get approved? Include an examination of CECONY's modeling software for capital and operation and maintenance budgeting.
- ◆ How are expenditures managed and controlled? What methodologies are used to control and manage total company, program and project capital costs in the near and long term?
- ◆ What is the annual process for reviewing and determining whether total capital and O&M planned expenditures are adequate? Evaluate cost control systems and processes from both a top-down and bottom-up perspective. Are there sufficient controls in place to ensure that increases and decreases to the construction budget/expenditures are justified and appropriately approved?

- ◆ Examine the bottom-up and top-down processes for developing the budgets for capital/construction classifications and categories.
- ◆ How are budget forecasts incorporated into rate case revenue requirements?

Operational Execution

Program and Project Planning and Management

- ◆ How do capital and O&M plans and budgets convert to specific programs and projects?
- ◆ How are programs and projects prioritized and approved over various time horizons?
- ◆ Define and review program and project planning, design, estimating, engineering, costing, scheduling and execution.
- ◆ How are materials, equipment, transportation and other logistical support planned and managed for programs and projects?
- ◆ How are tradeoffs analyzed and decisions made in order to optimize the use of in-house workforce versus contractor labor?
- ◆ Examine contractor and engineering bidding practices.
- ◆ Evaluate how construction contractor projects are planned and managed
- ◆ Evaluate quality assurance and quality control at the program and project level.
- ◆ Examine contractor management, project/program management, including accountability, goals, objectives, and performance measurement.
- ◆ Examine CECONY methodology for tracking costs, work units and work quality for specific programs and projects. What are the typical variances between original budgeted and actual capital expenditures and work units? How does CECONY track and minimize the variances in order to improve the cost control, efficiency/productivity and work quality?

Workforce Management

- ◆ Examine how planning and execution of programs and projects are converted into short-term and day-to-day work planning and management.
- ◆ Evaluate work management systems that are used to schedule and manage field crews, including transportation, equipment, and materials.
- ◆ Review the roles and responsibilities of project managers, supervisors, inspectors, etc.
- ◆ How does CECONY manage quality assurance and quality control?



- ◆ How does CECONY measure and manage employee availability, utilization, efficiency, productivity and effectiveness?
- ◆ How are work program and project schedules managed on a day-to-day basis?
- ◆ How does information about rework, failures, repair history, etc. get translated into corrective actions, infrastructure aging analysis, repair versus replace decisions, etc?
- ◆ How do workforce and work management systems feed back into performance improvement opportunities?

Performance Measurement and Reporting

Performance and Results Measurement

- ◆ How does CECONY's performance (reliability, productivity, etc.) feed back to its corporate mission, objectives and goals so that CECONY can improve its processes, redirect resources, and change priorities? At what point and to what extent are the Boards involved in this feedback loop?
- ◆ Are managers held accountable for performance improvements, e.g., cost savings and productivity gains anticipated from specific capital and O&M programs and projects, specific corporate goals, etc.
- ◆ Are there impediments that tend to constrain performance improvements and necessary changes?
- ◆ Are there additional performance measures or indicators that are needed to facilitate the corporate mission, objectives and goals? For example, in addition to lagging indicators, are there appropriate leading indicators, metrics and measures that will help improve performance?

C. Key Performance Indicators

Performance measurement and reporting is based, to a large part, on the identification and reporting of what many refer to in the industry as key performance indicators (KPIs). The naming of these indicators may vary with each utility, such as corporate performance indicators, performance metrics or measures, or scorecard indicators, but the management process surrounding the indicator is the same. These indicators are of two types:

- ◆ *Strategic Indicators* – Indicators that directly measure the progress of a strategic objective of an organization.

- ◆ *Operational Indicators* – Indicators that directly measure the results of operational activities that, although not necessarily of a strategic nature, are important indicators for measuring the efficiency or effectiveness of a business process.

Strategic objectives are attempting to measure the change in an organization, whereas operational indicators are measuring the ongoing efficiency and effectiveness of ongoing business processes. Both indicators will need to be assessed in our review.

Our approach to addressing the development of KPIs is based on two fundamental thoughts:

- ◆ The development of strategic KPIs that integrate and support CECONY's strategic plan – As with any organization, there are many items that can be measured, but the overriding questions to be answered are:
 - How does the KPI support the overall strategic plan for the organization?
 - What is the cost (new system development in the case where the data is not readily available) for developing the KPI relative to the impact on the strategic goals and objectives?
- ◆ The development of operational KPIs that are based on sound, practical measures that have proven useful at other utilities across the country
 - How does the KPI support the operational efficiency and effectiveness for the organization?
 - What is the cost (new system development in the case where the data is not readily available) for developing the operational KPI to measure efficiency and effectiveness?

Although most of our consulting assignments over the last 25 years have involved the review of existing KPIs, we have also been involved in developing specific KPIs for various organizational areas within utilities. Most recently, we are current developing KPIs (which on this particular project referred to as HR metrics) for the Human Resources area of American Water Works Corporation (specifically Pennsylvania-American Water Company).

Over the last 25 years, Schumaker & Company consultants have been developing a database of KPIs that we have seen implemented at various electric, gas, water, and telecommunications companies at which we have consulted. In the last five years, much of this information, and other information, has been collected and maintained at the Schumaker & Company data center in a knowledge management application specifically designed for Schumaker & Company.



D. Sample Performance Indicators, including Construction Program Planning

We are providing two examples: the first being a relatively straight forward example of a KPI whereas the second is a much more complicated example that is based on the existence of a very structured planning, design, and construction process on which various steps in the process are measured. Both of these KPIs are currently being used in an existing electric utility that we have worked with in the recent past. The first sample is a fairly universal measure that can therefore be compared to other electric utilities or business entities, whereas the second example is more specific to an organization's business processes that, therefore, is more appropriately a KPI that is better trended over time to measure improvements at an utility rather than compared to other utilities.

KPIs are both common and unique for each organizational group within an utility. Some KPIs, such as safety statistics related KPIs, can be developed and reported for each organizational unit within an utility, whereas the most important KPIs often are unique to the specific organizational group and perhaps a key indicator to support the overall business vision and mission for the whole organization.

Sample Simple KPI

The RFP alludes to the fact that this particular request is the beginning of a larger project to develop KPIs throughout CECONY. This particular effort is to address Electric Service Delivery processes, including the planning, design, construction, operation, and maintenance of the electric distribution, transmission, substation, and metering infrastructure. Some of the KPIs that could be developed within this area are rather straight forward and easy to measure and compare to other companies. Examples include:

- ◆ *OSHA Injuries* – The number of OSHA Recordable Injuries including every occupational death and every non-fatal occupational injury that involves one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (not first aid).
- ◆ *OSHA Rate* – The OSHA Recordable Rate, which is the number of OSHA Recordable Events x 200,000/actual hours. (The 200,000 hours in the formula represents the equivalent of 100 employees working 40 hours per week, 50 weeks per year, and provides the standard basis for the incidence rates.)
- ◆ *Lost Work Day Cases (LWDCs)* – The number of injuries including every non-fatal occupational injury, which involves one or more of the following: restriction of work or motion or transfer to another job and/or loss of time.
- ◆ *LWDC Rate* – Number of lost and restricted events x 200,000/actual hours.

- ◆ *Responsible Vehicle Accidents (RVAs)* – The number of vehicular accidents that are determined to be the responsibility of CECONY employees. Responsibility for a vehicular accident is determined by the CECONY Claims Department based on the facts of each accident.

Because these numbers are collected and reported on a fairly uniform basis, CECONY's statistical safety performance could be compared to other companies.

Sample Complicated KPI

However, one of the more interesting and useful approaches that we have seen for measuring planning, design, and construction activities within Electric Service Delivery is based on the existence of certain planning processes with the area. For example, if CECONY has a formal work management (WM) process within Electric Service Delivery, then it follows that more complex KPIs could be developed. The WM group generates a number of exception reports that highlight any issues that may arise during the course of completing the established schedule. Schedule adherence and stability are the two key performance metrics that are tracked closely to ensure the effective scheduling and completion of work tasks, as detailed below:

- ◆ *Scheduling Stability* – The percentage of work tasks that start in accordance with the established schedule. 85% is the established stability target for T-5 through execution week (having the job start on time).
- ◆ *Schedule Adherence* – The percentage of work tasks that are completed in accordance with the established schedule. 84% is the established schedule adherence target.

Exhibit IV-8 and *Exhibit IV-9* present the monthly indicators for adherence and stability for 2004 through 2006 in the sample organization. In addition to improving the processes, the targets for performance were raised to drive for better performance each year. The decline in performance in third quarter 2006 was primarily attributable to the abnormal storm season.



**Exhibit IV-8
Schedule Adherence
2004-2006**

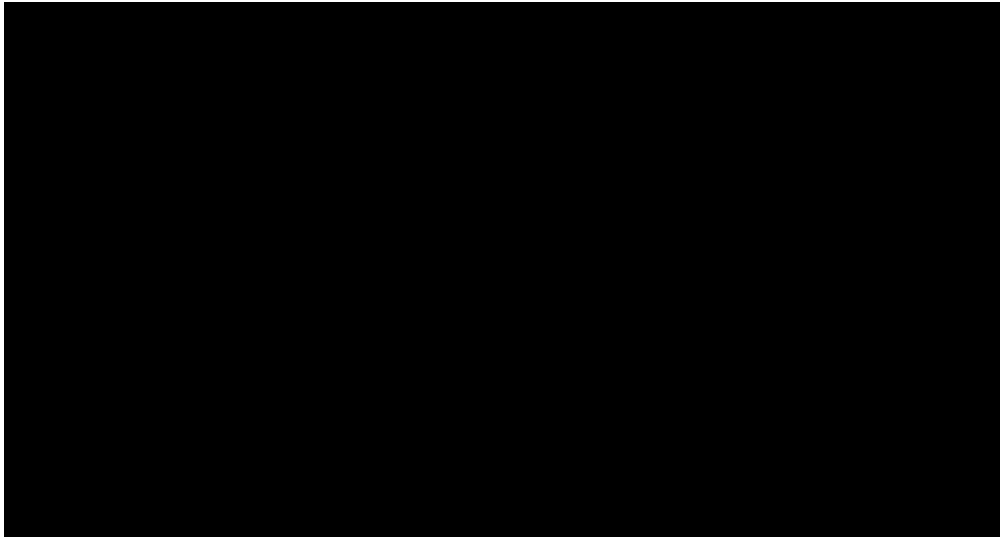
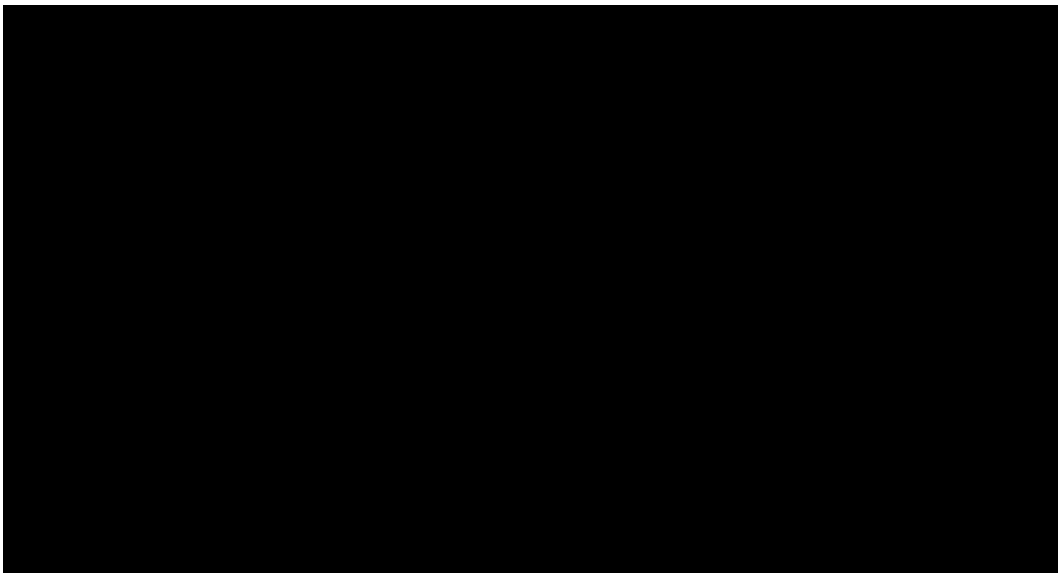


**Exhibit IV-9
Schedule Stability
2004-2006**



For the purpose of prioritizing the work, projects that have been entered into the system within the last 24 hours are discussed in a daily morning phone call, the work screening call. All involved organizations are included and the new work is prioritized. They then take all jobs in a prioritization category and

review any required schedule modifications. The schedule is reworked as required based on that information.

Of course all of the above information is based on a work management process similar to that discussed below.

Work Management System

The Work Management System is based on a standardized work control process intended to perform the following tasks:

- ◆ Provide a systematic scheduling process across the organization
- ◆ Schedule work for the organization, contract resources, and support activities
- ◆ Direct the execution of all scheduled activities
- ◆ Improve employee, system, and equipment performance through work bundling and strategic planning

The WM procedure specifies a 15-week process cycle defined as follows:

- ◆ The Work Control Schedule is developed based on priority and system conditions as influenced by available resources and the cycle plan.
- ◆ Weeks T-15 through T-6 are owned and managed by the Work Control Coordinator (WCC) (Note: “T” is defined as the scheduled week of execution of the project; therefore “T-3” would be defined as three weeks before the scheduled execution week).
- ◆ Schedule ownership is shared between the WCC and the Work Week Manager (WWM) in the T-6 week.
- ◆ Weeks T-5 to E+1 are owned and managed by the WWM (Note: “E” is the designation for the actual execution week of the project).

Exhibit IV-10 presents a summary of the established week-by-week project timeline for regularly scheduled projects.



Exhibit IV-10
Week-by-Week Project Timeline for Regularly Scheduled Projects

Work Week Number	Milestones to be Completed During Work Week
<u>T-15 to T-6 - Major Milestones - Owned by Work Control Coordinator (WCC)</u>	
T-15	Initial scope identification
T-12	Designs are complete for projects with value greater than \$100K
T-10	Designs are complete for projects with value less than \$100K
T-8	Contractor validation of scope of work that will be contracted
T-7	Work packages complete and clearance/switching requests are submitted
T-6	Schedule turnover between WCC and WWM
<u>T-5 to E+1 - Major Milestones - Owned by Work Week Manager (WWM)</u>	
T-5	Scope freeze applied to schedule by Friday and clearance/switching orders approved by clearance writer
T-4	Walkdown of job performed by First Line Supervisor (FLS) who also ensures that resources required, proper material, and the Work Package are available and acceptable
T-3	Required material is available by Friday of T-3
T-2	Verification that job is ready to work. Schedule is frozen to the day and time. Clearance order/switching routine are ready and/or posted
T-1	FLS performs final field review to ensure job can be performed and verifies field conditions
E-0	Work is performed
E+1	Performance review

If there is a schedule change within the scope freeze period (5 weeks before), a Scope Change Request (SCR) is issued and approved by all concerned. A copy is also sent to the Supervisor and Maintenance Manager to get their assessment of the impacts of the change. SCRs are not applicable for storm work. Most SCRs are driven by the New Business Engineering group.

Underlying the 15-week process cycle is an 18-month work plan, which identifies work and resource strategy/allocation for work that is scheduled for the next 18 months and beyond. The Category Owners, in conjunction with the field operations managers, identify the work that is to be completed. The work is initiated in the Work Management System following the approval of the work plan milestones.

A system of Work Order Priority Types has been established to prioritize the scheduled work in a proper manner. In general, the Fix It Now (FIN) teams handle the unscheduled emergent work (which is classified as Priority 10s and 20s) and “protect” the schedule from disruptions that would otherwise interfere with the Work Week Schedule. The following text describes the designated characteristics of the various priority classes:

- ◆ *Priority 10* – This is work that is classified as requiring an immediate response. It is generally work that is due to load off or safety-related conditions and is the most critical category of projects. A Priority 10 could also be related to summer month load conditions. It is intended that work on these items will be done on a 24-hour-per-day basis until the work is complete or until compensatory actions allow the downgrading of the priority. These projects are generally

of such a nature that they will have a direct and immediate impact on the CAIDI and SAIFI statistics. Included in the Priority 10 work classification are the following types of work:

- Public and/or employee safety at reasonably determined immediate risk
- Customer(s) completely or partially without power
- Customer(s) voltage out of tariff
- Environmental incidents
- Equipment at risk of immediate failure based on diagnostics or inspection
- Single contingency situations that exist for critical customers as determined by the Operations Control Center
- Out of configuration and exceeding emergency operational load limits
- Exceptional items as determined by the DSO/TSO shift manager
- Poles that are impeding walkway or roadway

- ♦ *Priority 20* – These projects consist of work that should begin within the next twenty-four hours and, with allowance for planning the scope, are targeted to complete within 14 days. These projects are addressed generally during normal work hours unless overtime is agreed on between the appropriate stakeholders. These items generally have a high probability of adversely affecting the CAIDI and SAIFI statistics. The work in this category includes, but is not necessarily limited to, the following types of work:

- Fuse component out of configuration and exceeding normal operational load relay limits
- Protective relay or communication system alarm repair
- High probability of failure as a result of diagnostic testing or visual inspection
- Poles that are leaning and being held up by a guy wire only
- Oil levels on equipment where gauges are on or below a “low” reading
- Nitrogen levels on equipment where gauges are below -6
- Exceptional items as determined by the DSO/TSO shift manager
- Cable faults with more than 20 single phase residential transformers, 10 commercial transformers, or secondary service faults
- Hot spots on equipment above 135 degrees

- ♦ *Priority 30* – This is composed of work that may be scheduled to commence within the T-5 Scope Freeze window (at T-5 the schedule and scope of regularly scheduled work are locked in and cannot be changed). If it is scheduled within T-5, the work will be executed when authorized in accordance with the established WM procedures for Scope Change Requests. These projects are intended to address existing conditions and are considered as having the potential to have a high impact on CAIDI and SAIFI. This risk of impacting CAIDI and



SAIFI is the reason that the work would not be scheduled as a Priority 50. Priority 30s are, by definition, exceptions to the process and are intended to be minimized as much as is possible. The total number of Priority 30s should not exceed the total number of Priority 50s. To the extent possible, Priority 30 work is to be scheduled in accordance with the overall cycle plan. Typical projects that are within this classification include, but are not limited to the following:

- Diagnostic program response for re-test
 - Cable faults that are not Priority 10 or 20
 - Existing conditions that are considered as having a high potential for impact on the system
 - Poles that have cracked at the base due to age-related degradation
 - Certain wildlife protection issues in areas that present a high risk to CAIDI and SAIFI
 - Exceptional items that cannot be properly scheduled as either Priority 40 or 50
- ◆ *Priority 40* – Work in this category is composed of projects that are based on a program timetable or need date. Their impact on SAIFI/CAIDI is tied to the associated program. This work is specified to be bundled and completed per the cycle plan or functional equipment groups (FEGs) to meet or exceed the program timetable and/or need date. This work is to be completed by the specified need date. Typical types of work that are within this classification include, but are not limited to the following:
- Replacing oil in transformers
 - Replacing/repairing strip heaters in equipment compartments
 - Replacing degraded bushings
 - Repairing defective street lights, leaning poles, and broken cross arm braces
- ◆ *Priority 50* – Work in this category is composed of projects that are to be bundled per the cycle plan or FEGs. These items should constitute the bulk of the maintenance backlog and do not meet the criteria of priority 10, 20, 30, or 40. Their impact on SAIFI and CAIDI may result only if the condition degrades, which is not likely. Typical work in this category is composed of, but not limited to, the following:
- Preventive maintenance inspections
 - Equipment painting where the integrity of equipment is not at risk
 - Replacing/removing temporary in-line disconnects
 - Removing tree limbs on wire
 - Replacing defective cut-outs
- ◆ *Priority 60* – This work is typically filler work (work that is done only when time is available) and must not impact other work groups, such as Operations, Supply, or Testing. This work is to be bundled and scheduled to the cycle plan whenever possible and does not have an impact on SAIFI/CAIDI. Typical work in this category is composed of, but not limited to, the following:

- Performing relay calibrations not requiring an equipment outage
- Removing/replacing fans on transformers
- Performing battery readings
- Replacing light bulb in stations
- Bracing poles
- Installing service wire
- Replacing old fire retardant seal with new type due to new standard
- Installing guy wire markers as needed

Data concerning the numbers and percentages of Priority 10 and 20 jobs that were completed within the prevailing time guidelines for each year can then be developed as illustrated on *Exhibit IV-11*.

Exhibit IV-11
Number and Percentage of Priority 10 and 20 Jobs Completed According to the Time Standards
for All Operations Organizations Which Includes Construction and Maintenance
2002-2006

	2002	2003	2004	2005	2006
Priority 10 Tasks:					
Total Number of Tasks	5,065	5,722	5,658	5,684	6,399
Number Completed Within 24 Hours	3,987	4,708	4,242	3,946	4,697
Percent Completed Within 24 Hours	78.7%	82.3%	75.0%	69.4%	73.4%
Priority 20 Tasks:					
Total Number of Tasks	3,457	3,719	4,862	5,723	5,915
Number Completed Within 14 Days	2,946	3,246	4,143	5,000	5,468
Percent Completed Within 14 Days	85.2%	87.3%	85.2%	87.4%	92.4%

Priority 10 and 20 tasks are not necessarily considered “scheduled” projects. In most cases, this work is handled by the FIN teams, which are line crews that are dedicated to handling this work. This minimizes the impact of having to pull other crews off of the scheduled work (Priority 30, 40, 50, and 60 projects) that is handled through the week-by-week project timeline process. Data concerning the numbers of Priority 30, 40, 50, and 60 jobs that were completed within the each of the preceding five years are presented on *Exhibit IV-12*.



Exhibit IV-12
Annual Number of Priority 30, 40, 50, and 60 Jobs That Were Completed
for All Operations Organizations Which Include Construction and Maintenance
2002-2006

	2002	2003	2004	2005	2006	Percent Difference 2002 - 2006
Priority 30 Jobs Completed	7,182	6,538	3,713	2,034	2,082	-71.0%
Priority 40 Jobs Completed	10,123	9,134	6,229	8,079	17,463	72.5%
Priority 50 Jobs Completed	1,038	675	4,406	7,941	2,765	166.4%
Priority 60 Jobs Completed	285	255	977	1,632	356	24.9%
Grand Totals	18,628	16,602	15,325	19,686	22,666	21.7%

E. Summary

In summary, the development of KPIs must be done in conjunction with the various department personnel. The successful implementation of KPIs requires departmental and individual “buy-in” in addition to the two fundamental thoughts:

- ◆ The development of KPIs that integrate and support CECONY’s strategic plan
 - How does the KPI support the overall strategic plan for the organization?
 - What is the cost (new system development in the case where the data is not readily available) for developing the KPI relative to the impact on the strategic goals and objectives?
- ◆ The development of KPIs that are based on sound, practical measures that have proved useful at other utilities across the country

V. Consulting Staff Organization

This chapter presents the team that Schumaker & Company will assign to the comprehensive management audit of Consolidated Edison Company of New York, Inc. (CECONY). Included in the following text we identify the Schumaker & Company contact and describe the proposed project team's organization and staffing (with specific task area assignments), qualifications of each project team member for this engagement, project management members for this assignment, estimated project team hours, and the balance of the chapter provides the resume of each proposed consultant.

Schumaker & Company's senior consultants have extensive experience in management, operations, and technology consulting in a project environment. They typically hold advanced degrees and average more than 25 years of professional experience. Our proposed project team is expert in the technical aspects of electric, gas, water, and telecommunications operations, as well as relevant regulatory proceedings.

Our proposed project team brings considerable experience in performing electric and gas utility audits, as illustrated in *Exhibit V-1* and *Exhibit V-2*.

Exhibit V-1 Electric Utility Audit Experience

◆ AEP/Kentucky ◆ Arkansas Power & Light Company ◆ Baltimore Gas and Electric Company ◆ Central Main Power Company ◆ Cleveland Electric Illuminating ◆ City of Hillsdale ◆ City of Niles Utilities Department ◆ Columbus Southern Power Company ◆ Conectiv ◆ Consumer Power Company ◆ Dayton Power and Light Company ◆ Detroit Edison ◆ Entergy ◆ Florida Power and Light Company ◆ General Public Utilities ◆ Georgia Power Company ◆ GP Energy ◆ Illinois Power Company ◆ Jacksonville Electric Authority ◆ Kingsport Power Company ◆ Long Island Lighting Company	◆ Michigan South Central Power Agency ◆ Nebraska Public Power District ◆ New Orleans Public Service ◆ Niagara Mohawk Power Company ◆ Ohio Power Company ◆ Pacific Gas & Electric Company ◆ PECO Energy Company ◆ Pennsylvania Power & Light Company ◆ Public Service Electric & Gas Company ◆ Rockland Electric Company ◆ Sierra Pacific Power Company ◆ Springfield City Utilities ◆ Sunflower Electric Cooperative ◆ Tennessee Valley Authority ◆ Toledo Edison Company ◆ Union Electric Company ◆ Union, Light Heat and Power Company ◆ United Power Cooperative ◆ West Texas Utilities Company ◆ Wisconsin Electric Power Company
-



Exhibit V-2
Gas Utility Audit Experience

◆ Atlanta Gas Light Company	◆ Boston Gas Company
◆ Cincinnati Gas and Electric Company	◆ Columbia Gas Transmission Corporation
◆ Connecticut Natural Gas Corporation	◆ Consolidated Natural Gas Company
◆ Consumers Power Company	◆ East Ohio Gas Company
◆ Gaslantic Corporation, Inc.	◆ Louisville Gas and Electric Company
◆ Madison Gas and Electric Company	◆ National Fuel Gas Company
◆ New York State Electric & Gas Corporation	◆ Ohio Gas Company
◆ Oklahoma Gas and Electric Company	◆ Pacific Gas & Electric Company
◆ PECO Energy Company	◆ Pennsylvania Gas & Water Companydfs
◆ People's Natural Gas Company	◆ PEPCO Energy Services and Gas Services, Inc.
◆ Philadelphia Gas Works	◆ Public Service Electric and Gas Company
◆ Rochester Gas and Electric Corporation	◆ San Diego Gas & Electric Company
◆ Sempra Energy	◆ Southern California Gas and Electric Company
◆ The Brooklyn Union Gas Company	◆ The Peoples Gas Light and Coke Company/North Shore Gas Company
◆ United Cities Gas Company	◆ Western Kentucky Gas Company

This combined knowledge base makes our firm uniquely qualified for the most complex and demanding of assignments.

A. Project Contact

Our Ann Arbor (Michigan) headquarters office will be responsible for managing this project. The contact information for Dennis Schumaker, our proposed *Project Manager* for this project, is as follows:

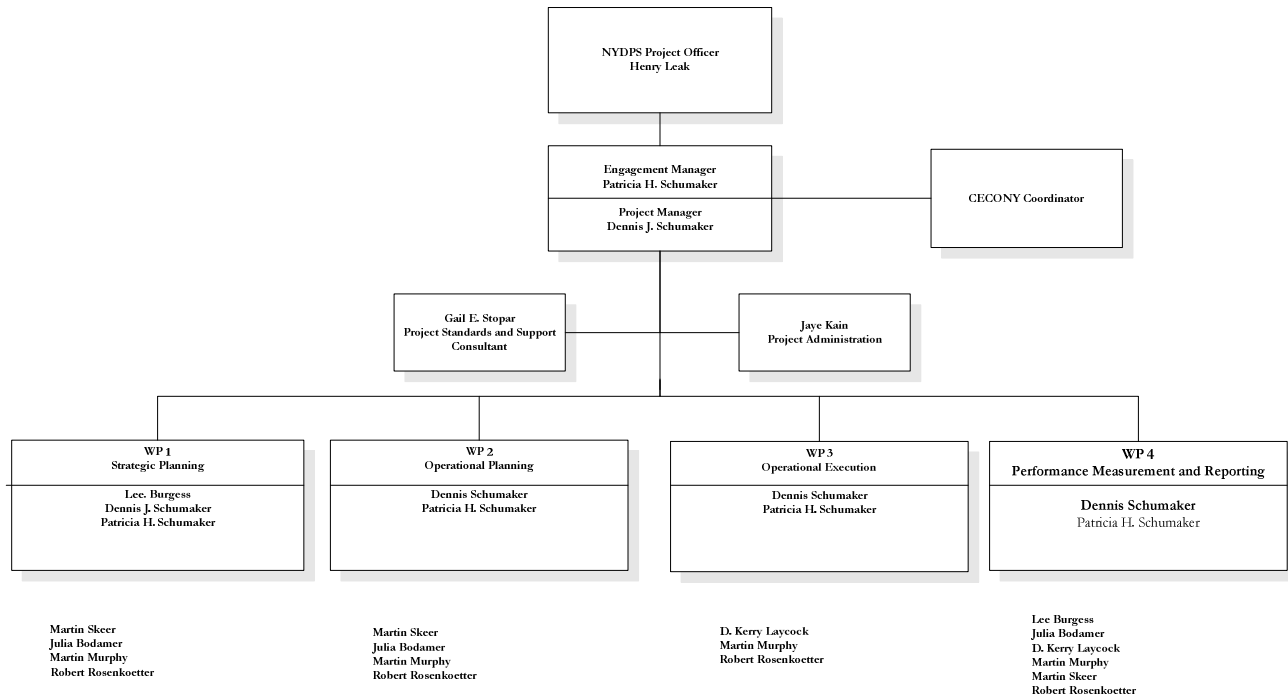
Name:	Mr. Dennis J. Schumaker	Address:	3101 Walnut Ridge, Ann Arbor, MI 48103
Telephone:	(734) 998-5550	Email Address:	dschumaker@schuco.com
Fax:	(734) 998-5590		

B. Proposed Staffing

The project team proposed for this assignment is composed of selected individuals, whose talents and expertise complement one another. Schumaker & Company's team has a strong working knowledge of utility company operations, as well as current industry issues. Each individual has been carefully selected according to his or her experience, technical expertise, and education in those areas for which s/he is proposed. We will bring to this review an especially strong team, a team that possesses all of the requisite skills and has worked together successfully in the past.

The project team proposed for this assignment is illustrated in *Exhibit V-3*.

Exhibit V-3 Project Team Organization



The single most important element a consulting firm brings to an assignment is the qualifications of the individual members of the consultant team. In combination, we respectfully submit that Schumaker & Company offers the New York Public Service Commission, the New York State Department of Public Service, CECONY, any parties to Case 08-M-0152, and CECONY's customers, a team that is unequalled in relevant experience, capability, and dedication to the completion of a highly successful engagement.



The educational and professional designations of each consultant are summarized in *Exhibit V-4*.

Exhibit V-4
Consultant Team Experience

Name	Responsibility	Years Exp.	Education and Professional Designations
Patricia H. Schumaker	Engagement Manager & Executive Consultant I	31	BSBA (Accounting), MBA (Operations Research) CMC®, CPA, PMP®
Dennis J. Schumaker	Project Manager & Executive Consultant I	31	BME (Mechanical Engineering), MS (Nuclear Engineering), MBA (Strategic & Corporate Planning), CMC®, PMP®, MCSE
Julia D. Bodamer	Executive Consultant II	20	BA (Business and Finance), Associate Degree in Legal Studies
Lee E. Burgess	Executive Consultant II	23	BS, MBA, CPIM
D. Kerry Laycock	Executive Consultant II	21	BS (Business Administration and Management), MS (Organizational Development), CMC®
Martin J. Murphy	Executive Consultant II	29	BCE (Engineering), MS (Engineering), MBA, PE
Robert L. Rosenkoetter	Executive Consultant II	25	BSBA, MBA (Finance), MPA (Professional Accountancy)
Martin H. Skeer	Executive Consultant II	20	BS (Civil Engineering), MS (Engineering Mechanics), MBA (Finance), Ph.D., and CMC®
Gail E. Stopar	Support Consultant & Analyst	22	BS (Quality Management), MSA (Human Resource Management), Certificate in Accounting
Jaye M. Kain	Project Administrator & Analyst	20	BS (Environmental Geoscience), BS (Geology), MS (Geology)
Hachin Sunid	Technology Support Consultant	8	BS (Computer Science Engineering)

All proposed project staff have experience with utilities and management audits. *Exhibit V-5* shows the Schumaker & Company's project team experience in relationship to all areas of these audits.

Exhibit V-5
Relevant Project Team Experience

	Executive Mgt	Electric/Gas Ops & Gas Supply	Finance	HR	Customer Service	External Relations	Support Services	Affiliate Interest
Lee E. Burgess	•	•		•		•	•	•
D. Kerry Laycock	•			•	•		•	
Martin J. Murphy	•	•					•	•
Robert L. Rosenkoetter	•		•					•
Dennis J. Schumaker	•	•			•	•	•	•
Patricia H. Schumaker	•		•	•	•	•	•	•
Martin H. Skeer	•	•			•	•	•	•
Gail E. Stopar	•		•	•	•		•	•

Based on the nature of the issues that need to be addressed or researched, other Schumaker & Company consultants would be made available for performing specific tasks as needed. We would discuss any need for additional Schumaker & Company resources with the New York Public Service Commission Staff's *Project Manager* before engaging those resources on the project. Over 40 different professional staff are employed or affiliated with Schumaker & Company.

All proposed project team members have worked on prior Schumaker & Company projects. For those consultants who are not firm employees, but Schumaker & Company associates, indicates those projects where they have worked together with Schumaker & Company in the past.

Exhibit V-6
Associates Involvement with Schumaker & Company on Past Projects

	Philadelphia Gas Works	Pennsylvania-American Water Company	PECO Energy	Verizon NY *	State of Michigan OFIS	Town of Hilton Head Island	City of Detroit	Total
Julia D. Bodamer	•		•					2
Lee E. Burgess	•	•	•					3
D. Kerry Laycock	•	•	•		•	•	•	6
Robert L. Rosenkoetter	•	•	•	•				4
Martin H. Skeer				•				1

A Doherty & Company project where Dennis Schumaker, Schumaker & Company, was Project Manager for assignment.



The proposed project team has worked together on several projects. Specifically, Patricia Schumaker, Dennis Schumaker, and Martin Murphy, all Schumaker & Company employees, worked together with the designated Schumaker & Company associates on PECO Energy, Philadelphia Gas Works, Pennsylvania-American Water Company, and Verizon NY projects, with Gail Stopar and Jaye Kain working on the first three listed projects.

C. Project Management

The quality of the final product of a consulting project is a direct result of the project team selected to perform the assignment. Astute, experienced consultants working under an appropriate project management system will produce a high-quality product. The quality standards by which we abide are specifically designed to exceed those of our competitors – giving our clients one more good reason for selecting Schumaker & Company.

The *Engagement Manager*, Patricia H. Schumaker, is responsible for ensuring that the consultant team is provided with the appropriate resources for completing its activities on a timely basis. She also performs a quality assurance role, ensuring that the work is progressing within budget and on schedule. Ms. Schumaker is a *Project Management Professional* (PMP®) and has participated as *Engagement Manager* or *Project Manager* on audits of Central Maine Power Company, Entergy, Philadelphia Gas Works, Pennsylvania-American Water Company, ALLTEL Pennsylvania, Commonwealth Telephone Company, Illinois Bell Telephone Company, Michigan State Police Communications Division, PECO Energy, US WEST, and others. Additionally, she has performed numerous other audits, including Pennsylvania Gas & Water Company (PG Energy), Kentucky-American Water Company (American Water Works), Philadelphia Suburban Water Company (Philadelphia Suburban Corporation), Water Services Corporation of South Carolina, United Water New Jersey (United Water Resources), City of Niles (MI) Utilities Department, Kingsport Power Company (AEP), Middleborough (MA) Gas & Electric Department, Pacific Gas & Electric Company, Pennsylvania Power & Light Company, Union Light Heat and Power Company, West Texas Utilities Company (Central & Southwest Corporation), City of Sturgis (Michigan) Electric Department, Elizabethtown Gas Company (NUI Corporation), New Jersey Natural Gas Company (New Jersey Resources Corporation), Pacific Gas & Electric Company, Southern California Gas Company, South Jersey Gas Company (South Jersey Industries Corporation), Western Kentucky Gas Company (Atmos), City of Niles (MI) Utilities Department, New England Telephone Company (Verizon), SBC Ameritech Indiana, Verizon NY, and Verizon PA.

The *Project Manager*, Dennis J. Schumaker, is the primary contact with the client regarding day-to-day operations of the project. Mr. Schumaker is a *Project Management Professional* (PMP®) and previously served as the *Engagement Manager* or *Project Manager* on audits of Philadelphia Gas Works, PECO Energy, AEP Kentucky, Elizabethtown Gas Company (NUI Corporation), New Jersey Natural Gas Company (New Jersey Resources Corporation), South Jersey Gas Company (South Jersey Industries Corporation), Western Kentucky Gas Company, Philadelphia Gas Works, Union Light Heat & Power Company, Middleborough Gas & Electric, Peoples Natural Gas Company, Kingsport Power Company,

Pennsylvania Power & Light Company, West Texas Utilities Company, Philadelphia Suburban Water Company, General Waterworks Corporation of Pine Bluff, Kentucky-American Water Company, US WEST, City of Sturgis, City of Niles, Entergy, Conectiv, Jersey Central Power and Light Company/GPU Energy, Public Service Electric & Gas Company, Rockland Electric Company, SBC Ameritech Indiana, US WEST, Verizon New York, Water Services Corporation of South Carolina, and others, such as a customer satisfaction survey project for the Illinois Commerce Commission. Additionally, he has performed numerous other audits, including Southern California Gas Company, ALLTEL Pennsylvania, Commonwealth Telephone Company, Central Maine Power Company, United Water New Jersey, Illinois Bell Telephone Company, Pennsylvania Gas & Water Company (PG Energy), Pennsylvania-American Water Company, Verizon PA, and others.

D. Estimated Project Team Hours

Schumaker & Company's project team estimated hours/days are shown in *Exhibit V-7*. Person day estimates can be determined by dividing hours by eight.

**Exhibit V-7
Estimated Hours**

Staff Member	Category	Total Hours	Total Days
Patricia Schumaker	Engagement Manager and Executive Consultant I	800	100
Dennis Schumaker	Project Manager and Executive Consultant I	1040	130
Julia Bodamer	Executive Consultant II	376	47
Lee Burgess	Executive Consultant II	296	37
D. Kerry Laycock	Executive Consultant II	256	32
Martin Murphy	Executive Consultant II	720	90
Martin Skeer	Executive Consultant II	376	47
Robert Rosenkoetter	Executive Consultant II	608	76
Gail Stopar	Support Consultant & Analyst	184	23
Jaye Kain	Project Administrator & Analyst	1056	132
Hachin Sunid	Technology Support Consultant	64	8
Total Hours		5712	714

Schumaker & Company's estimated hours by step, by consultant, and by work plan area are shown in *Exhibit V-8*, *Exhibit V-9*, *Exhibit V-10*, *Exhibit V-11*, and *Exhibit V-12*.



Exhibit V-8
Step I – Project Orientation and Final Work Plan Hours by Work Task

Work Loaded Tasks From Schedule	Duration	Total Hours
Step I - Project Orientation and Final Work Plan	32 days	472 hrs
Project Planning and Administration	6 days	48 hrs
Schumaker Dennis J.		24 hrs
Schumaker Patricia H.		24 hrs
Orientation Presentation and Interviews	10 days	264 hrs
Bodamer Juilia		24 hrs
Burgess Lee		24 hrs
Kain Jaye		24 hrs
Laycock D Kerry		24 hrs
Murphy Martin J.		24 hrs
Rosenkoetter Robert		24 hrs
Schumaker Dennis J.		24 hrs
Schumaker Patricia H.		24 hrs
Skeer Martin		24 hrs
Stopar Gail E.		24 hrs
Sunid Hachin		24 hrs
Prepare Draft Work Plan	5 days	144 hrs
Bodamer Juilia		16 hrs
Burgess Lee		16 hrs
Kain Jaye		16 hrs
Laycock D Kerry		16 hrs
Murphy Martin J.		16 hrs
Rosenkoetter Robert		16 hrs
Schumaker Dennis J.		16 hrs
Schumaker Patricia H.		16 hrs
Skeer Martin		16 hrs
First Progress Meeting	1 day	16 hrs
Schumaker Dennis J.		8 hrs
Schumaker Patricia H.		8 hrs

Exhibit V-9
Step II – Detailed Review and Analysis Work Plan Hours by Work Task

Work Loaded Tasks From Schedule	Duration	Total Hours
Step II - Detailed Review and Analysis	170 days	3,160 hrs
Work Package I	85 days	1,000 hrs
Corporate Mission, Objectives, Goals, and Planning	85 days	320 hrs
Schumaker Patricia H.		80 hrs
Schumaker Dennis J.		80 hrs
Burgess Lee		160 hrs
Long-term Load Forecasting	85 days	320 hrs
Schumaker Dennis J.		80 hrs
Bodamer Juilia		120 hrs
Skeer Martin		120 hrs
Long-term System Planning	85 days	360 hrs
Schumaker Dennis J.		120 hrs
Murphy Martin J.		120 hrs
Rosenkoetter Robert		120 hrs
Work Package II	85 days	760 hrs
Supply Procurement	85 days	320 hrs
Schumaker Dennis J.		80 hrs
Bodamer Juilia		120 hrs
Skeer Martin		120 hrs
Capital and O & M	85 days	440 hrs
Schumaker Patricia H.		120 hrs
Schumaker Dennis J.		80 hrs
Murphy Martin J.		120 hrs
Rosenkoetter Robert		120 hrs
Work Package III	85 days	760 hrs
Program and Project Planning and Management	85 days	400 hrs
Schumaker Dennis J.		80 hrs
Schumaker Patricia H.		80 hrs
Murphy Martin J.		120 hrs
Rosenkoetter Robert		120 hrs
Workforce/Resource Utilization	85 days	360 hrs
Laycock D Kerry		120 hrs
Murphy Martin J.		120 hrs
Rosenkoetter Robert		120 hrs
Work Package IV	85 days	640 hrs
Performance and Results Measurement	85 days	640 hrs
Schumaker Patricia H.		80 hrs
Schumaker Dennis J.		80 hrs
Bodamer Juilia		80 hrs
Burgess Lee		80 hrs
Laycock D Kerry		80 hrs
Murphy Martin J.		80 hrs
Skeer Martin		80 hrs
Rosenkoetter Robert		80 hrs



Exhibit V-10
Step III – Draft and Final Report Preparation Work Plan Hours by Work Task

Step III - Draft and Final Report Preparation	70 days	600 hrs
Draft Report Compilation	25 days	480 hrs
Schumaker Patricia H.		120 hrs
Schumaker Dennis J.		120 hrs
Murphy Martin J.		120 hrs
Stopar Gail E.		120 hrs
Final Report Preparation	15 days	120 hrs
Schumaker Patricia H.		40 hrs
Schumaker Dennis J.		40 hrs
Stopar Gail E.		40 hrs
Work Loaded Tasks From Schedule	Duration	Total Hours

Exhibit V-11
Workshop Hours by Work Task

Work Loaded Tasks From Schedule	Duration	Total Hours
Workshop Training Program	185 days	184 hrs
Project Management and Administration Processes	5 days	48 hrs
Schumaker Patricia H.		16 hrs
Schumaker Dennis J.		16 hrs
Kain Jaye		16 hrs
Strategic Planning	5 days	40 hrs
Schumaker Patricia H.		8 hrs
Schumaker Dennis J.		8 hrs
Bodamer Juilia		8 hrs
Burgess Lee		8 hrs
Skeer Martin		8 hrs
Operational Planning	5 days	32 hrs
Schumaker Patricia H.		8 hrs
Schumaker Dennis J.		8 hrs
Bodamer Juilia		8 hrs
Skeer Martin		8 hrs
Operational Execution	5 days	32 hrs
Schumaker Patricia H.		8 hrs
Schumaker Dennis J.		8 hrs
Burgess Lee		8 hrs
Laycock D Kerry		8 hrs
Performance Measurement and Reporting	5 days	32 hrs
Schumaker Patricia H.		8 hrs
Schumaker Dennis J.		8 hrs
Laycock D Kerry		8 hrs
Rosenkoetter Robert		8 hrs

Exhibit V-12
Project Management and Administration Work Plan Hours by Work Task

Work Loaded Tasks From Schedule	Duration	Total Hours
Project Management and Administration	280 days	1,360 hrs
Project Management	14 mons	320 hrs
Schumaker Patricia H.		160 hrs
Schumaker Dennis J.		160 hrs
Project Administration	14 mons	1,040 hrs
Kain Jaye		1,000 hrs
Sunid Hachin		40 hrs

E. Proposed Staff Resumes

The following resumes highlight the recent, relevant professional experience of our proposed consultants for this specific assignment with the NYPSC and CECONY. A background and experience summary is provided along with a listing of pertinent assignments in which the respective consultant has gained experience relevant to his/her responsibilities for this assignment.



Ms. Patricia H. Schumaker, CPA, CMC[®], PMP[®]

Engagement Manager and Executive Consultant I

EXPERIENCE

Ms. Patricia H. Schumaker has over 30 years of experience in private industry and in consulting for state and local governmental agencies, utilities, telecommunications firms, manufacturing and distribution firms, and service organizations. She has considerable experience as *Project Manager* and has acted as *Lead Consultant* in the areas of organization and management, quality improvement, accounting and financial management, corporate governance, affiliate relationships and transactions, cost allocations, information technology and systems, human resources, customer service, and support services (purchasing, materials management, transportation, safety, legal, risk management, records management) on numerous management, operations, and technology assessments and performance reviews. Previously, she also held various positions within ADP Network Services, including *Director-Information Services*, *Director-National Accounts*, and *Director-Professional Services*, as well as other managerial, technical, and sales positions. Ms. Schumaker also performed numerous studies for utility, government, manufacturing and distribution, retail, and service clients while an auditor and consultant with Arthur Andersen and Lybrand Ross Bros. & Montgomery. She is one of the founders of Schumaker & Company, Inc., which was founded in 1986.

EDUCATION & CERTIFICATIONS

She is a *Certified Public Accountant* (CPA) and holds a BSBA in Accounting from the Ohio State University and an MBA from the University of Michigan, where she has also completed post-graduate coursework. She also holds other certifications as *Certified Management Consultant* (CMC[®]) and *Project Management Professional* (PMP[®]).

CONSULTING EXPERTISE

- ◆ Management and operations reviews and assessments
- ◆ Business process re-engineering and quality improvement program development
- ◆ Strategic and operations planning
- ◆ Competitive analyses and customer surveys
- ◆ Performance measurement development
- ◆ User requirements definition and needs assessments
- ◆ Information technology planning, integration, and optimization
- ◆ Project management services
- ◆ Quality assurance services
- ◆ Litigation support



Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

**GENERAL
UTILITY
EXPERIENCE**

Ms. Schumaker's specific experience in the electric, gas, telecommunications, and water industries includes assignments at over 50 different organizations. Electric utilities include: Central Maine Power Company, City of Niles (MI) Utilities Department, Entergy, Kingsport Power Company (AEP), Middleborough (MA) Gas & Electric Department, Pacific Gas & Electric Company, PECO Energy, Pennsylvania Power & Light Company, Union Light Heat and Power Company, West Texas Utilities Company (Central & Southwest Corporation), City of Sturgis (Michigan) Electric Department, and others. Gas utilities include: Elizabethtown Gas Company (NUI Corporation), Middleborough (MA) Gas & Electric Department, New Jersey Natural Gas Company (New Jersey Resources Corporation), Pacific Gas & Electric Company, PECO Energy, Pennsylvania Gas & Water Company (PG Energy), Peoples Natural Gas Company, Philadelphia Gas Works, Southern California Gas Company, South Jersey Gas Company (South Jersey Industries Corporation), Western Kentucky Gas Company (Atmos), and others. Water utilities include: City of Niles (MI) Utilities Department, Kentucky-American Water Company (American Water), Pennsylvania-American Water (American Water Works), Pennsylvania Gas & Water Company (PG Energy), Philadelphia Suburban Water Company (Philadelphia Suburban Corporation), United Water New Jersey (United Water Resources), Water Services Corporation of South Carolina, and others. Telecommunications include: ALLTEL Pennsylvania, Commonwealth Telephone Company, Illinois Bell Telephone Company (SBC/Ameritech), Michigan State Police Communications Division, New England Telephone Company (Verizon), SBC Ameritech Indiana, US WEST, Verizon NY, and Verizon PA.

**UTILITY
INDUSTRY
RESTRUCTURING**

She has conducted restructuring studies, compliance audits, and code of conduct audits of electric and gas utilities to ensure that incumbent utilities or their related competitive business segments did not have an unfair competitive advantage over other, non-affiliated purveyors of competitive services, and to evaluate and review the allocation of costs between competitive and non-competitive services. She has offered expert opinion as to whether there was strict separation and allocation of revenues, costs, assets, risks, and functions between the utility's electric and/or gas distribution operations and its related competitive business segments, such as (1) whether cross subsidization between utility and non-utility segments within a public utility or holding company existed; (2) whether separation of utility and non-utility organizations was reasonable based on affiliate relation/fair competition standards; (3) effect on ratepayers on use of utility assets in provision of non-safety-related competitive services; (4) effect on utility workers; (5) effect of utility practices on the market for such services; and (6) to ensure compliance with legislation.

Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

**PROJECT
MANAGEMENT**

Ms. Schumaker is a *Project Management Professional* (PMP®) and has participated as *Engagement Manager* or *Project Manager* on numerous consulting projects for state and local governmental agencies and directly for companies, as well as providing project management services. She is a member of the Project Management Institute and has attended numerous project management training courses. She is also a member of the Microsoft Project Association, including participation in the Midwestern user group functions.

Project management software systems used include APECS, Workbench, Microsoft Project, and Microsoft Team Manager. Most recently, she has used the following specific project management tools on consulting assignments:

- ◆ Microsoft Project 2003 for planning, scheduling, resource loading, reporting, and monitoring project progress.
- ◆ @Risk for Project for dealing with the uncertainty associated with a large systems development project.
- ◆ Business Engine for developing enterprise wide resource resources loading and utilization analyses.

Over 30 years of consulting experience, Ms. Schumaker has been the Project Manager for over 100 different assignments, including management, operations, and technology reviews; business process reengineering and process outsourcing improvement projects, and technology implementation projects. Over 50 of these involved the review and implementation of project management or quality assurance techniques to a business or government entity's internal operations.



Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

**UTILITY
COMMISSION
EXPERIENCE**

Additionally, Ms. Schumaker has performed comprehensive and/or focused performance reviews for regulatory commissions and agencies, including:

- ♦ Arizona Corporation Commission
- ♦ Arkansas Public Service Commission
- ♦ California Public Utilities Commission
- ♦ Colorado Public Utilities Commission
- ♦ Idaho Public Utilities Commission
- ♦ Illinois Commerce Commission
- ♦ Indiana Utility Regulatory Commission
- ♦ Iowa Utilities Board
- ♦ Kansas Corporation Commission
- ♦ Kentucky Public Service Commission
- ♦ Maine Public Utilities Commission
- ♦ Massachusetts Department of Public Utilities
- ♦ Minnesota Public Utilities Commission
- ♦ Montana Public Service Commission
- ♦ Nebraska Public Service Commission
- ♦ Nevada Public Service Commission
- ♦ New Mexico Public Utility Commission
- ♦ New Jersey Board of Public Utilities
- ♦ New York Public Service Commission
- ♦ North Dakota Public Service Commission
- ♦ Oregon Public Utilities Commission
- ♦ Pennsylvania Public Utility Commission
- ♦ Public Utility Commission of Ohio
- ♦ Public Utility Commission of Texas
- ♦ Public Service Commission of Utah
- ♦ South Carolina Office of Regulatory Staff
- ♦ South Dakota Public Utilities Commission
- ♦ Tennessee Regulatory Authority
- ♦ Washington Utilities & Transportation Commission
- ♦ Wyoming Public Service Commission

Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

**PROFESSIONAL
AFFILIATIONS**

- ◆ Institute of Management Consultants (IMCUSA)
- ◆ President, Past Vice President, and Past Professional Development Chair, IMCUSA Michigan Chapter
- ◆ American Institute of Certified Public Accountants (AICPA)
- ◆ Information Technology Member, AICPA
- ◆ Project Management Task Force Member, AICPA
- ◆ Michigan Association of Certified Public Accountants (MACPA)
- ◆ Past Chair, Management Consulting Services Committee, MACPA
- ◆ Past Chair, Specialized Interests Track, MACPA
- ◆ Regional Advisory Committee, MACPA
- ◆ Project Management Institute (PMI), including memberships in the following special interest groups: consulting, government, information technology & telecommunications, risk management, and utility industry SIGs
- ◆ Past Chapter President & Board Member, Institute of Management Accountants (IMA)
- ◆ Capital Quality Initiative
- ◆ Computer Information Systems Advisory Committee, Washtenaw Community College

**PRESENTATION
& ARTICLES**

- ◆ *Incentive Compensation, Does It Work?*, MACPA, May, 1994
- ◆ *Managing Consulting Projects*, MACPA, October 2000
- ◆ *Managing Consulting Projects*, MACPA, August 2001
- ◆ *Managing Consulting Projects*, MACPA, November 2001

Representative, relevant projects are briefly described on the following pages. All projects except Verizon NY are Schumaker & Company projects; on the Verizon NY project Schumaker & Company was a subcontractor.



Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

Philadelphia Gas Works

Engagement Manager & Executive Consultant I

- ◆ Project planning and scheduling
- ◆ Financial management
- ◆ Corporate governance & Sarbanes-Oxley Act of 2002
- ◆ Diversity/EEO
- ◆ Risk management
- ◆ Legal
- ◆ Information technology

Performed a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this management and operations audit is to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted.

Pennsylvania-American Water Company

Engagement Manager, Project Manager & Executive Consultant I

- ◆ Project planning and scheduling
- ◆ Financial management
- ◆ Corporate governance & Sarbanes-Oxley Act of 2002
- ◆ Corporate culture, management structure, and staffing levels
- ◆ Affiliate relationships/cost allocations
- ◆ Diversity/EEO
- ◆ Risk management
- ◆ Legal
- ◆ Information technology

Performed a stratified management and operations audit of Pennsylvania-American Water Company (PAWC) for the Pennsylvania Public Utility Commission (PaPUC) with the primary focus areas being costs borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses are of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

Water Services Corporation of South Carolina

Lead Consultant

- ◆ Organizational design
- ◆ Affiliate relationships and allocation of revenues and costs
- ◆ Human resource policies and practices

Performed a management and operations review and assessment of Water Services Corporation (WSC) of South Carolina for the State of South Carolina Office of Regulatory Staff (ORS) with specific focus on the operations of the five subsidiary water and wastewater companies that operate in South Carolina, those being:

- ◆ Carolina Water Service, Inc. (CWS)
- ◆ Tega Cay Water Service, Inc. (TCWS)
- ◆ Utilities Services of South Carolina, Inc. (USSC)
- ◆ Southland Utilities, Inc. (SU)
- ◆ United Utility Companies, Inc.(UUC)

The bottom line of this project was to determine whether the rates charged to the South Carolina ratepayers can be reduced through the implementation of greater efficiencies in organizations, operations, or both. Additionally, another relevant analysis was a determination of whether the ratepayers of South Carolina were being properly and economically served by the range of corporate services that are provided to South Carolina operations by the managers located in both West Columbia and Northbrook. Significant consideration was given to investigation of the potential benefits that would result from the consolidation or merger of the affiliated companies of WSC.

PECO Energy Company

Engagement Manager and Lead Consultant

- ◆ Project planning and scheduling
- ◆ Financial management
- ◆ Corporate governance
- ◆ Risk management
- ◆ Legal services
- ◆ Facilities management
- ◆ Information technology
- ◆ Medicare Part D program
- ◆ Diversity/EEO
- ◆ Affiliate relationships/cost allocation

Performed a stratified management and operations audit of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission in with the primary focus areas being PECO, Exelon Energy Delivery, and Exelon Business Services Company functional areas, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assessed the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.



Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

Verizon New York

Lead Consultant

- ◆ Customer services
- ◆ Field operations
- ◆ Performance analysis and statistics

Analyzed, documented, and verified, through findings based on identifiable and measurable information and data, to ensure that Verizon NY's existing service quality plans and practices of the five VIP service objectives (customer trouble report rate, percent out of service over 24 hours, percent installation completed in five days, PSC complaints, and outliers), NY telephone service standards, and company guidelines meet applicable service quality performance standards, including reasonably foreseeable events and contingencies. Developed and documented recommendations to improve or modify these service quality practices and/or plans where existing plans and practices were not sufficient to ensure that applicable standards were met. Reviewed Verizon NY's processes for service quality performance and its employees, technology, and work processes related to the planning, design, construction, installation, maintenance, repair, and delivery of product to retail customers within Verizon NY's service territory.

SBC Ameritech Indiana

Lead Consultant

- ◆ Performance statistics
- ◆ Call center operations
- ◆ Field operations

Performed performance statistics analyses as part of a focused review of service quality performance and related plans and practices of SBC Ameritech Indiana, including its call center operations and field operations. Performed a historical review of performance statistics to help identify those causal factors that led up to the service problems that were experienced in the year 2000. Performed computer-based analyses of a wide range of available performance statistics to determine how well specific geographical service areas were performing in relation to the norm for Ameritech Indiana. Further defined the quality of service provision by looking for trends in the underlying operational data of Ameritech Indiana that was linked, directly or indirectly, to the quality of service provided.

Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

Elizabethtown Gas Company
NUI Corporation
New Jersey Natural Gas Company
New Jersey Resources Corporation
South Jersey Gas Company
South Jersey Industries Corporation

Lead Consultant

- ◆ Restructuring
- ◆ Affiliate relationships and transactions
- ◆ Allocation of fees
- ◆ Competitive services
- ◆ Code of conduct

Conducted compliance audits of the competitive services of New Jersey's gas utilities; specifically South Jersey Gas Company (South Jersey Industries Corporation), New Jersey Natural Gas Company (New Jersey Resources Corporation), and Elizabethtown Gas Company (NUI Corporation) as part of the utility industry restructuring in New Jersey. The purpose of these audits was to ensure that the utilities or their related competitive business segments do not have an unfair competitive advantage over other, non-affiliated purveyors of competitive services, and to evaluate and review the allocation of costs between the utilities' competitive and non-competitive services.

City of Sturgis

Senior Consultant

- ◆ Strategic planning
- ◆ Goals and objectives
- ◆ Competitive assessment/benchmarking
- ◆ Financial management
- ◆ Technology
- ◆ Customer service

Performed a management and operations review, customer satisfaction survey, and benchmarking study. It culminated with an all-day strategic planning session with the city commissioners and city management personnel in attendance. The current situation of the city (strengths, weaknesses, opportunities, and threats) was developed with specific strategies, goals and objectives identified and agreed to between the commissioners and city management.

ALLTEL Pennsylvania

Engagement Manager & Lead Consultant

- ◆ Executive management
- ◆ External relations
- ◆ Financial management
- ◆ Affiliate relationships and transactions
- ◆ Allocation of fees
- ◆ Information technology
- ◆ Legal

Performed a stratified management and operations review in which she focused on various functions and activities performed by ALLTEL Pennsylvania, its associated companies (ALLTEL Telephone Service Corporation, ALLTEL Corporate Services, ALLTEL Supply, ALLTEL Publishing), or its parent company (ALLTEL Corporation).



Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

Town of Middleborough

Senior Consultant

- ◆ Strategic planning
- ◆ Goals and objectives
- ◆ Competitive assessment/benchmarking
- ◆ Management and operations review
- ◆ Communication with utility board

Performed a competitive assessment of this municipal gas and electric department for the town of Middleborough, including a management review of all functional areas and benchmarking of major performance indicators in relation to other Massachusetts municipalities and to the best practices of other public and investor-owned utilities. The project resulted in an ongoing assignment with the Board of Commissioners to develop and implement a strategic plan, and develop and implement an information technology (IT) plan. The project included an all-day strategic planning session with the Board of Commissioners and City management personnel in attendance. The current situation of the municipality (strengths, weaknesses, opportunities, and threats) was developed and specific strategies, goals, and objectives identified and agreed to by the Commissioners and City management for addressing these items. Six months after the implementation of the strategic plan, a follow-up planning session was conducted to update the plan. The IT plan resulted in the standardization of computer hardware and software, the implementation of a wide area network (WAN) and an Internet presence by the municipality.

Kingsport Power Company

Lead Consultant

- ◆ Financial management
- ◆ Affiliate relationships & transactions
- ◆ Allocation of fees
- ◆ Cost allocation
- ◆ Information technology

Performed a comprehensive management and operations review in which she focused on various administrative and operating support services performed by the company's Tennessee operations and its affiliates, Appalachian Power Company (in Virginia) and American Electric Power Service Corporation (in Ohio).

United Water New Jersey

Lead Consultant

- ◆ Financial management & support services
- ◆ Cost allocation

Performed a comprehensive management audit to analyze areas of finance and support services (information technology and record management).

Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

Pennsylvania Power & Light Company

Lead Consultant

- ◆ Financial management
- ◆ Corporate-wide technology
- ◆ Management information systems

Performed a stratified management audit involving a review of financial management and information technology. Presented 18 major recommendations addressing how corporate-wide technology impacts PP&L's ability to operate efficiently in a changing environment.

Commonwealth Telephone Company

Engagement Director & Lead Consultant

- ◆ Executive management / human resources
- ◆ Information technology
- ◆ Legal services
- ◆ Financial management and dividend policies
- ◆ Affiliate relationships and transactions
- ◆ Allocation of fees

Performed a stratified management audit involving a diagnostic review of all company operations, followed by an in-depth review of nine pre-identified issues.

Central Maine Power Company

Engagement Manager, Lead Consultant, and Expert Witness

- ◆ Organizational structure/management and staffing
- ◆ Executive compensation
- ◆ Customer service operations
- ◆ Management efficiency and cost control

Performed a focused management and operations review in which she investigated many of the financial management and support services functions, including work management and materials management. As *Engagement Manager*, she was actively involved in all aspects of the project.

Entergy/Arkansas Public Service Commission

Engagement Manager & Lead Consultant

- ◆ Monitoring and control of a management and operations review
- ◆ Training to Commission staff regarding how to proceed with the monitoring and control of a management and operations review

Presented a written and oral review of the proposal prepared by the consultant team chosen by APSC to perform a review of Entergy. This review was followed by a written and oral review of the consultant team's detailed work plan. We also assisted the APSC in managing the audit, the consultant project team, and their work products.



Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

Philadelphia Gas Works

Lead Consultant

- ◆ Financial and accounting management
- ◆ Customer billing and accounting
- ◆ Management information systems

Engagement Manager & Lead Consultant

- ◆ Evaluation of implementation of earlier management audit

Performed a comprehensive management and operations review and completed a follow-up review approximately two years later that involved the following:

- ◆ Examining results of the studies recommended during the management audit
- ◆ Developing a request for proposal for long-term strategic options

Philadelphia Suburban Water Company

Lead Consultant

- ◆ Information systems
- ◆ Financial management

Performed a management and operations review in which information technology was among several special objectives.

City of Niles (Michigan) Utilities Department

Technical Adviser

- ◆ Executive management and staffing
- ◆ Accounting and finance
- ◆ Human resources
- ◆ Support /management information systems

Conducted a management and operations review for the electric, water, and wastewater functions.

Kentucky-American Water Company

Lead Consultant

- ◆ Financial management
- ◆ Management information systems
- ◆ Affiliate relationships and transactions
- ◆ Allocation of fees

Performed a management and operations review in which she investigated the areas of financial management (affiliated relationships, corporate finance, financial requirements planning and economic analysis, cash management, management accounting, taxes, budgeting management and control, internal auditing, and rates) and management information systems.

Ms. Patricia H. Schumaker, CPA, CMC®, PMP®, continued
Engagement Manager and Executive Consultant I

West Texas Utilities Company

Lead Consultant

- ◆ Financial management
- ◆ Support services
- ◆ Management information systems
- ◆ Affiliate relationships and transactions
- ◆ Allocation of fees

Performed a management and operations review in which she investigated affiliated relationships, corporate finance, financial requirements planning and economic analysis, cash management, accounting, taxes, budgeting management and control, internal auditing, rates, support services, and management information systems.

Southern California Gas Company

Senior Consultant

- ◆ Financial management
- ◆ Support functions

Performed a management and operations review in which she investigated the areas of financial management and administrative services, including cash collections and disbursements, cash forecasting, banking relationships, work order processing, accounts payable, and materials management.

Western Kentucky Gas Company

Lead Consultant

- ◆ Financial management
- ◆ Customer services
- ◆ Management information systems
- ◆ Affiliate relationships and transactions
- ◆ Allocation of fees

Performed a management and operations review in which she investigated affiliated relationships, corporate finance, financial requirements planning /economic analysis, cash management, accounting, taxes, budgeting, internal auditing, rates, customer services (customer billing and accounting), and management information systems.

Union Light, Heat & Power

Lead Consultant

- ◆ Financial management
- ◆ Customer services (billing and accounting)
- ◆ Human resources
- ◆ Support services
- ◆ Management information systems
- ◆ Affiliate relationships and transactions
- ◆ Allocation of fees

Performed a management and operations review in which she investigated the areas of affiliated relationships, corporate finance, financial requirements planning and economic analysis, cash management, management accounting, taxes, budgeting management and control, internal auditing, rates, customer services (customer billing and accounting), human resources, support services, and management information systems.



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I Project Manager & Executive Consultant I

BACKGROUND

Mr. Dennis J. Schumaker has over 30 years of business and industry experience with both private and public sector clients, including extensive experience in the electric, gas, telephone, and water utility industries. Mr. Schumaker's consulting experience encompasses expertise in executive management and staffing, strategic and corporate planning, corporate organization and structure, project management, business process re-engineering, materials management, engineering and construction and operations and maintenance (electric, telephone, gas, and water facilities), information technology, cost allocation and affiliated transactions, and quality assurance. He began his career as a *Design Engineer* with the Bechtel Corporation, after which he joined Theodore Barry & Associates (TB&A) as a *Manager*. He acquired more than eight years of consulting experience with TB&A before becoming one of the original founders of Schumaker & Company in 1986.

EDUCATION & CERTIFICATIONS

Mr. Schumaker holds both a Bachelor's degree in Mechanical Engineering and a Master's degree in Nuclear Engineering from Ohio State University and an MBA from the University of Michigan. He is a:

- ◆ Certified Management Consultant (CMC®)
- ◆ Project Management Professional (PMP®)
- ◆ Microsoft Certified Systems Engineer (MCSE)
- ◆ Microsoft Certified Systems Administrator (MCSA)
- ◆ Microsoft Certified Professional+ Internet (MCP+I)

PROFESSIONAL AFFILIATIONS

- ◆ Institute of Management Consultants (IMCUSA)
- ◆ Project Management Institute (PMI)

CONSULTING EXPERTISE

Mr. Schumaker's professional experience includes the following types of assignments:

- ◆ Strategic and operations planning
- ◆ Management and operations reviews and assessments
- ◆ Business process re-engineering
- ◆ Project management services
- ◆ Quality assurance services
- ◆ Competitive analyses including customer surveys
- ◆ User requirements definition and needs assessments
- ◆ Information systems design and development
- ◆ Information technology planning, integration, and optimization



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

**UTILITY
MANAGEMENT
& OPERATIONS
AUDIT
EXPERIENCE**

He has been an *Engagement Manager, Project Manager, Lead Consultant, or Technical Consultant* on more than 50 management and operations reviews over the last 15 years and has testified before five regulatory commissions during the last nine years. His specific experience in the electric, gas, water, and telecommunications industries includes assignments at over 50 different electric, water, or gas utilities. Electric utilities include: Central Maine Power Company, City of Niles (MI) Utilities Department, Conectiv, Entergy, Jersey Central Power and Light Company/GPU Energy Kingsport Power Company (AEP), Middleborough (MA) Gas & Electric Department, Pacific Gas & Electric Company, PECO Energy, Pennsylvania Power & Light Company, Public Service Electric & Gas Company, Rockland Electric Company, Southern California Gas Company, Union Light Heat and Power Company, West Texas Utilities Company (Central & Southwest Corporation), City of Sturgis (Michigan) Electric Department, and others. Gas utilities include: Elizabethtown Gas Company (NUI Corporation), Middleborough (MA) Gas & Electric Department, New Jersey Natural Gas Company (New Jersey Resources Corporation), Pacific Gas & Electric Company, Pennsylvania Gas & Water Company (PG Energy), PECO Energy, Peoples Natural Gas Company, Philadelphia Gas Works, South Jersey Gas Company (South Jersey Industries Corporation), Western Kentucky Gas Company (Atmos), and others. Water utilities include: City of Niles (MI) Utilities Department, Kentucky-American Water Company (American Water Works), Pennsylvania-American Water Company (American Water Works), Pennsylvania Gas & Water Company (PG Energy), Philadelphia Suburban Water Company (Philadelphia Suburban Corporation), United Water New Jersey (United Water Resources), Water Services Corporation of South Carolina, and others. Telecommunications companies include: ALLTEL Pennsylvania, Commonwealth Telephone Company, Illinois Bell Telephone Company (SBC/Ameritech), New England Telephone Company (Verizon), SBC Ameritech Indiana, US WEST, Verizon NY, and Verizon PA.

His management audit work has focused on management and operations assessments and performance reviews, business restructuring and business process re-engineering and process analysis teams, affiliated transactions and cost allocations, customer satisfaction and needs assessments, performance measurement development, and information systems and technology.

Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

**UTILITY
INDUSTRY
RESTRUCTURING**

Mr. Schumaker has conducted restructuring studies, compliance audits, and code of conduct audits of electric and gas utilities. Their purpose was to ensure that the incumbent utilities or their related competitive business segments do not have an unfair competitive advantage over other, non-affiliated purveyors of competitive services, and to evaluate and review the allocation of costs between competitive and non-competitive services of the utilities. He has offered expert opinion, based on appropriate methodology, as to whether there is strict separation and allocation of each utility's revenues, costs, assets, risks, and functions between the utility's electric and/or gas distribution operations and its related competitive business segments. In many cases the audits (1) determined whether there is cross subsidization between utility and non-utility segments within a public utility or holding company; (2) whether the separation of utility and non-utility organizations is reasonable based on the state commission's affiliate relation and fair competition standards; (3) the effect on ratepayers of the use of utility assets in the provision of non-safety-related competitive services; (4) the effect on utility workers; (5) the effect of utility practices on the market for such services; and (6) to ensure compliance with legislation. He has given his opinion on whether any other service(s) offered by the utilities was a competitive service.



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

**PROJECT
MANAGEMENT
EXPERIENCE**

Mr. Schumaker is a Project Management Professional (PMP®). He has acted as *Engagement Manager, Project Manager, Lead Consultant, or Technical Consultant* on numerous management reviews at the request of both state and local government entities and directly for companies. These assignments involved the implementation of project management techniques to a business or government entity's internal operations. He is a member of the Project Management Institute (PMI) and has also been a presenter at a national PMI meeting, where he presented the application of PMI methodologies, titled *A Dose of One's Own Medicine*, involving a large utility client providing services in various states. He is also a member of the mid-western Microsoft Project Users Group.

Mr. Schumaker has implemented project management systems (mainframe and minicomputer-based systems) on assignments ranging from large multi-billion dollar nuclear and fossil generation projects to large ongoing software development projects. Mr. Schumaker has implemented project management systems (mainframe and minicomputer-based systems) on assignments ranging from large multi-billion dollar consulting projects to smaller ongoing software development projects. Project management software systems used include APECS, Project 2, Artemis, Workbench, Primavera, @Risk, and Microsoft Project.

With over 30 years of consulting experience, Mr. Schumaker has been the Project Manager for over 100 different assignments. Over 25 of these assignments involved the review and implementation of project management techniques to a business or government entity's internal operations. These projects included nuclear and fossil power plant projects, electric and gas transmission and distribution projects, water plant and distribution engineering and construction projects, telecommunications installation projects, and research and development projects.

Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

**UTILITY
COMMISSION
EXPERIENCE**

Additionally, Mr. Schumaker has performed comprehensive and/or focused performance reviews for regulatory commissions and agencies, including:

♦ Alaska Public Utilities Commission	♦ New Mexico Public Utility Commission
♦ Arizona Corporation Commission	
♦ Arkansas Public Service Commission	♦ New Jersey Board of Public Utilities
♦ California Public Utilities Commission	♦ New York Public Service Commission
♦ Colorado Public Utilities Commission	♦ North Dakota Public Service Commission
♦ Idaho Public Utilities Commission	♦ Oregon Public Utilities Commission
♦ Illinois Commerce Commission	♦ Pennsylvania Public Utility Commission
♦ Indiana Utility Regulatory Commission	♦ Public Service Commission of Wisconsin
♦ Iowa Utilities Board	♦ Public Utility Commission of Ohio
♦ Kansas Corporation Commission	♦ Public Utility Commission of South Carolina
♦ Kentucky Public Service Commission	♦ Public Utility Commission of Texas
♦ Maine Public Utilities Commission	♦ Public Service Commission of Utah
♦ Maryland Public Service Commission	♦ South Dakota Public Utilities Commission
♦ Massachusetts Department of Public Utilities	♦ Tennessee Regulatory Authority
♦ Minnesota Public Utilities Commission	♦ Tennessee Valley Authority
♦ Mississippi Public Service Commission	♦ Washington Utilities & Transportation Commission
♦ Montana Public Service Commission	♦ Wyoming Public Service Commission
♦ Nebraska Public Service Commission	
♦ Nevada Public Service Commission	

Representative, relevant projects are briefly described on the following pages. All projects except Verizon NY are Schumaker & Company projects; on the Verizon NY project Schumaker & Company was a subcontractor.



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

Philadelphia Gas Works

*Project Manager &
Executive Consultant I*

- ◆ Project planning and scheduling
- ◆ System reliability performance and related operations
- ◆ Customer service, billing, and collection functions

Performed a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this management and operations audit is to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted.

Pennsylvania-American Water Company

Executive Consultant I

- ◆ Water operations
- ◆ Customer service, billing, and collection functions
- ◆ Operational performance

Performed a stratified management and operations audit of Pennsylvania-American Water Company (PAWC) for the Pennsylvania Public Utility Commission with the primary focus areas being costs borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses are of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

PECO Energy Company

Project Manager and Lead Consultant

- ◆ Project planning and scheduling
- ◆ Data and statistics research and benchmarking analysis
- ◆ Executive management
- ◆ Electric and gas operations
- ◆ Electric and gas reliability
- ◆ Emergency response
- ◆ GIS
- ◆ Corporate governance
- ◆ Customer service

Performed a stratified management and operations audit of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission in with the primary focus areas being PECO, Exelon Energy Delivery, and Exelon Business Services Company functional areas, whose costs were borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assessed the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

Water Services Corporation of South Carolina

Engagement Manager & Lead Consultant

- ◆ Project planning and scheduling
- ◆ Analytical discipline
- ◆ Planning concepts and practices
- ◆ Organization design
- ◆ Customer service
- ◆ Water operations
- ◆ Pricing strategies
- ◆ Technology tools and training

Performed a management and operations review and assessment of Water Services Corporation (WSC) of South Carolina for the State of South Carolina Office of Regulatory Staff (ORS) with specific focus on the operations of the five subsidiary water and wastewater companies that operate in South Carolina, those being:

- ◆ Carolina Water Service, Inc. (CWS)
- ◆ Tega Cay Water Service, Inc. (TCWS)
- ◆ Utilities Services of South Carolina, Inc. (USSC)
- ◆ Southland Utilities, Inc. (SU)
- ◆ United Utility Companies, Inc. (UUC)

The bottom line of this project was to determine whether the rates charged to the South Carolina ratepayers can be reduced through the implementation of greater efficiencies in organizations, operations, or both. Additionally, another relevant analysis was a determination of whether the ratepayers of South Carolina are being properly and economically served by the range of corporate services that are provided to the WSC operations in South Carolina by the managers located in both West Columbia and Northbrook. Significant consideration was given to investigation of the potential benefits that would result from the consolidation or merger of the affiliated companies of WSC.

Verizon New York

Project Manager

- ◆ Organization and management
- ◆ Capital and maintenance planning
- ◆ Customer services and field operations
- ◆ Performance analysis and statistics
- ◆ Best practice comparisons

Analyzed, documented, and verified, through findings based on identifiable and measurable information and data, to ensure that Verizon NY's existing service quality plans and practices of the five VIP service objectives (customer trouble report rate, percent out of service over 24 hours, percent installation completed in five days, PSC complaints, and outliers), NY telephone service standards, and company guidelines meet applicable service quality performance standards, including reasonably foreseeable events and contingencies. Developed and documented recommendations to improve or modify these service quality practices and/or plans where existing plans and practices were not sufficient to ensure that applicable standards were met. Reviewed Verizon NY's processes for service quality performance and its employees, technology, and work processes related to the planning, design, construction, installation, maintenance, repair, and delivery of product to retail customers within Verizon NY's service territory.



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

AEP/Kentucky

Project Manager & Lead Consultant

- ◆ Asset management
- ◆ Engineering and construction
- ◆ Transmission and distribution operations
- ◆ Vegetation management

Performed an assessment of the reliability of service within AEP/Kentucky's distribution system in its Hazard service territory (a forested mountainous terrain), which has historically experienced a greater number of electric service interruptions than other AEP/Kentucky service areas and, additionally, these interruptions have tended to be longer in duration.

SBC Ameritech Indiana

Engagement Manager & Lead Consultant

- ◆ Call center operations
- ◆ Field operations

Performed management and operations analyses of existing practices as part of a focused review of service quality performance and related plans and practices of SBC Ameritech Indiana, including its call center and field operations. Performed a historical review of operations to help identify those causal factors that led up to the service problems that were experienced in the year 2000. Performed computer-based analyses of a wide range of available performance statistics to determine how well specific geographical service areas were performing in relation to the norm for Ameritech Indiana. Further defined the quality of service provision by looking for trends in the underlying operational data of Ameritech Indiana that was linked, directly or indirectly, to the quality of service provided.

City of Sturgis
Sturgis, Michigan

Project Manager and Senior Consultant

- ◆ Customer survey
- ◆ Competitive assessment/benchmarking
- ◆ Electric operations, transmission, and distribution

Performed a management and operations review, conducted a customer satisfaction and needs assessment, performed a competitive assessment and benchmarking study, and developed a strategic plan. Addressed the changes occurring within the electric utility industry and the competitive threats felt by the city.

Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

New Jersey Board of Public Utilities

Jersey Central Power and Light Company
GPU Energy
Public Service Electric & Gas Company
Rockland Electric Company
Conectiv

Engagement Manager & Lead Consultant

- ◆ Electric system reliability
- ◆ Workforce management
- ◆ Transmission/distribution operations and maintenance

Engaged to assist Board of Public Utility (BPU) staff in reviewing and monitoring the implementation of recommendations resulting from an investigation of New Jersey's electric utilities' system reliability. Assisted BPU staff in the review and investigation of the information supplied by each of New Jersey's four electric utilities, in connection with the implementation of the selected recommendations as ordered by the Board. Particular emphasis was placed on each utility's activities to improve and/or maintain CAIDI and SAIDI indicators at acceptable levels. In particular, issues regarding utilities work force management, electric system distribution planning and engineering practices, transmission and substation maintenance practices and procedures were addressed during our investigations. Worked closely with and at the direction of the BPU staff in reviewing the implementation of the recommendations.

Elizabethtown Gas Company
NUI Corporation
New Jersey Natural Gas Company
New Jersey Resources Corporation
South Jersey Gas Company
South Jersey Industries Corporation

Engagement Manager & Lead Consultant

- ◆ Restructuring
- ◆ Affiliate relations
- ◆ Competitive services
- ◆ Code of conduct

Conducted compliance audits of the competitive services of New Jersey's gas utilities; specifically South Jersey Gas Company (South Jersey Industries Corporation), New Jersey Natural Gas Company (New Jersey Resources Corporation), and Elizabethtown Gas Company (NUI Corporation) as a part of the utility industry restructuring in New Jersey. The purpose of these audits was to ensure that the utilities or their related competitive business segments do not have an unfair competitive advantage over other, non-affiliated purveyors of competitive services, and to evaluate and review the allocation of costs between the utilities' competitive and non-competitive services.

Illinois Commerce Commission

Engagement Manager and Senior Consultant

- ◆ Customer satisfaction survey design
- ◆ Training manual in survey implementation
- ◆ Survey implementation training workshops

Designing survey to measure customer satisfaction with electric service reliability/quality, clarity of billing, rates, and services, and providing an Electric Service Customer Satisfaction Survey Manual to instruct electric service providers how to administer the survey and to understand, interpret, and present its results.



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

Middleborough Gas & Electric Department
Middleborough, Massachusetts

Project Manager and Senior Consultant

- ◆ Competitive assessment/benchmarking
- ◆ Management and operations review
- ◆ Communication with utility board
- ◆ Electric operations and distribution

Performed a competitive assessment of this municipal gas and electric department, including a management review of all functional areas and benchmarking of major performance indicators in relation to other Massachusetts municipalities and to the best practices of other public and investor-owned utilities.

City of Coldwater Board of Public Utilities
Coldwater, Michigan

Project Manager and Senior Consultant

- ◆ Customer satisfaction survey

Developed, performed, and analyzed the results of a customer survey to assess satisfaction with the city utility services as well as some other city services. Customer survey was a follow-up survey to one that had been conducted two years earlier.

ALLTEL Pennsylvania

Lead Consultant

- ◆ Customer services
- ◆ Marketing
- ◆ Telephone operations
- ◆ Network planning, engineering, and construction

Performed a stratified management and operations review in which he focused on various functions and activities performed by ALLTEL Pennsylvania, its associated companies (ALLTEL Telephone Service Corporation, ALLTEL Corporate Services, ALLTEL Supply, ALLTEL Publishing), or its parent company (ALLTEL Corporation). Involved heavily in the areas of telephone operations (engineering, construction, and maintenance), regional operations (I&R, Network, etc.), business office and repair center operations, and marketing activities.

Kingsport Power Company

Engagement Manager and Lead Consultant

- ◆ Electric operations and distribution
- ◆ Executive management and human resources
- ◆ Cost allocation
- ◆ Information technology

Performed a comprehensive management and operations review which focused on executive management and human resources, electric operations (transmission, distribution, and substation) and information technology. Reviewed activities performed at Kingsport Power Company and its affiliate, Appalachian Power Company (in Virginia) and American Electric Power Service Corporation (in Ohio).



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

<i>United Water New Jersey</i> <i>Lead Consultant</i> ◆ Customer services ◆ Cost allocation	Performed a comprehensive management audit in which the area of customer services was analyzed, including telephone center operations, credit and collections, meter reading, meter investigators, and the meter shop.
<i>Commonwealth Telephone Company</i> <i>Lead Consultant</i> ◆ Customer services ◆ Marketing ◆ Telephone operations ◆ Network planning, engineering, and construction	Performed a stratified management audit involving a diagnostic review of all company operations, followed by an in-depth review of nine pre-identified issues. Involved heavily in the areas of telephone operations (engineering, construction, and maintenance), regional operations (I&R, Network, etc.), business office and repair center operations, and marketing activities. Identified over \$500,000 in annual savings plus other benefits.
<i>Philadelphia Suburban Water Company</i> <i>Engagement/ Project Manager and Lead Consultant</i> ◆ Customer services ◆ Engineering and construction ◆ Operations and maintenance ◆ Cost allocation ◆ Capacity planning	Performed a management and operations review of all company functions, giving specific emphasis to staffing and compensation levels, management information systems, allocation of fees from affiliated companies, customer services, engineering and construction, operations and maintenance, water purchase agreements, and capacity planning.
<i>Michigan South Central Power Agency</i> <i>Engagement/ Project Manager and Senior Consultant</i> ◆ Customer survey ◆ Competitive assessment/benchmarking ◆ Relationship development – commercial and industrial customers ◆ Communication with boards and councils	Assisted in the development of a strategic plan for this agency owned by five Michigan municipalities, specifically Coldwater, Clinton, Hillsdale, Marshall and Union City. Addressed the changes occurring within the electric utility industry and the competitive threats being felt by the agency. The effort involved the performance of (1) a competitive assessment/benchmarking of the power agency and (2) a customer attitude survey (mail survey to residential and non-residential customers) to identify issues and concerns that needed incorporation in the strategic plan. The results of these efforts were presented at the agency's annual meeting with customers/owners. Following the strategic plan development, Schumaker & Company was engaged to create, design, and implement a relationship development program involving the commercial and industrial customers of each municipality.



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

City of Hillsdale Board of Public Utilities

Engagement Manager and Lead Consultant

- ◆ Strategic planning

Developed a strategic plan involving the creation of a mission statement; identification of the organization's strengths, weaknesses, opportunities, and threats; and formulation of long-term goals and objectives in support of the mission.

Pennsylvania Power & Light Company

Engagement/Project Manager and Lead Consultant

- ◆ Executive management and organization
- ◆ Strategic planning
- ◆ Power production
- ◆ Fuels management
- ◆ Transmission and distribution
- ◆ Engineering and construction

Performed a management and operations review of all areas of PP&L's operations. This study included an in-depth investigation of affirmative action/EEO programs; salaries, wages, and benefits; staffing plans and levels; corporate-wide information technology; power plant materials management; nuclear de-commissioning; competitive position of in-house construction and maintenance work forces; and others. Total estimated annual and one-time savings and/or increased efficiency associated with recommendations were in excess of \$70 million (annual) and \$40 million (one-time).

General Waterworks Corporation of Pine Bluff

Engagement/Project Manager and Lead Consultant

- ◆ Affiliated relationships and transaction
- ◆ Water operations
- ◆ Customer service

Performed a management and operations review focused on affiliate relationships, water operations, customer services, and financial management. His final report was submitted as testimony in a general rate hearing of General Waterworks Corporation of Pine Bluffs.

Arkansas Public Service Commission

Lead Consultant

- ◆ Project management training

Provided training to the APSC staff on how to proceed with the monitoring and control of a management and operations review. Prepared both written and oral reviews of the proposal and detailed work plan from the consultant team. Schumaker & Company also assisted the APSC in managing the review conducted by the outside consultant team.

Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

Central Maine Power Company	Performed a focused management and operations review evaluating organizational structure/ management/staffing, executive compensation, customer service operations, and management efficiency and cost controls.
<i>Lead Consultant and Expert Witness</i>	
◆ Organizational structure/management and staffing ◆ Electric operations ◆ Customer service operations ◆ Management efficiency and cost control	
City of Niles (Michigan) Utilities Department	Performed a management and operations review, which was used to develop a long-term plan for this 55-person utilities department. Identified potential benefits approaching \$250,000 yearly for the electric, water, and wastewater operations, which totaled \$9 million in revenues annually.
<i>Engagement/ Project Manager and Lead Consultant</i>	
◆ Management and operations	
Philadelphia Gas Works	Performed a follow-up review approximately two years after the completion of a management and operations review, in which he completed the following:
<i>Lead Consultant</i>	
◆ Evaluation of implementation of earlier management audit	◆ Reviewed results of the additional studies recommended during the management audit ◆ Developed a request for proposal for long-term strategic options
Kentucky-American Water Company	Performed a management and operations review of all functions within the company and the relationships with its parent company and affiliates. Investigated the areas of executive management and corporate planning.
<i>Engagement/ Project Manager and Lead Consultant</i>	
◆ Executive management ◆ Corporate planning	
West Texas Utilities Company	Performed a management and operations review involving all operations functions and the company's relationship with its parent company, CSW. Investigated the areas of executive management and organization, electric operations, and power generation.
<i>Engagement/ Project Manager and Lead Consultant</i>	
◆ Executive management and organization ◆ Electric operations ◆ Power generation	



Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

<i>Western Kentucky Gas Company</i> <i>Engagement/ Project Manager and Lead Consultant</i> ◆ Executive management and organization ◆ Gas operations ◆ Affiliated relationships and transactions	Performed a management and operations review of all company operations, administrative functions, and relations between WKG and its parent company, ATMOS. Significant emphasis was placed on customer service, gas operations, and organization and management changes following the recent acquisition of WKG by ATMOS.
<i>Union Light, Heat and Power</i> <i>Engagement/ Project Manager and Lead Consultant</i> ◆ Organization and management ◆ Electric and gas operations ◆ Strategic and corporate planning ◆ Legal services	Conducted a management and operations review of the Kentucky division of Cincinnati Gas & Electric Company. Led the investigation of organization and management, strategic and corporate planning, electric and gas operations, and management and legal services.
<i>Philadelphia Gas Works</i> <i>Project Manager and Lead Consultant</i> ◆ Executive management and organization ◆ Gas operations ◆ Customer services and customer relations	Performed a management and operations review of this city-owned entity. Investigated executive management and its relations with customers and various political entities. Study was conducted amidst a highly charged (political) environment surrounding all interaction between the Commission and the Gas Works.
<i>Toledo Edison Company</i> <i>Cleveland Electric Illuminating Company</i> <i>National Gas and Oil Corporation</i> <i>Cincinnati Gas and Electric Company</i> <i>Lead Consultant and Expert Witness</i> ◆ Fossil and nuclear fuel procurement ◆ System dispatch and power purchase ◆ Power plant performance	Conducted performance reviews of the fuel procurement policies and practices. These assessments included fossil and nuclear fuel procurement, system dispatch and purchase power, and power plant performance.

Mr. Dennis J. Schumaker, CMC®, PMP®, MCSE, MCSA, MCP+I, continued
Project Manager & Executive Consultant I

Baltimore Gas & Electric Company
Columbia of Maryland Inc.
Washington Gas Light Company

Engagement/Project Manager and Lead Consultant

- ◆ Gas purchasing practices

Reviewed and evaluated purchasing practices of three natural gas utilities for the Maryland Public Service Commission. In addition, he developed training materials and conducted a training program for commission staff personnel, thereby allowing them to continue the annual review and assessment of the natural gas plans submitted by each company.

Ohio Power Company
Columbus Southern Power Company

Engagement/Project Manager

- ◆ Fuel procurement
- ◆ Strategic planning
- ◆ Purchasing
- ◆ Marketing

Conducted a review of electric fuel procurement practices and procedures of two AEP subsidiary companies. Analyzed affiliated mines (surface and deep mines) and fuel procurement planning, long-term contracts, and spot procurement. Made recommendations on strategic planning, purchasing policies, and marketing programs.



Ms. Julia D. Bodamer

Executive Consultant II

BACKGROUND

Ms. Julia D. Bodamer, a Schumaker & Company associate, has acquired more than 20 years of experience, predominantly in the natural gas industry, characterized by increased levels of responsibility and a proven track record of success in operational management, financial administration, staff development, and performance improvement. She is a high-impact negotiator and communicator able to lead an organization toward strong, sustainable results and subsequent profit growth. She employs a proactive, results-oriented management style, with focus on problem identification and resolution. She has been the founder of a full-service energy provider of natural gas, demand side management, and electricity in the emerging deregulated market. Additionally, she started a financial company that focuses on the purchase and sale of privately owned mortgages, trust deeds, and land sale contracts.

Ms. Bodamer's natural gas industry experience has been with interstate pipeline operations, experience in the deregulated natural gas fuel management arena for industrial and large commercial customers, experience in the deregulated natural gas marketing & trading, consulting, and expert witness projects. While at Columbia Gas, Ms. Bodamer led the company's effort to conform to the Federal Energy Regulatory Commissions Order 636, which deregulated the natural gas industry. In addition, she assisted LDCs throughout the eastern seaboard and the mid-west in long- and short-term operations on the Columbia Gas Pipeline. As deregulation began to take hold, her responsibilities expanded to supporting industrial customers and marketers in addition to the LDCs.

While at Gaslantic Corporation and Pepco Energy, Ms. Bodamer was *Senior Vice President of Gas Supply*. Responsibilities for this position included obtaining the necessary transportation services to service the customer base, purchasing long-term, short-term, and daily gas supplies, re-marketing excess supplies and transportation as needed, and aggregating accounts to facilitate better pricing. This effort included monitoring long-term and short-term pricing to determine the optimum price at which to lock up supply, including how much of the supply to lock up. It included the use of financial instruments, mainly "puts & calls" to protect price. In support of both the sales and procurement efforts, she conducted load profile analysis and purchasing scenarios that the client could then review and choose the plan that best matched their risk/return objectives. Once a client chose their procurement plan, Ms. Bodamer would then go to the natural gas market and negotiate the necessary supply and price with one or multiple suppliers depending on the specific scenario.



Ms. Julia D. Bodamer, continued
Executive Consultant II

**BACKGROUND
(CONTINUED)**

Other responsibilities included the gas control function, which consisted of scheduling gas to flow on interstate pipelines, scheduling gas to be received by the individual LDCs, moving excess gas supply to other purchasers, addressing out of balance conditions, and managing storage. These activities included working with the Finance Department to reconcile supplier invoices, interstate pipeline invoices, LDC invoices, and client invoices. Activities on the interstate pipeline system included obtaining the necessary transportation, scheduling the gas to flow, reconciling the actual gas flowed, balancing flow in and out of storage, and dealing with pipeline limitations via OFOs. Activities related to the LDCs included scheduling flow, balancing deliveries, balancing customer usage, and dealing with LDC system limitations.

**UTILITY
INDUSTRY
POSITIONS**

At Pepco Gas Services, Ms. Bodamer held the position of *Senior Vice President-Supply & Transportation Division*, where she was responsible for streamlining procedures for natural gas transportation, generation of natural gas sales invoices, natural gas supply purchases, natural gas supplier/end user contracts; and authorized payments to natural gas suppliers. She created comprehensive business strategies/plans in development of the marketing company; and led start-up plans to launch a successful marketing campaign in Northeast and Southeast regions. She initiated and implemented a state-of-the-art natural gas computer system that tracks all natural gas transactions from supply planning to invoicing; and managed the trading desk for natural gas commodity on a daily basis. She also acted as liaison among the operations, legal services, and finance groups.

At Gaslantic Corporation, Ms. Bodamer was *Vice President-Operations*, where she coordinated ongoing activities for industrial clients for their entire natural gas need; implemented a natural gas pipeline grid, alternate fuel program for natural gas clients; and initiated NYMEX market-based natural gas arbitrage opportunities. She purchased all natural gas (long-term, short-term and spot supply) and managed the usage of available natural gas storage. Oversaw all natural gas transportation and exchange (T&E) activities for industrial clients, ensuring compliance with LDC and pipeline balancing requirements. She conducted a comprehensive assessment of processes used in the operational side of the natural gas business so that data was properly gathered and stored for reconciliations, audits, and billing. She negotiated natural gas transportation rates with suppliers, pipelines and via capacity release. She participated in various forums at the LDC level representing clients. She had an active voice through the natural gas deregulation process at Atlanta Gas Light, where she actively and successfully participated in the negotiation for the sale of Gaslantic Corporation.

Ms. Julia D. Bodamer, continued
Executive Consultant II

**UTILITY
INDUSTRY
POSITIONS
(CONTINUED)**

At Columbia Gas Transmission, Ms. Bodamer held the positions of *Gas Purchase/Transportation and Exchange Analyst* and *Senior Transportation and Exchange Representative*. She led efforts in areas of customer service, maximizing throughput at highest profit, and discounting natural gas transportation rates to compete with alternate fuels and other natural gas pipelines. She maintained efficient and accurate account management in-service contracting, nominating, allocating and billing, balancing, and dispute resolution. She also developed procedural solutions to natural gas supply operating problems through the analysis of capacity restricted areas, and developed a confirmation process between Columbia and all other pipelines to ensure correct flows of natural gas thus eliminating the abuse of storage. She developed and implemented a program that reduced Columbia's take-or-pay obligations by \$30 million annually and contributed to development of services in conjunction with Order 636 as a member of multi-disciplinary task force. In addition, Ms. Bodamer supervised fulfillment of Order 636 services and identified necessary revisions; handled natural gas tariff issues with clients.

**EDUCATION &
CERTIFICATIONS**

Ms. Bodamer holds a BA in Business and Finance from the London College of Business in London, England and an Associate Degree in Legal Studies from Marshall University.

Representative consulting projects are included on the following pages. Both Philadelphia Gas Works and PECO Energy management and operations audits were Schumaker & Company projects.



Ms. Julia D. Bodamer, continued
Executive Consultant II

Philadelphia Gas Works

Executive Consultant II

- ◆ System reliability performance and related operations

Performed a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this management and operations audit was to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted.

PECO Energy Company
Philadelphia, Pennsylvania

Senior Consultant

- ◆ Gas supply and operations

Performed a stratified management and operations audit of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC), in with the primary focus areas being PECO, Exelon Energy Delivery (EED), and Exelon Business Services Company (EBSC) functional areas, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assessed the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. Ms. Bodamer's focus on this project was in the gas supply and operations areas. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

Ms. Julia D. Bodamer, continued
Executive Consultant II

Trustee, United States Bankruptcy Court, Southern District of Ohio

Civil Action No. 01-CVHO6 5390

General Consultant & Damage Expert to Provide a Report of Economic Damages

A failure to properly measure gas produced resulted in the under-crediting of production. The result was Chapter 11 bankruptcy protection for the injured marketing company. Ms. Bodamer researched the gas measurement issue and worked with attorneys to file FERC requests for clarifications, established the erroneous measurement practices, did a comprehensive audit of the entire injured marketing company with emphasis on existing company owned production, existing retail business and projected company growth over a five year period. The damage analysis computed the net profits before taxes by means of a cash flow calculation that recognizes revenues, variable costs and fixed costs. The foundation of the damage analysis was market rates for physical gas in addition to the financial tools required to protect the market price. Gross damages are calculated in excess of \$60 million.

Garrison G. Tawney

Civil Action No. 03-C-10E

General Consultant & Expert Witness

Retained as *General Consultant & Expert Witness* involving a certified class action on behalf of all land owners in West Virginia who entered into oil & gas leases with CNR. The dispute is that the natural gas produced was not properly accounted for and payments were not made to the land owners based on market rates. Duties include calculations of the production quantities over a 14 year period, how to obtain market pricing for gas through physical hedges and financial hedges, review of financial hedges placed primarily with Chase Manhattan Bank, depositions of employees involved in financial hedges, review of documents produced in discovery, calculation of damages and testimony in depositions and at trial. On January 30, 2007, the jury awarded \$404,000,000 in gross damages, of which \$270,000,000 was punitive.



Ms. Julia D. Bodamer, continued
Executive Consultant II

***United States District Court, The
Southern District Of West Virginia***

Civil Action No. 2:04-0867

*Stand Energy Corporation, et al, Plaintiff v.
Columbia Gas Transmission Corporation, et
al., Defendants*

General Consultant & Expert Witness

The dispute is that an interstate pipeline conceived and implemented a scheme to provide illegal preferential storage and transportation services to its own unregulated marketing affiliate and subsequently to other select natural gas entities in exchange for illegal “kickbacks.” The illegal scheme was recognized by FERC in November 2000 and now spans over a 10-year period. The lawsuit addresses the damage caused to non-select natural gas entities by the illegal scheme in the form of diminished revenues, obstruction to business expansion, loss of market share, and loss of asset value. The class certification process is currently underway.

Ms. Bodamer is retained as a *General Consultant and Expert Witness* in all aspects of the case. The scheme permits the select group to hold positive or negative balances on the pipeline, meaning the pipeline loans large volumes and accepts large volumes to store for price arbitrage purposes. Physical market pricing for natural gas in addition to the financial hedges must be reviewed and calculated to determine the unjust enrichment afforded to the privileged few. All violations of the pipelines natural gas tariff must be determined to calculate every damage applicable to the case. Understanding that the core principle in this case revolves around where the injured party would be today absent the scheme, the market prices that he would have or could have received is the fundamental question. Market pricing at the receipt point, at the pooling point, and market delivered prices is the dominant ingredient. Financial instruments are paramount in the purchase and sale of natural gas. Damages are expected to be in the billions.

Nicole Energy Services

Project Manager

Reviewed the supply portfolio and the end-use customer’s requirements. Based on geographical locations of the ultimate consumer, Ms. Bodamer provided expert reports to describe the transportation resources and the physical assets that made deliverability of the gas commodity to the relevant market areas possible on critical interruption days.

Ms. Julia D. Bodamer, continued
Executive Consultant II

**Major Natural Gas Marketing
Company (confidentiality
requested)**

Project Manager

Performed different acquisition analysis for the purchase of four different competing natural gas companies. Coordinated a review in accordance with due diligence to determine the purchase value of the company and reviewed all functional areas of the acquisition candidate with an emphasis on the gas supply function as it pertained to demand forecasting, the procurement of natural gas and projections of market rates. This was necessary to determine the value of any long-term gas supply or gas transportation contract. In addition, the supply procurement and control functions were reviewed as to the level of risk or price exposure to which a buyer may be exposed. Other functional areas reviewed included marketing and engineering to determine the reasonableness of the marketing projections and the stability and capacity of the company's retail load.

Nicole Energy Services

Project Manager

Performed a comprehensive and focused performance review of all transactions between Nicole and three LDCs. This included review of the LDC natural gas tariffs, the implementation of those tariffs, billing issues, agreements, load profiles for customers, penalties, relevant public utility orders and the various choice residential programs. Provided expert reports for depositions and trial.

**Management Engineering
Associates**

Senior Consultant

Served as *Senior Consultant* to secure exclusive gas contracts with the federal government on the FSS Schedule GS-10F-0334L. The government has difficulty providing equal access to all vendors in the United States on a level and non-discriminatory basis. This is due to the number of commodity vendors and the sensitivity of the government towards equality. Mechanisms are available for master contracts through a pre-approval process. This mechanism requires detailed financials, business plans and a demonstration of the expertise and resources to serve the government loads. Additional processes and procedures are required. Ms. Bodamer was successful in preparing all necessary business plans, reports, and applications and did obtain the subject master agreements.



Ms. Julia D. Bodamer, continued
Executive Consultant II

Apple Financial Inc.

President & Founder

Founded a company that focused on the purchase and sale of privately owned mortgages, trust deeds, land sale contracts and any other financial instrument where payments were made in increments into the future. The company acted in the function of a broker. Apple Financial located interested sellers of financial instruments and arranged for the sale of such instruments to other parties.

Gaslantic Corporation & Pepco Energy Services

Consultant

A comprehensive and focused audit was performed. Due diligence issues needed resolution in accordance with the sale of Gaslantic Corporation to Pepco Energy Services. The audit included review of supplier contracts and associated payments, review of end-use customers contracts and payments, review of transportation contracts and payments, a review of all streams of revenues and a review of fixed and variable costs.

Pepco Gas Services, Inc.

Sr. Vice President

Developed business strategies and business plans to form a gas marketing company, implemented start-up plans to launch a marketing effort in the Northeast and Southeast regions, selected and implemented a computer system to track all transactions from risk to invoicing, established and implemented processes and procedures for the transportation of gas, established and implemented the final tracking system that generates invoices, determined monthly load profiles for end-use customers, contracted with suppliers and end-use customers alike, authorized payment to suppliers, established processes and procedures for the purchase of supply both on a spot and long-term basis, managed and participated at the trading disk on a daily basis. Controlled the daily dispatch of over 200,000 dekatherms of natural gas.



Ms. Julia D. Bodamer, continued
Executive Consultant II

Gaslantic Corporation, Inc.

Manager of Operations & Supply

Coordinator of ongoing activities for industrial representatives and implementation of pipeline grid, alternate fuel and NYMEX market based arbitrage opportunities. Controlled the daily economic dispatch of over 80,000 dekatherms of natural gas. Purchased all gas commodities and transportation both long-term and spot supplies alike. Monitored all transportation offered through capacity release. Developed, analyzed and implemented hedging strategies, working with financial analysts. Managed all T&E activity as it related to industrial clients. Responsible for imbalances, daily deliveries and compliance with daily LDC balancing requirements. Remarketed excess gas and excess transportation capacity as necessary.

Columbia Gas Transmission Corporation

Sr. Transportation & Exchange Representative

Managed the affiliate relationship to ensure that unfair advantage was not provided by the pipeline to its affiliate. Responsible for the overall direction of customer service, responsible for maximizing throughput at the highest profit possible, responsible for discounting transportation rates to compete with alternate fuels and other pipelines, responsible for all aspects of account management including contracting for services, nominating, allocating, billing issues, disputes and balancing requirements. Participated on a task force to develop services in conjunction with Order 636, Managed the implementation of Order 636 services and identified revisions to services as necessary. Responsible for all Natural Gas Tariff issues with the customers.

Columbia Gas Transmission Corporation

Gas Purchase and Transportation Analyst

Administered gas purchase contracts with Appalachian producers, developed procedural solutions to gas supply operating problems, analyzed capacity restricted areas, developed and implemented a program to reduce take-or-pay obligations for the pipeline from \$30 million annually to \$1 million annually. Developed a confirmation process to work with all other pipelines to ensure correct flows of gas in/out of Columbia's system. Implemented a penalty program to control customer imbalances that effectively reduced demand charges for firm type rate schedules from the ten-dollar range down to the seven dollar range.

Lloyds of London

As a *Loan Officer* with Lloyds of London, Ms. Bodamer facilitated transactions involving customer interviewing, application processing, establishing credit references, and finalizing approved credit.



Mr. Lee E. Burgess

Executive Consultant II

BACKGROUND

Mr. Lee Burgess, a Schumaker & Company associate, has more than 23 years of consulting experience to the utilities and regulatory industry. He was previously a *Senior Associate* with Theodore Barry & Associates for five years, a *Partner* of Metzler & Associates for over 10 years, *President* of L. E. Burgess Consultants, Inc. for six years, and was most recently *Vice President of Operations* for Navigant Consulting, Inc. He also served for five years as a *US Navy Line Officer* where he saw combat duty in Vietnam and gained broad-based experience in engineering, maintenance and materials management, shipyard construction, personnel, and administration. He has testified as an *Expert Witness* on utility management before the New York Public Service Commission (NYPSC), the Connecticut Department of Public Utility Control (CDPUC), the Pennsylvania Public Utility Commission (PAPUC), the Missouri Public Service Commission (MPSC), the Florida Public Service Commission (FPSC) and the California Public Utilities Commission (CPUC).

EDUCATION & CERTIFICATIONS

Mr. Burgess holds a Master of Business Administration Degree from the University of Michigan and a Bachelor of Science Degree from the United States Naval Academy. He is also a Certified Practitioner of Inventory Management (CPIM).

CONSULTING EXPERTISE

Mr. Burgess has worked on various consulting assignments for over 70 clients and has managed projects for over 40 clients. He has also participated in over 30 management audits. Through this broad-based experience, he has developed high level expertise in:

◆ Organizational effectiveness	◆ Customer operations
◆ Strategic/business planning	◆ Engineering and construction
◆ Workforce management	◆ Power plant maintenance and operations
◆ Corporate performance improvement	◆ Fuels management
◆ Corporate governance and ethics	◆ Supply chain management
◆ Internal controls	◆ Affiliate interests
◆ Transmission and distribution	

Representative consulting projects are included on the following pages. Philadelphia Gas Works, Pennsylvania-American Water Company, and PECO Energy management and operations audits were Schumaker & Company projects.



Mr. Lee E. Burgess, continued
Executive Consultant II

**ORGANIZATION
EFFECTIVENESS,
STRATEGIC/BUSINESS
PLANNING, AND
CORPORATE
PERFORMANCE
EXPERIENCE**

Mr. Burgess has performed numerous evaluations of utility organization effectiveness as well as strategic/business planning, and the measurement of corporate performance for the following utilities:

- ♦ *Philadelphia Gas Works* – Performed a stratified management audit of PGW for the Pennsylvania Public Utility Commission, in which he investigated the executive management, planning, external relations, and corporate governance functions
- ♦ *Pennsylvania-American Water Company* – Performed a stratified management audit of PAWC for the Pennsylvania Public Utility Commission, in which he investigated the executive management, planning, external relations, and corporate governance functions, as well as corporate culture, management structure, and staffing levels.
- ♦ *PECO Energy* – Performed a stratified management audit of PECO Energy for the Pennsylvania Public Utility Commission, in which he investigated the executive management, planning, external relations, and corporate governance functions

Mr. Lee E. Burgess, continued
Executive Consultant II

**ORGANIZATION
EFFECTIVENESS,
STRATEGIC/BUSINESS
PLANNING, AND
CORPORATE
PERFORMANCE
EXPERIENCE
(CONTINUED)**

- ◆ *KTL, Inc.* – Developed and wrote the first strategic plan for the non-regulated companies of Kansas City Power and Light Company,, which was conducted a seminar for senior management on strategic planning
- ◆ *Atlantic Electric Company* – *Lead Consultant* evaluating company organization, strategic/business planning, corporate performance (to include non-regulated companies) as part of a comprehensive management audit of all company management and operations, which was conducted for the New Jersey Board of Regulatory Commissioners
- ◆ *The Brooklyn Union Gas Company* – *Lead Consultant* evaluating organization, strategic/business planning and corporate performance as part of a focused management audit, which was conducted for the New York Public Service Commission.
- ◆ *Commonwealth Edison Company* – *Lead Consultant* evaluating organization planning, strategic/business planning, and corporate performance as part of a comprehensive management audit of this multi-billion dollar electric utility, which was conducted for the Illinois Commerce Commission.
- ◆ *Commonwealth Utilities Corporation* (Saipan, Northern Marianas) – *Lead Consultant* conducting a review of organization and all planning functions for this remote island utilities, which was conducted for the utility and the U.S. Department of Interior.
- ◆ *Connecticut Light and Power Company* – *Lead Consultant* evaluating organization and strategic planning as part of a diagnostic management review, which was conducted for the Connecticut Department of Public Utility Control
- ◆ *Connecticut Water and Gas Corporation* – *Lead Consultant* evaluating organization/strategic planning in a diagnostic management review, which was conducted for the Connecticut Department of Public Utility Control
- ◆ *Illinois Bell Telephone Company* – *Technical Advisor* to a commission staff conducting management audit in the areas of organization, strategic/business planning, and corporate performance.
- ◆ *Long Island Lighting Company* – *Lead Consultant* evaluating organization, strategic/business planning, and corporate performance as part of a focused management audit, which was conducted for the New York Public Service Commission



Mr. Lee E. Burgess, continued
Executive Consultant II

**ORGANIZATION
EFFECTIVENESS,
STRATEGIC/BUSINESS
PLANNING, AND
CORPORATE
PERFORMANCE
EXPERIENCE
(CONTINUED)**

- ◆ *Los Angeles Department of Water & Power – Lead Consultant* evaluating organization and strategic/business planning as part of a comprehensive review.
- ◆ *Niagara Mohawk Power Corporation – Lead Consultant* evaluating organization, strategic/business planning, and corporate performance as part of a focused management audit, which was conducted for the New York Public Service Commission
- ◆ *The Peoples Gas & Light Company/North Shore Gas Company – Lead Consultant* evaluating organization planning, strategic/business planning, and corporate performance as part of a comprehensive management audit of this multi-billion dollar gas utility, which was conducted for the Illinois Commerce Commission
- ◆ *Philadelphia Electric Company –* Evaluated the senior management and construction management organization as it related to the construction of the Limerick II Nuclear Generating Station, which was conducted for the Pennsylvania Public Utility Commission; testified as an expert witness on this topic in regulatory hearings

**ETHICS AND
INTERNAL CONTROLS
EXPERIENCE**

Mr. Burgess has conducted reviews of the ethics programs and internal controls of major utilities, including:

- ◆ *Philadelphia Gas Works –* Performed a stratified management audit of PGW for the Pennsylvania Public Utility Commission, in which he investigated the executive management, planning, external relations, and corporate governance functions
- ◆ *Pennsylvania-American Water Company –* Performed a stratified management audit of PAWC for the Pennsylvania Public Utility Commission, in which he investigated the executive management, planning, external relations, and corporate governance functions, as well as corporate culture, management structure, and staffing levels.
- ◆ *PECO Energy –* Performed a stratified management audit of PECO Energy for the Pennsylvania Public Utility Commission, in which he investigated the executive management, planning, external relations, and corporate governance functions.
- ◆ *The Brooklyn Union Gas Company –* Conducted an in depth review of the company's ethics and internal control programs for the New York Public Service Commission, including an analysis of the effectiveness of past company programs

Mr. Lee E. Burgess, continued
Executive Consultant II

**ETHICS AND
INTERNAL
CONTROLS
EXPERIENCE
(CONTINUED)**

- ◆ *Northeast Utilities* – Conducted an in depth review of the internal audit department, which included a review of company internal controls, which was conducted for the Connecticut Department of Public Utility Control
- ◆ *Vermont Public Service Company* – Conducted a review of the internal controls, ethics procedures, and Board of Director oversight for the Vermont Public Service Commission

**MANPOWER
PLANNING &
WORKFORCE
MANAGEMENT
EXPERIENCE**

Mr. Burgess has expertise in the area of manpower planning and work force management, having worked with many utilities over the past 22 years on a wide variety of manpower planning and productivity issues. This experience is summarized below:

- ◆ *Baker & Botts (Houston Light and Power Company)* – Performed litigation support advising HC&P's council of workforce productivity issues related to the construction of the South Texas Project (Nuclear Generating Station)
- ◆ *GPU Energy* – Evaluated workforce productivity systems and procedures for GPU's fossil power production. Evaluated the systems for all three GPU operating companies Pennsylvania Electric Company, Metropolitan Edison Company and Jersey Central Power and Light Company
- ◆ *Georgia Power Company* – Evaluated workforce management systems in the Nuclear and Fossil Power Restriction departments on a comprehensive management audit for the Georgia Public Service Commission
- ◆ *Gulf States Utilities Company* – Implemented a workforce productivity system at the construction site of the River Bend Nuclear Generating Station
- ◆ *Todd Shipyards* (San Diego, California and Seattle, Washington) – Performed a review of labor productivity and work management systems
- ◆ *Lagoven, S. A.* (Venezuela) – Performed a broad based manpower planning review for the corporation
- ◆ *Illinois Power Company* – Implemented a workforce productivity and methods improvement program at the construction site of the Clinton Nuclear Generating Station
- ◆ *Lakeland Department of Electric and Water Utilities* – Evaluated workforce productivity systems in the Power Generating Division
- ◆ *Long Island Lighting Company* – Evaluated manpower planning systems as part of a review of corporate perspective (organization & strategic planning), which was conducted for the New York Public Service Commission



Mr. Lee E. Burgess, continued
Executive Consultant II

**MANPOWER
PLANNING &
WORKFORCE
MANAGEMENT
EXPERIENCE
(CONTINUED)**

- ◆ *Nebraska Public Power District* – Evaluated workforce productivity systems at the District's fossil and nuclear generating stations
- ◆ *New York State Electric & Gas Corporation* – Evaluated workforce productivity systems at each of the corporation's fossil generating stations
- ◆ *Niagara Mohawk Power Corporation* – *Lead Consultant* evaluating manpower planning and work management systems as part of a focused management audit, which was conducted for the New York Public Service Commission
- ◆ *Oklahoma Gas & Electric Company* – Evaluated workforce productivity systems at the company's fossil generating station
- ◆ *Omaha Public Power District* – Implemented workforce productivity systems at the North Omaha (fossil) and Fort Calhoun (nuclear) Generating Stations
- ◆ *Madison Gas & Electric Company* – Implemented a workforce productivity system in transmission and distribution engineering and field forces
- ◆ *Public Service Company New Mexico* – Implemented a workforce productivity system at the San Juan Generating Station
- ◆ *Tennessee Valley Authority* – Implemented a workforce productivity measuring system at the construction site of Hartsville Nuclear Generating Stations; subsequently developed a methods improvement program using the results of the earlier efforts
- ◆ *Texas Utilities* – Reviewed work management and productivity at the construction site of the Comanche Peak Nuclear Reactor Generating Station; advised the company on workforce productivity issues in preparation for regulatory proceedings
- ◆ *State of Alaska* – Advised State attorneys on workforce productivity issues related to the construction of the Trans Alaska Pipeline System
- ◆ *New York Public Service Commission* – Conducted an investigation into the workforce management programs and workforce productivity in the construction of the Shoreham Nuclear Generating Station; testified as an expert witness on workforce productivity and the quantification of productivity

Mr. Lee E. Burgess, continued
Executive Consultant II

UTILITY & TELECOMMUNICATIONS EXPERIENCE

- ◆ Alaska Energy Authority
- ◆ Arkansas Power and Light Company
- ◆ Atlanta Gas Light Company
- ◆ Atlantic Electric Company
- ◆ Avatar Utilities Incorporated
- ◆ Baker & Botts (Houston Lighting and Power Company)
- ◆ The Brooklyn Union Gas Company
- ◆ Carolina Power and Light Company
- ◆ Central Power & Light Company
- ◆ Cincinnati Gas and Electric Company
- ◆ Clay Electric Cooperative
- ◆ Commonwealth Edison Company
- ◆ Commonwealth Utilities Corporation (Saipan, Northern Marianas)
- ◆ Connecticut Light and Power Company
- ◆ Connecticut Natural Gas Corporation
- ◆ Consumers Power Company
- ◆ Dayton Power and Light Company
- ◆ East Ohio Gas Company
- ◆ Entergy Corporation
- ◆ Florida Cities Water Company
- ◆ General Public Utilities Company
- ◆ Georgia Power Company
- ◆ Gulf States Utilities Company
- ◆ Houston Lighting and Power Company
- ◆ Illinois Bell Telephone Company
- ◆ Illinois Power Company
- ◆ Isham, Lincoln & Beale (Commonwealth Edison Company)
- ◆ Kansas City Power & Light Company
- ◆ Kentucky Utilities Company
- ◆ KLT, Inc.
- ◆ Lagoen, S. A. (Venezuela)
- ◆ Lakeland (FL) Department of Electric and Water Utilities
- ◆ Lincoln Electric System (Nebraska)
- ◆ Long Island Lighting Company
- ◆ Los Angeles Department of Water & Power
- ◆ Louisville Gas and Electric Company
- ◆ Madison Gas and Electric Company
- ◆ Missouri Cities Water Company
- ◆ Naperville Electric Department (Illinois)
- ◆ Nebraska Public Power District
- ◆ New York State Electric & Gas Corporation
- ◆ Niagara Mohawk Power Corporation
- ◆ Northeast Utilities
- ◆ Ohio Gas Company
- ◆ Oklahoma Gas and Electric Company
- ◆ Omaha Public Power District
- ◆ Orange & Rockland Utilities, Inc.
- ◆ Pacific Gas & Electric Company
- ◆ The Peoples Gas Light and Coke Company/North Shore Gas Company
- ◆ PECO Energy
- ◆ Pennsylvania-American Water Company
- ◆ Philadelphia Electric Company
- ◆ Philadelphia Gas Works
- ◆ Public Service Company of New Mexico
- ◆ Public Service Electric and Gas Company
- ◆ Rochester Gas and Electric Corporation
- ◆ San Diego Gas & Electric Company
- ◆ Southern California Edison Company
- ◆ System Energy Resources, Incorporated
- ◆ Tennessee Valley Authority
- ◆ Texas Utilities
- ◆ Todd Shipyards (San Diego and Seattle)
- ◆ Toledo Edison Company
- ◆ Tucson Electric Power Company
- ◆ UGI Utilities, Inc.
- ◆ U.S. Navy
- ◆ Wisconsin Electric Power Company



Mr. Lee E. Burgess, continued
Executive Consultant II

**GOVERNMENT
EXPERIENCE**

Public/regulatory agency clients include:

- ◆ California Public Utilities Commission
- ◆ Connecticut Department of Public Utility Control
- ◆ Georgia Public Service Commission
- ◆ Illinois Commerce Commission
- ◆ Kentucky Public Service Commission
- ◆ New Jersey Board of Regulatory Commissioners
- ◆ New York Department of Public Service
- ◆ Pennsylvania Public Utility Commission
- ◆ Public Utilities Commission of Ohio
- ◆ U.S. Department of the Interior
- ◆ Public Utility Commission of Texas

**MANAGEMENT
AUDIT
EXPERIENCE**

Mr. Burgess is one of the foremost authorities in conducting management audits of electric, gas, telephone, and water/wastewater utilities. He has participated in numerous management audits over the past 19 years, most as a *Project Manager* and *Lead Consultant*, including the following:

◆ Arkansas Power & Light Company	◆ Los Angeles Department of Water & Power
◆ Atlanta Gas Light Company	◆ Louisville Gas & Electric Company
◆ Atlantic Electric Company (two audits)	◆ Madison Gas & Electric Company
◆ The Brooklyn Union Gas Company	◆ Naperville Electric Department (Illinois)
◆ Cincinnati Gas & Electric Company (three audits)	◆ Nebraska Public Power District
◆ Commonwealth Edison Company	◆ New York State Electric & Gas Corporation
◆ Commonwealth Utilities Corporation	◆ Niagara Mohawk Power Corporation
◆ Connecticut Light and Power Company (two audits)	◆ Ohio Gas Company
◆ Connecticut National Gas Corporation	◆ Oklahoma Gas & Electric Company
◆ Dayton Power & Light Company (three audits)	◆ Orange & Rockland Utilities, Inc.
◆ East Ohio Gas Company (two audits)	◆ Pacific Gas & Electric Company
◆ Georgia Power Company	◆ The People Gas Light & Coke Company/Northshore Gas Company
◆ Houston Lighting and Power Company	◆ PECO Energy
◆ Illinois Bell Telephone Company	◆ Pennsylvania-American Water Company
◆ Kentucky Utilities Company	◆ Philadelphia Electric Company
◆ Lakeland Department of Electric and Water & Utilities (Florida)	◆ Philadelphia Gas Works
◆ Long Island Lighting Company	◆ Public Service Electric & Gas Company
	◆ Rochester Gas & Electric Company
	◆ Southern California Edison Company
	◆ Toledo Edison Company
	◆ Wisconsin Electric Power Company

Mr. Lee E. Burgess, continued
Executive Consultant II

**LITIGATION &
 TESTIMONY
 EXPERIENCE**

- ◆ *California Public Utilities Commission* – Presented direct testimony on a comprehensive investigation into the management, costs, and cost allocations regarding PG&E Enterprises construction of the Pipeline Expansion Project
- ◆ *Florida Public Service Commission* – Presented testimony in a rate case hearing on affiliate relations and cost allocations of Avatar Utilities and Florida Water Company
- ◆ *Missouri Public Service Commission* – Presented testimony in a rate case hearing on affiliate relations and cost allocations of Avatar Utilities and Missouri Cities Water Company
- ◆ *Pennsylvania Public Utility Commission* – Presented testimony in the rate case hearing regarding a retrospective construction management audit of Philadelphia Electric Company's Limerick Unit 2; testimony specifically concerned project management of Limerick 2's construction, which included PECO's executive management oversight, and the management and conduct of the audit
- ◆ *Connecticut Department of Public Utility Control* – Testified regarding management audit approach and quantification methodologies (1988)
- ◆ *State of New York Department of Public Service* – Presented testimony regarding productivity, construction management, and quantification methodologies in the prudence audit of Shoreham Nuclear Generating Station (1982)
- ◆ *Trans Alaska Pipeline System – Support Consultant* in the area of construction project management for Ragovin, Hugh, & Lenzner in a rate case/litigation involving prudence issues related to the project



Mr. D. Kerry Laycock, CMC®

Executive Consultant II

EXPERIENCE

Mr. Laycock, a Schumaker & Company associate, has twenty-one years of experience as a management and organizational consultant. Mr. Laycock has been involved in a wide range of large-scale change initiatives, operational assessments and the design and presentation of training. The primary focus of his work in recent years is organizational structure, work process and job design. Recent projects include utility process and job redesign, municipal restructuring and HR systems redesigns for payroll, disability management, employee selection and year-end compensation. He began his work facilitating quality circles in the automotive industry. Today his clients include business, government and nonprofit organizations.

- ◆ Ann Arbor Water Utilities
- ◆ Blue Cross Blue Shield & Blue Care Network
- ◆ City of Ann Arbor, Michigan
- ◆ City of Battle Creek, Michigan
- ◆ City of Dearborn, Michigan
- ◆ City of Detroit, Michigan
- ◆ City of Southfield, Michigan
- ◆ Continental Teves, Inc.
- ◆ Cousins Environmental Control/BBC
- ◆ DaimlerChrysler, AG
- ◆ DTE Energy/Detroit Edison
- ◆ Detroit Medical Center
- ◆ Domino's Pizza, Inc.
- ◆ Domtar Gypsum
- ◆ Edison Credit Union
- ◆ Ford Motor Company
- ◆ Henry Ford Health System
- ◆ Holiday Retirement Corporation
- ◆ Oakland & Washtenaw Counties
- ◆ Michigan Department of Mental Health
- ◆ Michigan Office of Financial & Insurance Services-General Counsel
- ◆ Michigan Supreme Court
- ◆ PECO Energy
- ◆ Pennsylvania-American Water Company
- ◆ Philadelphia Gas Works
- ◆ Pfizer, Inc.
- ◆ R. R. Donnelley & Sons Co.
- ◆ Town of Hilton Head Island, South Carolina
- ◆ Trinity Health/St. Joseph Mercy Hospital
- ◆ Time Warner Cable
- ◆ United Methodist Retirement Communities
- ◆ U. S. Environmental Protection Agency
- ◆ Washtenaw Intermediate School District

EDUCATION & CERTIFICATION

Mr. Laycock is a *Certified Management Consultant*, as a member of the Institute of Management Consultants (IMC). This certification represents evidence of the highest standards of consulting and adherence to the ethical canons of the profession. Less than 1% of all consultants have achieved this level.



Mr. D. Kerry Laycock, CMC, continued
Executive Consultant II

**EDUCATION &
CERTIFICATION
CONTINUED**

Mr. Laycock holds a Bachelors of Business Administration in Management from Eastern Michigan University and a Masters degree in organization development from Eastern Michigan University. He is also a qualified administrator of the Myers-Briggs Type Indicator®.

In addition to consulting, he has taught graduate and undergraduate courses in organizational behavior and organizational development. He also serves on the boards of directors of a number of nonprofit organizations.

Representative consulting projects are included on the following pages. Philadelphia Gas Works, Pennsylvania-American Water Company, and PECO Energy management and operations audits were Schumaker & Company projects, as were three other non-utility (City of Detroit, Town of Hilton Head Island, and State of Michigan OFIS) projects.

Mr. D. Kerry Laycock, CMC, continued
Executive Consultant II

Philadelphia Gas Works

Executive Consultant II

- ◆ Executive management and human resources
- ◆ Customer service
- ◆ Diversity/EEO

Performed a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this management and operations audit is to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted.

Pennsylvania-American Water Company

Executive Consultant II

- ◆ Executive management and human resources
- ◆ Corporate culture, management structure, and staffing levels
- ◆ Diversity/EEO
- ◆ Customer service

Performed a stratified management and operations audit of Pennsylvania-American Water Company (PAWC) for the Pennsylvania Public Utility Commission (PaPUC) with the primary focus areas being costs borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses are of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

PECO Energy

Lead Consultant

- ◆ Executive management and human resources
- ◆ Customer service
- ◆ Merger review

Performed a stratified management and operations audit of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC) in with the primary focus areas being PECO, Exelon Energy Delivery (EED), and Exelon Business Services Company (EBSC) functional areas, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assessed the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.



Mr. D. Kerry Laycock, CMC, continued
Executive Consultant II

***State of Michigan
Office of Financial and
Insurance Services***

Senior Consultant

- ◆ Organization and management review

Conducted an assessment of the operational and managerial aspects of the Office of General Counsel for the Office of Financial and Insurance Services (OFIS). Interviews with key management and staff consisted of reviews of the organization and chief processes for which each key person was responsible, as well as discussions of any areas of particular interest, plus review of documents and associated analyses were performed. A well balanced report that reflected both areas that hold opportunity for operational and financial improvement and those areas that demonstrate exemplary management and operation effectiveness was written and delivered.

City of Detroit, Michigan

Lead Consultant

- ◆ Development and analysis of process maps (fire)
- ◆ Development of findings, conclusions, and recommendations (fire)

Recommended cost reduction planning and potential revenue enhancement initiatives based on process mapping and analysis of key processes for designated departments (fire and public works, plus potentially reviewing police, transportation, and health/wellness promotion in future months). These plans/initiatives address risks associated with implementation, not only within the designated departments, but especially its potential impact on the delivery of services to the residents and surrounding communities.

Edison Credit Union

Principal Consultant

- ◆ Organization and management analysis
- ◆ Customer service and call center operations
- ◆ Best practice comparisons

Mr. Laycock is currently working on a project to upgrade technology and work processes for the banking call center of Edison Credit Union. ECU holds over \$480 million in assets for employees of Detroit Edison, Michigan Consolidated Gas and the parent company, DTE Energy. This project will document all current customer-facing processes and banking transactions, and evaluate supporting technology and customer service personnel. The analysis will include identification and tracking of new performance metrics, time studies, issue analysis and an assessment of customer preferences. Project deliverables include process optimization, and technology upgrade recommendations, an optimized staffing model, standardized training protocols and on-line knowledge management objects tied to each step of the work processes.

Mr. D. Kerry Laycock, CMC, continued
Executive Consultant II

City of Ann Arbor

Senior Consultant

- ◆ Organization and management analysis
- ◆ Capital and maintenance planning
- ◆ Customer services and field operations
- ◆ Best practice comparisons

Mr. Laycock has worked for the City of Ann Arbor over the past two years on a city-wide reorganization. Originally, the project was limited to the water utilities and was intended to accommodate the effects of an early retirement program and achieve permanent staffing reductions and operational efficiencies. Working with union/management design teams, operations and mechanic jobs were combined into a single classification. This classification is divided into five levels with each level having progressively higher licensing and competency requirements. Utilizing the combined classification, the water treatment plant now operates with five fewer employees, including one less supervisor, producing an annual operating cost reduction of more than \$300,000.00. Similar results were achieved in the wastewater treatment plant.

Based on the success of this effort, the City of Ann Arbor has consolidated its former departments into four service areas and has expanded the process and job redesign initiatives. In Public Services, 28 classifications were reduced to three broadly-defined, broadly-skilled classifications yielding substantial efficiencies and staffing reductions. For example, the new Field Operations Technician: Forestry and Facilities combines 12 classifications from parks maintenance and facilities maintenance. This has allowed for an 8 percent staffing reduction (12 FTEs) producing an annual savings of over \$700,000.00. All field operations work in the Public Services Area has been redesigned. (Public Services include the former, Street Maintenance, Solid Waste, Parks Operations and Maintenance, and Utilities Field Operations departments.)

Among the current projects is a redesign of clerical positions. Clericals in 27 union-represented classifications are being combined into a single classification and will be assigned work throughout their service area. This will result in 6 FTEs eliminated in the FY 04-05 budget and an additional 6.5 in subsequent budgets.

The process and job redesign effort is expected to conclude in about a year. Currently, Mr. Laycock is leading process redesign initiatives in procurement and development. The new development process will integrate current planning functions with building and code enforcement and be supported by new work management software.



Mr. D. Kerry Laycock, CMC, continued
Executive Consultant II

<i>Detroit Edison</i> <i>Principal Consultant</i>	Mr. Laycock performed a variety of organizational assessments and restructurings for Detroit Edison over a period of five years. He planned and facilitated the restructuring of Design Engineering and Technical Support Engineering into a combined Engineering Support Organization. He managed a reorganization of the Corporate Auditor's Office. In addition, he helped design and establish a Customer Relationship Management function within the marketing organization.
◆ Organization and management analysis ◆ Reorganization assessment and implementation	
<i>United States Environmental Protection Agency</i> <i>Senior Consultant</i>	Completed a team assessment for the Program Managements Network Team responsible for computer network administration for the National Vehicle and Fuel Emissions Laboratory. Conducted an organizational assessment and staff development process for the Program Management Network Team. The assessment included the completion and interpretation of the Campbell-Hallam™ team development survey, which was followed by feedback and action planning sessions with management and staff. Based on his recommendations, the EPA is moving forward customer service improvement and team development strategies. Mr. Laycock was also recently engaged by the EPA's Motor Vehicle Emission Simulator (MOVES) development team on a role clarification quality assurance process initiative.
◆ Organizational assessment ◆ Employee surveys	
<i>Town of Hilton Head Island</i> <i>Lead Consultant</i>	Provided services related to an assessment of the Town of Hilton Head Island's (Town) current business processes, organization structure, staffing levels, and software that support the management of the Town's employee information. This study evaluated the performance of the subject organization, staffing, operations, and costs with the intended final result of identifying opportunities for improving, revising, or replacing the processes, organization structure, staffing levels, and software. Conducted an on-site analysis using the least intrusive means possible, concluding with the delivery of an oral presentation summarizing the findings to that time. Subsequently, produced a detailed draft organizational review report that was presented to the Town Board for review.
◆ Human resource assessment	
<i>City of Southfield</i> <i>Lead Consultant</i>	Recently completed a reorganization of Public Works Department (DPW) in response to the imminent retirement of a number of senior managers and declining revenues.
◆ Reorganization assessment and implementation	

Mr. D. Kerry Laycock, CMC, continued
Executive Consultant II

City of Battle Creek

- ◆ Organization and management analysis
- ◆ Call-center implementation

Mr. Laycock recently completed an assessment of the City's Citizen Response Management (CRM) system and made organizational, process and technology recommendations. He is currently working with the City and a technology partner to implement new, technology, optimized issue and request management processes and performance based-job designs.

City of Dearborn, Michigan

Senior Consultant

- ◆ Organizational review, analysis, and assessment

Assisted the City of Dearborn, who like many organizations, was faced with delivering essential services to its citizens with a reduced level of resources, by performing an assessment of selected departments, specifically the Assessor's Office and Camp Dearborn, as a means to streamline and consolidate its operations, eliminate non-essential services, and optimize overall level of resources involved in achieving its goals.

Washtenaw County

Senior Consultant

- ◆ Organizational analysis
- ◆ Facilitation

Performed work for the count's trial court, which involved a number of initiatives over the past 10 years, including confidential work performed for the juvenile court. Another engagement focused on the facilitation of a number of community-wide human services meetings.

Washtenaw County

Senior Consultant

- ◆ Organizational analysis
- ◆ Facilitation

Completed an evaluation of the Environmental Health and Building Services departments, with a primary focus on the customer service aspects of both functions. Based on Mr. Laycock's recommendations, the County is moving forward with a reorganization plan and job changes. Mr. Laycock also provided facilitation skills in work focused on leading meetings for the County Board of Commissioners, plus work involving facilitation of Parks Commission planning retreats and the Agricultural Lands and Open Spaces task forces.

Michigan Supreme Court, State Court Administrative Office

Senior Consultant

- ◆ Facilitation

Worked as facilitator for the SCAO Collections Advisory Committee, which is comprised of Judges and Court Administrators from around the state.



Mr. Martin J. Murphy, PE

Executive Consultant II

BACKGROUND

Mr. Martin J. Murphy has over 30 years of consulting experience. His background, which includes a blend of experience in operations, engineering, information systems, and management, provides him with a unique perspective from which to perform the required investigations, develop viable findings, and formulate appropriate recommendations for improvement. His utility consulting experience encompasses numerous management and operations audits for commissions and utilities. His assignments have focused on the review of several functional areas, including workforce management; engineering and construction; purchasing and materials management; construction program planning; affiliated interests; transportation; legal services; facilities management; risk management and finance; operational efficiency assessment; project planning and management; organizational analysis; budgeting and cost control; and technical and economic feasibility evaluation.

EDUCATION & CERTIFICATIONS

His educational achievements include a Bachelor's degree in Civil Engineering from Cornell University, a Master's degree in Civil and Environmental Engineering from Cornell University, and an MBA from the University of Chicago.

CONSULTING EXPERIENCE

Mr. Murphy has served as a *Lead Consultant* on numerous management and operations reviews for electric, gas, telephone, and water utilities. He has focused primarily on areas related to operations, engineering, construction, and support services. Several of these reviews also had a particular emphasis on performing reviews of the management of the workforce within the operational units of the companies and formulating recommendations for implementing improvements. Additionally, Mr. Murphy has performed numerous audits that focused on the relationships between utilities and their affiliated interests, especially in reference to the potential for cross-subsidization and compliance with the applicable regulations. In addition, he has a solid working knowledge of the purchasing and materials management, information technology, and support services functions of utilities, having served as *Lead Consultant* for reviews of each of these functions.



Mr. Martin J. Murphy, PE, continued
Executive Consultant II

**CONSULTING
EXPERIENCE
(CONTINUED)**

Mr. Murphy also has significant experience and expertise in the area of computer systems implementation and operation. He has reviewed the systems environments at several utilities and commercial operations and formulated recommendations for improvements. Additionally, he has performed requirements definitions for hardware and software systems and assisted in the selection and implementation of the selected system.

**PROFESSIONAL
AFFILIATIONS**

- ◆ *Registered Professional Engineer* (New York, Connecticut, and Illinois)
- ◆ American Production and Inventory Control Society

PRIOR EXPERIENCE

Prior to joining Schumaker & Company, Mr. Murphy was the Director of MIS for Chicago Pneumatic Tool Company, an international manufacturing firm based in Rock Hill, SC. Prior to that he was the President of M.J. Murphy & Company, a management consulting firm serving the utility and manufacturing industries. Before that, Mr. Murphy was a Senior Manager with the Management Consulting Department of KPMG Peat Marwick in Charlotte, North Carolina. Specifically, he served as Manager of their Carolinas Operations Improvement Group. As a Manager at Theodore Barry & Associates he was a member of their Management and Operations Analysis Group located in Cambridge, Massachusetts.

Representative, relevant projects are briefly described on the following pages. Philadelphia Gas Works, Pennsylvania-American Water Company, Water Services Corporation of South Carolina, PECO Energy, AEP/Kentucky, New Jersey BPU, SBC Ameritech Indiana, Kingsport Power Company, ALLTEL Pennsylvania, and Kentucky-American Water Company are Schumaker & Company projects; on the Verizon NY project Schumaker & Company was a subcontractor.

Mr. Martin J. Murphy, PE, continued
Executive Consultant II

Philadelphia Gas Works

Executive Consultant II

- ◆ System reliability performance and related operations
- ◆ Materials management and stores
- ◆ Fleet management
- ◆ Facilities management

Performed a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this management and operations audit is to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted.

Pennsylvania-American Water Company

Executive Consultant II

- ◆ Water operations
- ◆ Materials management and stores
- ◆ Fleet management
- ◆ Facilities management
- ◆ Operational performance

Performed a stratified management and operations audit of Pennsylvania-American Water Company (PAWC) for the Pennsylvania Public Utility Commission (PaPUC) with the primary focus areas being costs borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses are of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.



Mr. Martin J. Murphy, PE, continued
Executive Consultant II

Water Services Corporation of South Carolina

Lead Consultant

- ◆ Customer service
- ◆ Water operations
- ◆ Pending litigation
- ◆ Pricing strategies
- ◆ Technology tools and training

Performed a management and operations review and assessment of Water Services Corporation (WSC) of South Carolina for the State of South Carolina Office of Regulatory Staff (ORS) with specific focus on the operations of the five subsidiary water and wastewater companies that operate in South Carolina, those being:

- ◆ Carolina Water Service, Inc. (CWS)
- ◆ Tega Cay Water Service, Inc. (TCWS)
- ◆ Utilities Services of South Carolina, Inc. (USSC)
- ◆ Southland Utilities, Inc. (SU)
- ◆ United Utility Companies, Inc.(UUC)

The bottom line of this project was to determine whether the rates charged to the South Carolina ratepayers can be reduced through the implementation of greater efficiencies in organizations, operations, or both. Additionally, another relevant analysis was a determination of whether the ratepayers of South Carolina are being properly and economically served by the range of corporate services that are provided to the WSC operations in South Carolina by the managers located in both West Columbia and Northbrook. Significant consideration was given to investigation of the potential benefits that would result from the consolidation or merger of the affiliated companies of WSC.

PECO Energy Company

Lead Consultant

- ◆ Electric and gas operations
- ◆ Electric and gas reliability
- ◆ Materials management and stores
- ◆ Fleet management

Performed a stratified management and operations audit of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC) in with the primary focus areas being PECO, Exelon Energy Delivery (EED), and Exelon Business Services Company (EBSC) functional areas, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assessed the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

Mr. Martin J. Murphy, PE, continued
Executive Consultant II

Verizon New York

Senior Consultant

- ◆ Organization and management analysis
- ◆ Capital and maintenance planning
- ◆ Customer services and field operations
- ◆ Performance analysis and statistics
- ◆ Best practice comparisons

Analyzed, documented, and verified, through findings based on identifiable and measurable information and data, to ensure that Verizon NY's existing service quality plans and practices of the five VIP service objectives (customer trouble report rate, percent out of service over 24 hours, percent installation completed in five days, PSC complaints, and outliers), NY Telephone Service Standards, and company guidelines meet applicable service quality performance standards, including reasonably foreseeable events and contingencies. Developed and documented recommendations to improve or modify these service quality practices and/or plans where existing plans and practices were not sufficient to ensure that applicable standards were met. Reviewed Verizon NY's processes for service quality performance and its employees, technology, and work processes related to the planning, design, construction, installation, maintenance, repair, and delivery of product to retail customers within Verizon NY's service territory.

AEP/Kentucky

Project Manager & Lead Consultant

- ◆ Asset management
- ◆ Engineering and construction
- ◆ Transmission and distribution operations
- ◆ Vegetation management

Performed an assessment of the reliability of service within AEP/Kentucky's distribution system in its Hazard service territory (a forested mountainous terrain), which has historically experienced a greater number of electric service interruptions than other AEP/Kentucky service areas. Reviewed crew scheduling, training, and communications systems for effectiveness. Evaluated field crew staffing levels with relation to the historical work loadings and the amount of overtime being charged. Performed observations and analysis of technician crews in the field and the tools and systems at their disposal. Reviewed dispatch center and storm response procedures and planning. Reviewed design engineering procedures and the engineering and technical standards utilized.



Mr. Martin J. Murphy, PE, continued
Executive Consultant II

New Jersey Board of Public Utilities

***Jersey Central Power and Light Company
 /GPU Energy
 Public Service Electric & Gas Company
 Rockland Electric Company
 Conectiv***

Lead Consultant

- ◆ Work force management
- ◆ Distribution operations
- ◆ Engineering and construction
- ◆ Electric distribution planning

Engaged to assist Board of Public Utility (BPU) staff in reviewing and monitoring the implementation of recommendations resulting from an investigation of New Jersey's electric utilities' system reliability. Assisted Board Staff in the review and investigation of the information supplied by each of New Jersey's four electric utilities, in connection with the implementation of the selected recommendations as ordered by the Board. Particular emphasis was placed on each utility's activities to improve and/or maintain CAIDI and SAIDI indicators at acceptable levels. In particular, issues regarding utilities work force management, electric system distribution planning and engineering practices, transmission and substation maintenance practices and procedures were addressed during our investigations. He worked closely with and at the direction of the BPU Staff in reviewing the implementation of the recommendations.

***New Jersey Board of Public Utilities
 Newark, New Jersey***

***Elizabethtown Gas Company/
 NUI Corporation
 New Jersey Natural Gas Company/
 New Jersey Resources Corporation
 South Jersey Gas Company/
 South Jersey Industries Corporation***

Lead Consultant

- ◆ Restructuring
- ◆ Affiliate relations
- ◆ Competitive services
- ◆ Code of conduct

Conducted compliance audits of the competitive services of New Jersey's gas utilities; specifically South Jersey Gas Company (South Jersey Industries Corporation), New Jersey Natural Gas Company (New Jersey Resources Corporation), and Elizabethtown Gas Company (NUI Corporation) as part of the utility industry restructuring in New Jersey. The purpose of these audits was to ensure that the utilities or their related competitive business segments do not have an unfair competitive advantage over other, non-affiliated purveyors of competitive services, and to evaluate and review the allocation of costs between the utilities' competitive and non-competitive services.

Mr. Martin J. Murphy, PE, continued
Executive Consultant II

SBC Ameritech Indiana

Project Manager & Lead Consultant

- ◆ Call center operations
- ◆ Field operations
- ◆ Performance statistics

Performed management and operations analyses of existing practices as part of a focused review of service quality performance and related plans and practices of SBC Ameritech Indiana, including its call center operations and field operations. Performed a historical review of operations to help identify those causal factors that led up to the service problems that were experienced in the year 2000. Performed field reviews of company installation, repair, and construction operations. Reviewed outside plant and central office planning and budgeting programs to assess their ability to provide for proper network facilities to meet future demand. Performed computer-based analyses of a wide range of available performance statistics to determine how well specific geographical service areas were performing in relation to the norm for Ameritech Indiana.

Kingsport Power Company

Lead Consultant

- ◆ Operations
- ◆ Workforce management
- ◆ Engineering and construction
- ◆ Procurement and materials management
- ◆ Transportation management

Performed a comprehensive management and operations review in which his primary responsibilities included evaluating the operations/engineering and construction function and various support services, including reviews of the workforce management function. Developed recommendations pertaining to implementation of improved computer systems for materials management and transportation management. Recommended enhancements to maintenance and construction work estimating and monitoring system.

ALLTEL Pennsylvania

Lead Consultant

- ◆ Operations
- ◆ Workforce management
- ◆ Customer service
- ◆ Network engineering
- ◆ Purchasing, materials management, and stores
- ◆ Risk management
- ◆ Affiliate relationships

Performed a stratified management and operations review in which he focused on various functions and activities performed by ALLTEL PA, its associated companies (ALLTEL Telephone Service Corporation, ALLTEL Corporate Services, ALLTEL Supply, ALLTEL Publishing), or its parent company (ALLTEL Corporation).



Mr. Martin J. Murphy, PE, continued
Executive Consultant II

Kentucky-American Water Company

Lead Consultant

- ◆ Engineering and construction
- ◆ Workforce management
- ◆ Purchasing
- ◆ Materials management
- ◆ Land and facilities management
- ◆ Risk management

Performed a comprehensive management and operations review in which his primary responsibilities included evaluating the engineering and construction function and various support services including purchasing and materials management, risk management, and facilities management. Recommended improved utilization of the KAWC engineering group and better control of the charges emanating from the corporate engineering group. Suggested implementing an integrated purchasing and inventory control software package to improve KAWC's ability to monitor and control inventory levels.

Major Northeastern Gas Utility

Lead Consultant

- ◆ Engineering
- ◆ Workforce management
- ◆ Construction program planning
- ◆ Operations management

Assisted in the preparation for commission-mandated management audits. Performed "mini-audits" in all functional areas and designed programs intended to educate utility executives and functional area heads in the audit process. Focused specifically on interview preparation.

West Texas Utilities Company

Lead Consultant

- ◆ Purchasing
- ◆ Materials management
- ◆ Transportation management

Performed a comprehensive management and operations review in which his responsibilities included evaluating the purchasing, materials management, and transportation functions. Focused on the effective monitoring and control of inventory levels through the implementation and utilization of an integrated purchasing and inventory control software package. Enhanced WTU's ability to take economic advantage of its volume purchasing power by more effective centralization of the purchasing process.

Commonwealth Edison

Lead Consultant

- ◆ Construction management
- ◆ Engineering

Performed a commission-mandated, retrospective review of the construction management at the Byron and Braidwood Nuclear Power Plants. The study included an in-depth review of all elements of the construction management program, including project controls and scheduling, materials procurement and warehousing, equipment procurement and management, management organization and staffing, contractor selection and management, materials and equipment management, and executive involvement.

Mr. Martin J. Murphy, PE, continued
Executive Consultant II

Commonwealth Edison
Central Illinois Public Service
Louisville Gas & Electric Company
City of Syracuse, New York
City of Orchard Park, New York
City of Chicago, Illinois

Project Manager and Design Engineer

- ◆ Design engineering
- ◆ Environmental engineering

Managed and performed various consulting engineering design projects, with specific expertise in environmental engineering. Responsibilities involved all phases of the engineering design process including conceptual planning, design, equipment specification, purchasing, construction, and start-up.

New York City and several other
New York State Municipalities

Project Manager

- ◆ Power supply and rate forecasting

Managed and performed analytical studies to determine the effects of proposed changes in the New York State power supply situation (especially relating to nuclear plants) on various classes of electric consumers in several municipalities, including New York City. Calculated revenue requirements, forecasted rates adjusted for price elasticity under alternative scenarios, and quantified the impacts.

Commonwealth Edison

Resident Construction Manager

- ◆ Construction
- ◆ Engineering
- ◆ Finance

Managed the retrofit construction of a water recycle, air pollution abatement, and wastewater treatment system for a coal-fired electric generating station. Responsible for construction surveillance, supervision of material/equipment receipt, warehousing and distribution, provision of technical guidance to nine on-site contractors, coordination and scheduling of construction activities, and financial monitoring and control. Remained on-site following construction completion to direct and coordinate the plant testing and start-up programs.



Mr. Robert L. Rosenkoetter, CPA

Executive Consultant II

BACKGROUND

Mr. Robert Rosenkoetter, a Schumaker & Company associate, has more than 25 years experience as a project manager, task manager, and functional expert on management consulting engagements in the telecommunications, electric and gas utility, extractive, and service industries, as well as numerous national, state, and local governments.

He has designed, directed, and participated in performing management audits for utilities, public commissions, and government agencies throughout the United States and abroad. He has analyzed and evaluated organizations, designed and implemented accounting and information systems, and performed numerous analytical and financial reviews to reduce costs and improve effectiveness and efficiency.

He started his consulting career with Arthur Young & Company (now, Ernst & Young) and worked in their USA and international practices, with long-term consulting assignments in Europe and Asia. Prior to beginning his consulting career, he was employed by Cities Service Company, responsible for conducting budget and capital expenditure analysis.

EDUCATION & CERTIFICATIONS

Mr. Rosenkoetter earned both an MBA in Finance and MPA (Master of Professional Accountancy) from Georgia State University, after receiving a BS in Business Administration from Auburn University. He is also a Certified Public Accountant.

UTILITY MANAGEMENT & OPERATIONS ASSESSMENT EXPERIENCE

Mr. Rosenkoetter has served as the *Project Manager, Lead Consultant, or Senior Consultant* for many utility projects involving electric, gas, telecommunications, water, and waste-water utilities.

Representative consulting projects are included on the following pages. Philadelphia Gas Works, Pennsylvania-American Water Company, and PECO Energy management and operations audits were Schumaker & Company projects.



Mr. Robert L. Rosenkoetter, CPA, continued
Executive Consultant II

**ELECTRIC UTILITY
MANAGEMENT &
OPERATIONS
ASSESSMENT
EXPERIENCE**

Mr. Rosenkoetter has served as the *Lead Consultant* for the following electric utility projects:

- ◆ Affiliate compliance audit of Sempra Energy utilities, in which his responsibilities included assessing compliance by San Diego Gas & Electric Company and Southern California Gas Company with the affiliate transaction rules promulgated by the California Public Utilities Commission for the year ended December 31, 2006, and addressing potential audit issues in the eight areas in which the CPUC has issued specific affiliate transaction rules.
- ◆ Original cost audit of Commonwealth Edison, in which his responsibilities included reviewing additions to ComEd's delivery electric utility plant over a 20-year period from 1985 to 2004, verifying the appropriateness of the recorded original cost and accumulated depreciation as of December 31, 2004, and determining that the capitalization policy, property unit catalog, and system for recording capital costs are appropriate and have been maintained and applied in a consistent manner.
- ◆ Merger compliance review of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC) during a stratified management and operations audit.
- ◆ Prudency review of Georgia Power Company in the management of its coal contracts for the Georgia Public Service Commission.
- ◆ Financial management audit of the Potomac Edison Company for the Maryland Public Service Commission. Responsibilities included the review of organizational units, policies, and systems relating to all accounting and finance functions.
- ◆ Comprehensive management audit of Rockland Electric for the New Jersey Board of Public Utilities. Work included reviewing and assessing accounting and finance functions, organizations, systems, and documentation, including cost allocations with affiliated organization to determine the existence of cross-subsidization and to evaluate the efficiency and effectiveness of affiliate relationships.

Mr. Robert L. Rosenkoetter, CPA, continued
Executive Consultant II

**ELECTRIC UTILITY
MANAGEMENT &
OPERATIONS
ASSESSMENT
EXPERIENCE
(CONTINUED)**

- ◆ Management audit of the Guam Power Authority for the Public Utilities Commission of the Territory of Guam. Work included the review and assessment of the finance and accounting functions, the CAM and all affiliate transactions of the local electric power utility on the island territory of Guam.
- ◆ Management audit of GTE's northeastern regional telephone operations for the Illinois Commerce Commission. Responsibilities included reviewing and assessing affiliated interest transactions and all finance and accounting policies, procedures, functions, and systems.
- ◆ Ethics oversight review of Orange and Rockland Utilities for the New Jersey Board of Public Utilities. This work included assessing the organizations, practices, and procedures governing all finance and accounting functions, as well as all transactions between affiliated entities and cost allocation transactions.

Mr. Rosenkoetter also served as the *Senior Consultant* for the following electric utility projects:

- ◆ Financial management and affiliated interest review of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC) during a stratified management and operations audit.

**GAS UTILITY
MANAGEMENT &
OPERATIONS
ASSESSMENT
EXPERIENCE**

Mr. Rosenkoetter has served as the *Lead Consultant* for the following gas utility projects:

- ◆ Stratified management audit of Philadelphia Gas Works (PGW) for the Pennsylvania Public Utility Commission (PaPUC), in which his responsibilities included a review of financial management activities.
- ◆ Affiliate compliance audit of Sempra Energy utilities, in which his responsibilities included assessing compliance by San Diego Gas & Electric Company and Southern California Gas Company with the affiliate transaction rules promulgated by the California Public Utilities Commission for the year ended December 31, 2006, and addressing potential audit issues in the eight areas in which the CPUC has issued specific affiliate transaction rules.
- ◆ Merger compliance review of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC) during a stratified management and operations audit.



Mr. Robert L. Rosenkoetter, CPA, continued
Executive Consultant II

**GAS UTILITY
MANAGEMENT &
OPERATIONS
ASSESSMENT
EXPERIENCE
(CONTINUED)**

- ◆ Audit of San Diego Gas & Electric's Energy Efficiency Program expenses from 1998 through 2002 for the California Public Utilities Commission
- ◆ Audit of competition transition costs (CTC) of San Diego Gas & Electric Company. Work included testing compliance of the company's CTC application with state requirements and performing an assessment of recorded and unrecorded sunk costs and projections of future costs during the transition period.
- ◆ Management audit of the National Fuel Gas Company for the Pennsylvania Public Utility Commission. Responsibilities consisted of reviewing and assessing finance and accounting functions, including affiliate transactions, cost allocation methodologies and assignment of cost between regulate and non-regulated activities and between parent organization and state utility operations.
- ◆ Supporting United Cities Gas Company in its defense of its cost allocation manual (CAM) and cost allocations to affiliated entities in a contested management audit with the Tennessee Regulatory Authority. Work consisted of reviewing and analyzing recommendations made and the company's responses and assisting in preparing testimony for the Tennessee Public Service Commission hearing.
- ◆ Focused management audit of Southern California Gas Company for the California Public Utilities Commission. Responsibilities included the review, analysis, and evaluations of the cost allocation model (CAM) and affiliate interests transactions between this utility and its parent holding company and other affiliated subsidiaries.

Mr. Rosenkoetter also served as the *Senior Consultant* for the following gas utility projects:

- ◆ Financial management and affiliated interest review of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC) during a stratified management and operations audit.

Mr. Robert L. Rosenkoetter, CPA, continued
Executive Consultant II

**TELECOMMUNICATIONS
MANAGEMENT &
OPERATIONS
ASSESSMENT
EXPERIENCE**

He was a *Technical Advisor* on a management audit of the Illinois Bell Telephone Company for the Illinois Commerce Commission. Work included mentoring and advising the commission auditors on the review and assessment of all finance and accounting functions, procedures, policies, and systems. Mr. Rosenkoetter has served as the *Lead Consultant* in for the following telecommunications projects:

- ◆ Audit of the Verizon New York retail sales performance for the New York Public Service Commission. Responsibilities included the review of the organization and activities of the capital and maintenance planning functions.
- ◆ Audit of Verizon Pennsylvania's performance metrics and related penalties/remedies for the Pennsylvania Public Utility Commission. Responsibilities included the review of performance metrics documentation; data extraction procedures; data storage, backup, retrieval and security; change management processes; and billing credits.
- ◆ Focused management audit of the effects of the SBC/Ameritech merger for the Illinois Commerce Commission. Responsibilities included assessing the appropriateness of SBC Illinois's affiliate transactions, cost allocations, and the separation of regulated and non-regulated activities.
- ◆ Management audit of Cincinnati Bell Telephone Company for the Kentucky Public Service Commission. Responsibilities included the review of organizational units, policies, procedures, and systems relating to all accounting and finance functions. He also served as a *Task Leader* in the review of transactions with affiliated entities.
- ◆ Focused management audit of the customer service functions of the Southern New England Telephone Company (SNET). Work included reviewing and assessing billing, credit, and collections organizations, policies, functions, and systems.



Mr. Robert L. Rosenkoetter, CPA, continued
Executive Consultant II

**TELECOMMUNICATIONS
MANAGEMENT &
OPERATIONS
ASSESSMENT
EXPERIENCE
(CONTINUED)**

- ◆ Stratified management audit of GTE's telephone operations in the State of Pennsylvania for the Pennsylvania Public Utilities Commission. This work included the review and assessment of all organizations, policies, procedures, and systems relating to all finance, accounting and international functions, and also included the review of all transactions with affiliated entities, GTE's cost allocation practices and their cost allocation manual (CAM).
- ◆ Management audit of the California Deaf and Disabled Telecommunications Program for the California Public Utilities Commission. Responsibilities included evaluating the finance and accounting policies, procedures, functions, processes, and systems.
- ◆ Management audit of the Guam Telephone Authority for the Public Utilities Commission of Guam. Responsibilities included the review and assessment of the finance and accounting functions and transactions between affiliated entities.
- ◆ Management audit of United Telephone of Pennsylvania for the Pennsylvania Public Utility Commission. This work consisted of assessing policies, procedures, functions, and systems concerning affiliated transactions, collection and bad debt, and finance and accounting.
- ◆ Management audit of the Tennessee telephone operating companies of the Telephone Electronics Corporation for the Tennessee Regulatory Authority. Responsibilities included the review and assessment of organizational units, policies, procedures, and systems related to all finance and accounting functions.
- ◆ Management audit of Contel of Illinois for the Illinois Commerce Commission. Responsibilities included reviewing and assessing all policies, procedures, practices, and systems relating to accounting and finance functions and transactions with affiliate organizations.
- ◆ Management audit of Alltel of Pennsylvania for the Pennsylvania Public Utility Commission. Responsibilities included the review and assessment of all finance and accounting organizations, functions, policies, and procedures, as well as affiliated transactions.

Mr. Robert L. Rosenkoetter, CPA, continued
Executive Consultant II

**WATER & WASTEWATER
MANAGEMENT &
OPERATIONS
ASSESSMENT
EXPERIENCE**

- ◆ Stratified management audit of Pennsylvania-American Water Company (PAWC) for the Pennsylvania Public Utility Commission (PaPUC), in which his responsibilities included a review of financial management activities.
- ◆ Management audit of the Colorado Springs Utilities for the City of Colorado Springs. This work included assessing all accounting and finance functions, systems, staffing, and activities, including cost allocations and the cost allocation manual (CAM) and shared services and resources of the City of Colorado Springs and the electric, gas, water, and waste-water utilities.

**OTHER RELEVANT
EXPERIENCE**

Mr. Rosenkoetter has also served as *Project Manager* or *Lead Consultant* on a variety of other related consulting engagements and management audits on behalf of telecommunications and gas and electric utility companies, public commissions, and regulatory bodies, including:

- ◆ *Project Manager* in providing technical assistance to EVN (the electric power company of Vietnam) in implementation of a Financial Management Information System (FMIS) for the U.S. Trade and Development Agency (TDA).
- ◆ *Project Manager* for the migration of a billing system data base from Sybase to Oracle for Alltel's cellular business.
- ◆ *Practice Manager* overseeing the implementation of financial systems at Bangor Hydro, Boston Gas Company, CMS, Consolidate Natural Gas Company (CNG), Dayton Power & Light, IPALCO, Louisville Gas & Electric, and PREPA (Puerto Rico Electric Power Authority).
- ◆ *Project Manager* in the design of a regulatory financial information system for the Russian electric power industry for USAID.
- ◆ *Lead Consultant* in a management review of PLN, the electric power company of Indonesia for the World Bank.



Mr. Robert L. Rosenkoetter, CPA, continued
Executive Consultant II

UTILITIES AND COMMISSIONS SERVED

- ◆ Alltel Corporation
- ◆ Alltel of Pennsylvania
- ◆ Bell South
- ◆ Boston Gas Company
- ◆ California Public Utilities Commission
- ◆ California Deaf & Disabled Telecom. Program
- ◆ Cincinnati Bell Telephone Company
- ◆ CMS Energy
- ◆ Colorado Springs Utilities
- ◆ Commonwealth Edison Company
- ◆ Contel of Illinois
- ◆ Contel/GTE of New York
- ◆ Consolidated Natural Gas Company
- ◆ Dayton Power & Light
- ◆ D.C. Public Service Commission
- ◆ Electricity of Vietnam (EVN)
- ◆ Florida Department of Human Resources
- ◆ Florida Power Corporation
- ◆ GTE North – Illinois
- ◆ GTE – Pennsylvania
- ◆ Guam Power Authority
- ◆ Guam Telephone Authority
- ◆ Guam Public Utilities Commission
- ◆ Illinois Bell Telephone Company
- ◆ Illinois Commerce Commission
- ◆ IPALCO
- ◆ Maryland Public Service Commission
- ◆ National Fuel Gas Corporation
- ◆ Nebraska Public Power District
- ◆ New Jersey Board of Public Utilities
- ◆ New York Public Service Commission
- ◆ Orange & Rockland Utilities, Inc
- ◆ Pacific Gas & Electric Company
- ◆ PECO Energy
- ◆ Pennsylvania-American Water Company
- ◆ Pennsylvania Public Utility Commission
- ◆ Pertamina Oil Company of Indonesia
- ◆ Philadelphia Gas Works
- ◆ PLN (public power company of Indonesia)
- ◆ Potomac Edison
- ◆ Potomac Electric Power Company
- ◆ PREPA (Puerto Rico Electric Power Authority)
- ◆ Rockland Electric Company
- ◆ Sacramento Municipal Utilities District
- ◆ Semptra Energy
- ◆ Southern Bell Telephone Company
- ◆ Southern California Gas Company
- ◆ Southern New England Telephone Company
- ◆ State of Maine
- ◆ Telephone Electronics Corporation
- ◆ Tennessee Regulatory Authority
- ◆ Texas Utilities
- ◆ United Cities Gas Company
- ◆ United Telephone Company of Pennsylvania
- ◆ U.S. Trade Development Agency
- ◆ Verizon New York
- ◆ Verizon Pennsylvania

Mr. Martin H. Skeer, Ph.D., CMC®

Executive Consultant II

EXPERIENCE

Dr. Skeer, a Schumaker & Company associate, has more than 25 years of management consulting experience serving utilities, regulatory agencies, municipal governments and major corporations. He has participated as a *Project Manager*, *Technical Advisor*, or *Lead Consultant* in numerous energy and telecommunications industry engagements. His areas of consulting experience encompass operations and systems planning; corporate, strategic, and financial planning; market analysis; operations support systems development; and performance measurement. Dr. Skeer has served as *Lead Consultant* for commission ordered audits and business process reviews of many major energy and telecommunications companies.

- ◆ Electric and gas utilities include: Potomac Gas & Electric Company; Public Service Electric & Gas Company, Long Island Power Authority, Central Hudson Gas and Electric Company; Chelan (WA) Public Utility District; Truckee-Donner (CA) Public Utility District; Transmission Agency of Northern California, Florida Municipal Power Agency; Ameren Services Corporation and others.
- ◆ Telecommunications carriers include Verizon, Quest, Bell Atlantic and NYNEX (before they merged), Sprint-United, Contel (before it merged with General Telephone), General Telephone (GTE – before it merged with Bell Atlantic and became Verizon), and numerous independent telephone companies.

Dr. Skeer has actively participated in functional analyses and operational reviews for these companies. He has assessed opportunities for improved service quality and cost savings; conducted in-depth interviews with company management and operations personnel; reviewed proprietary documentation; performed quantitative and qualitative analyses; and documented findings and recommendations in reports to the top corporate management and regulatory commissions. He has prepared specific plans and benefit/cost analysis for implementing proposed recommendations.

Before entering the consulting profession, Dr. Skeer was a *Manager of Engineering Economics* at Bell Telephone Laboratories (Murray Hill, New Jersey) and a *Technical Project Coordinator* for Network Planning and Operations (Holmdel, New Jersey). He subsequently was a *Manager of AT&T Corporate Strategic Planning* (New York City), reporting to the Office of the Chairman.



Mr. Martin H. Skeer, Ph.D., CMC®, continued
Executive Consultant II

**EXPERIENCE
(CONTINUED)**

He established an independent consulting practice spanning a 21-year time frame, during which time he performed the aforementioned management audits and operations reviews. During the six-year period, from 1997 to 2003, he was a *Managing Executive Consultant* at Navigant Consulting (a.k.a., Resource Management International) – a New York Stock Exchange-listed consulting firm – where he had project management responsibility for engagements with such clients as Silicon Valley Power (City of Santa Clara, CA), the City of Anaheim (CA), and the Florida Municipal Power Agency.

**EDUCATION &
CERTIFICATIONS**

Dr. Skeer is a *Certified Management Consultant*, as a member of the Institute of Management Consultants (IMC). He was a *Licensed Professional Engineer* in New York and New Jersey.

Dr. Skeer holds Ph.D. and MS degrees in Engineering from Carnegie-Mellon University, Pittsburgh, where he taught advanced undergraduate courses in engineering and numerical analysis. He received a BS in Engineering from The Cooper Union, New York City, and an MBA in Finance from American University, Washington.

He was a recipient of full-tuition four-year teaching assistantship at Carnegie-Mellon University; a four-year New York State Scholarship; and was a Member of the Sigma XI Honorary Engineering Society.

**PROJECT
MANAGEMENT
& CONSULTING
EXPERTISE**

Dr. Skeer, as a *Lead Consultant*, conducted management audits and operations and effectiveness reviews of major energy and telecommunications companies. He was responsible for evaluation of performance and business practices which, for various electric utilities and local exchange carriers, have encompassed the following functional areas (in alphabetic order):

♦ Business and strategic planning	♦ Operator services
♦ Central office and outside plant operations	♦ Organization and executive management
♦ Customer services	♦ Performance measurement
♦ Directory publishing	♦ Process reengineering
♦ Economics of equipment replacement	♦ Procurement/make-versus buy decisions
♦ Engineering and construction	♦ Software capabilities
♦ External affairs	♦ Technology deployment
♦ Governmental and regulatory affairs	♦ Workforce management
♦ Marketing and product management	
♦ Network planning	

Mr. Martin H. Skeer, Ph.D., CMC®, continued
Executive Consultant II

**ELECTRIC
UTILITY PROJECT
MANAGEMENT &
CONSULTING
EXPERTISE**

As a *Lead Consultant* Dr. Skeer conducted financial and technical analysis on behalf of the Transmission Agency of Northern California and Level 3 Communications to supplant an existing System Control and Data Acquisition (SCADA) microwave system with a fiber optic network. He worked with the Level 3 team to develop requirements and formulate contractual arrangements for indefeasible right to use, colocation, and professional services contractual agreements. (2005 – 2006)

Dr. Skeer conducted an operations review for the Chelan (WA) Public Utility District (CPUD) that identified the most attractive options for increasing the efficiency and effectiveness of the existing outside party/joint use program.

- ◆ He provided an independent, expert review that evaluated organization, operations and administration functions; assessed the outside party/joint use program relative to CPUD's current and future requirements and industry best practices; and identified key issues for further analysis and action. He assessed activities associated with operating and administering joint use of CPUD assets.
- ◆ As activities were highly fragmented across organizations and personnel, Dr. Skeer developed a "virtual cost center" analysis to bring disparate activities together in a cohesive framework so that the underlying costs and personnel resources could be clearly defined. With building blocks in place, underlying costs associated with these activities were identified, which provided a basis for establishing a compensatory rate structure to ensure that CPUD customers were not subsidizing third parties. (2004 – 2005)
- ◆ As a subject matter expert on pole loading and shared electric/telecom use, Dr. Skeer developed a proprietary utility pole-loading model in conjunction with the CPUD engagement, to assess critical field structural overloading problems associated with distribution and transmission infrastructures from both functional and policy perspectives. This analysis provided an expeditious means of determining loading profiles relative to NESC standards, including actual stresses under "as built" field conditions, together stress that would occur under critical snow and wind "design loads." The model analyzed the incremental contribution of each attaching entity (electric, telecom, cable television & fiber) together with the cumulative loading of all attaching entities. (2005)



Mr. Martin H. Skeer, Ph.D., CMC®, continued
Executive Consultant II

**ELECTRIC UTILITY
PROJECT
MANAGEMENT &
CONSULTING
EXPERTISE
(CONTINUED)**

Dr. Skeer prepared a market evaluation of Central Hudson Gas & Electric surplus lands along the company's rights of way and freestanding sites. Issues included: willingness to take "subject to" contracts; time allowance for site plan approval; revenue requirements over time; phased rollout of properties to maximize returns and realize expedient sales. (2005)

Dr. Skeer prepared a business case to assess financial opportunities that were afforded by assets of Potomac Electric Power Company's (PEPCo's) communications antenna leasing business, involving transmission and communications tower sites that serve as platforms for wireless facilities. He incorporated business models that assigned existing lease rights to a third party in exchange for a lump sum payment in the current year. Business case analysis encompassed: value propositions and rationale; current operating environment; business strategy; competitive assessment; critical success factors; business risk factors; pro forma financial results; organizational roles within PEPCo; possible exit strategies and sunk costs. (2003)

**ELECTRIC UTILITY &
COMMISSION PROJECT
MANAGEMENT &
CONSULTING
EXPERTISE**

Dr. Skeer developed a series of business cases to assess the potential increase in revenues from Ameren Service Corporation's joint use assets from technical, market and financial perspectives. He identified target firms in key sectors for potential acquisition; collected and analyzed data on competitive pricing of services; and created a preliminary scope and framework for the new Ameren Services business model and revenue targets. Preliminary resource requirements and key risks and drivers for successful implementation were identified. (2001)

As Project Manager, Dr. Skeer conducted business case analysis and network planning studies on behalf of Florida Municipal Power Agency to build and lease an 850-mile backbone fiber network for providing SCADA and broadband telecommunication services to its 20+ member cities. He assessed the viability of leasing unused dark fiber capacity on the backbone network to offset network capital expenditures. The project entailed establishing specific route options for building the proposed fiber network; optimizing fiber network capacity, preparing capital and operations budget estimates, and preparing design/build performance specification for the fiber network construction phase. He was awarded the contract for implementation study after completion of analysis that gauged project feasibility and identified a preferred network configuration comprised of leased and new-construction facilities. (1999 – 2000)

Mr. Martin H. Skeer, Ph.D., CMC®, continued
Executive Consultant II

**ELECTRIC UTILITY &
 COMMISSION PROJECT
 MANAGEMENT &
 CONSULTING
 EXPERTISE,
 CONTINUED**

As *Project Manager*, Dr. Skeer assessed market opportunities for sale of fiber transport services (bandwidth) and fiber capacity (dark fiber) for the cities of Santa Clara (a.k.a. Silicon Valley Power) and Anaheim. He supported the municipalities in determining the merits of prospective partnership agreements with telecommunications service providers for the purpose of sharing construction and operating costs. Dr. Skeer evaluated the replacement value of the cities' fiber optic backbone routes as a basis for establishing business relationships and joint business opportunities. He negotiated telecommunications services partnership agreements between the municipal utilities and competitive local exchange carriers. He developed business models of the existing and expected information industry players (e.g., CATV operators, local and long distance telephone companies, competitive access providers), and their possible roles as partners or licensees of local transport. (1997 – 1999, 2002 – 2003)

As *Project Manager*, Dr. Skeer developed business strategies for deploying an advanced telecommunications network throughout the Truckee-Donner (California) Public Utility District (TDPUD) serving area for the purposes managing the District's internal operations more efficiently; delivering more competitive services and “increasing accessibility to the information superhighway” on behalf of TDPUD's constituents; and providing strategic telecommunications services as a potential source of additional revenues. He identified and evaluated strategic alternatives for informed decision making with respect to the TDPUD's electric utility's role in telecommunications, laying the groundwork for detailed investigations to support infrastructure development and substation analysis. He also conducted negotiations for structuring joint ventures on behalf of TDPUD, which included:

- ◆ An agreement to facilitate conduit construction planning and implementation on behalf of a long distance carrier by establishing a preferred route layout within the strategically located Donner Pass corridor (across the High Sierras), and obtaining construction permits.
- ◆ Construction of a 32-mile aerial fiber optic network that would accommodate requirements of both TDPUD and a CATV provider on a single, shared backbone facility. Business and residential services, for Internet, data transport, security, and telephony were to be provided on jointly owned fiber under a partnership arrangement. (1998 – 1999)



Mr. Martin H. Skeer, Ph.D., CMC®, continued
Executive Consultant II

**ELECTRIC UTILITY &
 COMMISSION PROJECT
 MANAGEMENT &
 CONSULTING EXPERTISE,
 CONTINUED**

Dr. Skeer, as *Lead Consultant*, negotiated a resale and interconnection agreement between CLECo (Central Louisiana Electric Co.) and BellSouth; assisted CLECo in determining where it might develop metropolitan area networks within communities and between communities in their service territory. He examined various distribution alternatives, including: wireless, cable, fiber, and Digital Subscriber Line, to determine the most economical and compatible arrangements for its target market. (2000)

On behalf of Toronto Hydro, Dr. Skeer developed a business model to assess the market for broadband telecommunications services in the City of Toronto, and the capital investment associated with broadband fiber network construction to accommodate demand within major office building in the company's service area. He valued the market value of Toronto Hydro's facilities that provide access to a substantial majority of office buildings throughout the metropolitan area. (2000)

**SUPPORT TO
 SCHUMAKER & COMPANY
 ON PROJECTS**

Dr. Skeer supported Schumaker & Company in the analysis, documentation, and verification of Verizon NY's existing service quality plans and practices of five Verizon Incentive Plan (VIP) service objectives (including customer trouble report rate, percent out of service over 24 hours, percent installation completed in five days, PSC complaints, and outliers) in the context of NY telephone service standards. He assessed company guidelines with respect to applicable service quality performance standards, including reasonably foreseeable events and contingencies. He developed and documented recommendations to improve or modify these service quality practices and/or plans where existing plans and practices were not sufficient to ensure that applicable standards were met. Reviewed Verizon NY's processes for service quality performance and its employees, technology, and work processes related to the planning, design, construction, installation, maintenance, repair, and delivery of product to retail customers within Verizon NY's service territory. (2005)

Mr. Martin H. Skeer, Ph.D., CMC®, continued
Executive Consultant II

Energy and Telephone Utilities Experience

♦ Ameren Corporation	♦ Guam Telephone Authority
♦ Bell Telephone Company of Pennsylvania	♦ Illinois Bell Telephone Company
♦ Central Hudson Gas & Electric Company	♦ New York Telephone Company
♦ Contel of Illinois, Inc.	♦ Qwest Communications, Inc.
♦ Contel of Texas, Inc.	♦ South Central Bell Telephone Company in Kentucky
♦ Contel/GTE New York	♦ Telephone Electronics Corporation
♦ Continental Telephone Company of Pennsylvania	♦ Toronto Hydro
♦ General Telephone Company of Pennsylvania	♦ United Telephone Company of Pennsylvania, Inc.
♦ GTE Corporation	♦ United Telephone Company of Texas, Inc.
♦ GTE North-Illinois Operations	♦ Verizon New York, Inc.
♦ GTE North-Pennsylvania Operations	
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Regulatory Authorities and Associations Experience

♦ Anaheim (CA), City of	♦ Pension Guarantee Trust Corporation
♦ Arizona Corporation Commission	♦ Potomac Electric Power Company
♦ Burlington (VT), City of	♦ Public Service Electric & Gas Company
♦ Chelan (WA) Public Utility District	♦ Public Utilities Commission of Ohio
♦ Colorado Public Utilities Commission	♦ Public Utility Commission of Texas
♦ District of Columbia Public Service Commission	♦ Sacramento Builders Exchange
♦ Florida Municipal Power Agency	♦ Silicon Valley Power (Santa Clara, CA)
♦ Guam Public Utility Commission	♦ Small Business Development Center (CA)
♦ Illinois Commerce Commission	♦ Tennessee Public Service Commission
♦ Kansas Corporation Commission	♦ Transmission Agency of Northern California
♦ Kentucky Public Service Commission	♦ Truckee-Donner (CA) Public Utility District
♦ Long Island Power Authority	♦ West Sacramento (CA), City of
♦ New York Public Service Commission	
♦ Pennsylvania Public Utility Commission	



Ms. Gail E. Stopar

Support Consultant & Analyst

BACKGROUND

Ms. Gail Stopar has 22 plus years of business and personnel management, corporate and academic training, software engineering, and technical writing experience in the computer, banking, and automotive industries. She has comprehensive experience leading documentation and training areas, composing, editing, and maintaining documents, databases, web sites and spreadsheets. Additionally, Ms. Stopar has extensive cross-functional experience in computer software/tools, quality methodology, and software engineering. Her experience has demonstrated her ability to interact and communicate effectively across all organizational levels; develop and teach employees, management, and public courses; work independently or as part of a team; prioritize and problem-solve effectively during crunch times and/or while multi-tasking; and service both internal and external customers. Prior to joining Schumaker & Company, she held various positions with Schoolcraft College, Digital Equipment Corporation, Program Planning Professionals, Inc., Software Services, Virtual Services, Inc., World Computer Corporation, Oakland County's Computer Services (MI), and Macomb County Schools Employees Credit Union (MI).

EDUCATION & CERTIFICATIONS

Ms. Stopar holds an MSA in Human Resource Management from Central Michigan University and a BS in Quality Management from Cleary University. She also holds an Associate in Liberal Arts with a concentration in Business/Computer Science from Schoolcraft College and a Certificate in Accounting from Oakland Community College.

PROFESSIONAL AFFILIATIONS & CERTIFICATIONS

- ◆ Adjunct Faculty for Schoolcraft College (MI) Continuing Education Services Business and Computer division, 2001-present
- ◆ Microsoft Office Specialist core-certified in Microsoft Project 2000 and Microsoft Outlook 2002, and expert-certified in Microsoft Word 2002
- ◆ Founder and member (1997-present) of the Microsoft Project Users Group (MPUGlobal) – holding MPUGlobal Board of Directors position, 1997-2001
- ◆ Editor-in-Chief of *The Project Network Magazine*, the MPUGlobal quarterly publication, 1997-2001
- ◆ Member of Association of Proposal Management Professionals (APMP), 2004-present

ARTICLES PUBLISHED

- ◆ *Business Continuity: Security Starts Within*, Executive Renaissance Forums Fall 2003 newsletter, *The Forum*



Ms. Gail E. Stopar, continued
Support Consultant & Analyst

**SENIOR
MANAGEMENT
EXPERIENCE**

Ms. Stopar was a *Business Director* with Program Planning Professionals, Inc. (Pcubed) where she managed the General Motors North American business account and all of its program management specialists. Responsibilities included new business development, expanding existing contracts, developing new relationships and contract opportunities, and managing overall profitability and staff of the assigned business. Strategic internal corporate planning and multi-level client management interfacing developed the client account and coordinated/facilitated Pcubed's resources and payroll into a one million dollar annual revenue stream. Her human resource (HR) skills were invaluable in planning and developing ways to build organizational effectiveness, manage employee morale, build teams, and enhance productivity; while working to improve employee career development through designed and delivered training programs and HR initiatives. Her professional credibility in upholding corporate and client confidentiality with senior management level issues and employee personnel matters in accordance with all generally accepted, corporate and government standards has lead to efficient and productive work environments.

As a *Business Unit Manager*, Ms. Stopar established, marketed and managed Pcubed's interest in MPUG, the Microsoft Project Users Group, a Pcubed/Microsoft® corporate partnership. She was instrumental in the launch of MPUG as a recognized organization, MPUG's global growth, and building Pcubed's relationship with Microsoft. Management responsibility for all operational business functions with a full-time staff and 85 worldwide volunteer officers covering 11 regional chapters included membership communication, statistical reporting, maintenance, and tracking performed through database and web site technologies. Her delivery of technical support, networking opportunities, newsletters, and shared expertise to thousands of Microsoft® Project software users while marketing Pcubed strategic corporate planning was critical to provide sales leads and establish world-wide recognition of Pcubed's Project Management knowledge.

**ACCOUNTING
EXPERIENCE**

While at Macomb County Schools Employees Credit Union, she was an accounting assistant and computer operator where she reviewed policies, audited controls, and reconciled six financial accounts, while maintaining an efficiently running computer system. While at World Computer Corporation, she managed the accounts payable system. MPUGlobal's membership accounting system was handled using QuickBooks software and Ms. Stopar assists with the Schumaker & Company accounting practices.

Ms. Gail E. Stopar, continued
Support Consultant & Analyst

**PROJECT
MANAGEMENT
EXPERIENCE**

Ms. Stopar has participated as *Project Manager* on numerous projects for a variety of companies, as well as providing project management services. She has attended and taught numerous project management training courses, and is a member of the Microsoft Project Association.

Most recently, she has used Microsoft Project 2002 and 2003 for planning, scheduling, resource loading, reporting, and monitoring project progress.

With over 22 years of business experience, Ms. Stopar has been the *Project Manager* for many different assignments, including human resource management, quality reviews; training, software engineering, process improvement, and technology implementation projects.

In addition to the everyday project management of a *Business Unit Manager*, Ms. Stopar developed and delivered corporate training to staff and management professionals' in project management methodologies and tools (Primavera® and Microsoft® Project) as well as Project Management Institute (PMI) standards to fulfill career development goals. Corporate and Microsoft Project Users Group (MPUGlobal, now the Microsoft Project Association) member training was developed and delivered via Microsoft® events, user meetings, and scheduled class sessions.

As a *Software Engineer* for Digital Equipment Corporation, she designed, developed/programmed, and tested Computer Numerical Control (CNC) communications software (on/off-site), while providing in-depth U.S. product software technical support to companies like Westinghouse, Thiokol, EG&G, Boeing, and Cummins Engine. Major responsibilities included development and updating of project schedules, tracking online systems problems and corrections, and coordinating software releases. To establish open communications with a disbursed engineering team in France, U.S., Italy and Germany, she communicated software engineering activities, maintenance, and tracking through a working library database. Thereby, earning Ms. Stopar a 1989 Digital Equipment Corporation Software Services Excellence Award.

As an *Adjunct Faculty Member* for Schoolcraft College (MI) for six years, Ms. Stopar provided American Management Association (AMA) certification courses to the general public and all levels of computer courses for the Continuing Education Services division. Many of which needed development.



Ms. Gail E. Stopar, continued
Support Consultant & Analyst

**TECHNICAL
 WRITING AND
 DOCUMENTATION
 EXPERIENCE**

As *Documentation Services Manager*, Ms. Stopar was responsible for strategic departmental planning relating to contract work for Ford Motor Company, internal and external customers, and multimedia/Web development. Her focus to work with clients, like the Ford Fairlane Training & Development Center (FTDC), to ensure training and documentation efforts were kept to their standards during new or revised project efforts produced best-in-class results. She has supported management and human resource initiatives regarding policy and procedure development, job description development, International Standards Organization (ISO) 9000 certification process project endeavors, and design and development of course materials including hardcopy and electronic help. Direct reports included Technical Writers, Instructional Systems Designers, and Multimedia Technicians.

As *Senior Technical Writer*, Ms. Stopar has performed as team lead for product engineering writer staff; developed work statements and large-scale proposals for field sales teams; created custom project engineering quotes, estimates, test plans, schedules and functional specifications for new sales; and documented new or existing software products. During an effort to coordinate Digital Equipment Corporation's U.S. engineering writer process for standardized writing methodology, Ms. Stopar received a Corporate Team Recognition Award.

As *Editor-in-Chief* of *The Project Network Magazine*, the MPUGlobal organization's quarterly publication for three-plus years, Ms. Stopar was responsible for membership communication. All articles, advertising, graphics, and announcements were written, reviewed, and/or edited.

**WEB SITE
 DEVELOPMENT
 EXPERIENCE**

Ms. Stopar developed, launched (1997), and maintained the MPUGlobal (now MPA) web site (www.mpug.org) for its first four years using Microsoft® FrontPage. In order to improve the system over time, later development included the use of Microsoft's Visual Interdev for active server pages, online security site connections, online application processing, and online membership payments.

Ms. Stopar also developed, launched (2004), and maintained the Association of Proposal Management Professionals Greater Midwest Chapter website (www.apmp.org/midwest) using Microsoft® Publisher and Microsoft® FrontPage.

Most recently Ms. Stopar developed and launched (2005) the Michigan Chapter of the Institute for Management Consultants USA website (www.imcmi.org) using Microsoft® Publisher.

Ms. Gail E. Stopar, continued
Support Consultant & Analyst

**SOFTWARE
ENGINEERING
AND TECHNICAL
SUPPORT
EXPERIENCE**

As a *Software Engineer* for Digital Equipment Corporation, she designed, developed and programmed, and tested Computer Numerical Control (CNC) communications software (on/off-site), while providing in-depth U.S. product software technical support to companies like Westinghouse, Thiokol, EG&G, Boeing, and Cummins Engine. Major responsibilities included development and updating of project schedules, tracking online systems problems and corrections, and coordinating software releases. To establish open communications with a disbursed engineering team in France, U.S., Italy, and Germany, she communicated software engineering activities, maintenance, and tracking through a working library database. Thereby, earning Ms. Stopar a 1989 Digital Equipment Corporation Software Services Excellence Award.

**ACADEMIC
EXPERIENCE**

Ms. Stopar has extensive experience interacting with both the corporate employee and collegiate individuals in classroom settings and business seminars. Having worked with a variety of business experiences and technical expertise levels of computer users, she has been able to evaluate, recommend and develop new courses to accommodate weaknesses in existing offerings. While a *Business Unit Manager*, she developed and delivered corporate training to staff and management professionals' in project management methodologies and tools (Primavera® and Microsoft® Project) as well as Project Management Institute (PMI) standards to fulfill career development goals. Corporate and Microsoft Project Users Group (MPUGlobal) member training was developed and delivered via Microsoft® events, user meetings, and scheduled class sessions.

As an *Adjunct Faculty Member* for Schoolcraft College (MI) for six years, Ms. Stopar provided American Management Association (AMA) certification courses to the general public and all levels of computer courses for the Continuing Education Services division.

As an *Audio Visual Training Coordinator*, she created and produced professional training productions for credit union computer operations that included:

- ◆ Computer Maintenance: An Operator's Responsibility
- ◆ Data Processing Fundamentals
- ◆ Introduction to Your In-House Computer System
- ◆ Numerous internal training productions

Representative consulting projects are included on the following pages. Philadelphia Gas Works, Pennsylvania-American Water Company, PECO Energy, Water Services Corporation of South Carolina, City of Detroit, City of Dearborn management and operations studies were Schumaker & Company projects; on the Verizon NY project Schumaker & Company was a subcontractor.



Ms. Gail E. Stopar, continued
Support Consultant & Analyst

Philadelphia Gas Works

Consultant, Analyst, & Editor

- ◆ Data and statistics research and benchmarking analysis
- ◆ Focused analyses in various functional areas
- ◆ Document preparation and delivery

Performed a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this management and operations audit is to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted.

Pennsylvania-American Water Company

Consultant, Analyst, & Editor

- ◆ Data and statistics research and benchmarking analysis
- ◆ Focused analyses in various functional areas
- ◆ Document preparation and delivery

Performed a stratified management and operations audit of Pennsylvania-American Water Company (PAWC) for the Pennsylvania Public Utility Commission (PaPUC) with the primary focus areas being costs borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses are of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

Ms. Gail E. Stopar, continued
Support Consultant & Analyst

PECO Energy Company

Support Consultant, Editor, & Analyst
June 2006 – August 2007

- ◆ Data and statistics research and benchmarking analysis
- ◆ Focused analyses in various functional areas
- ◆ Document preparation and delivery

Performed a stratified management and operations audit of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC) in with the primary focus areas being PECO, Exelon Energy Delivery (EED), and Exelon Business Services Company (EBSC) functional areas, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assessed the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

Water Services Corporation of South Carolina

Consultant
June 2006 – April 2007

- ◆ Human resource policies and procedures
- ◆ Turnover rates and compensation
- ◆ Training policies and practices

Performed a management and operations review and assessment of Water Services Corporation (WSC) of South Carolina for the State of South Carolina Office of Regulatory Staff (ORS) with specific focus on the operations of the five subsidiary water and wastewater companies that operate in South Carolina, those being:

- ◆ Carolina Water Service, Inc. (CWS)
- ◆ Tega Cay Water Service, Inc. (TCWS)
- ◆ Utilities Services of South Carolina, Inc. (USSC)
- ◆ Southland Utilities, Inc. (SU)
- ◆ United Utility Companies, Inc.(UUC)

The bottom line of this project was to determine whether the rates charged to the South Carolina ratepayers can be reduced through the implementation of greater efficiencies in organizations, operations, or both. Additionally, another relevant analysis was a determination of whether the ratepayers of South Carolina are being properly and economically served by the range of corporate services that are provided to the WSC operations in South Carolina by the managers located in both West Columbia and Northbrook.



Ms. Gail E. Stopar, continued
Support Consultant & Analyst

City of Detroit, Michigan

Consultant and Analyst

- ◆ Data research and investigation
- ◆ Performance measures/metrics or other quantitative assessments

Recommended cost reduction planning and potential revenue enhancement initiatives based on process mapping and analysis of key processes for public works organization. These plans/initiatives address risks associated with implementation, not only within the designated departments, but especially its potential impact on the delivery of services to the residents and surrounding communities.

City of Dearborn, Michigan

Analyst

- ◆ Camp Dearborn

Provided investigational assistance for an operations review and assessment of Camp Dearborn that included reviewing all key positions, evaluating staffing levels, reviewing operating revenues and expenditures and business policies, and more.

Verizon New York

Analyst & Editor

- ◆ Document management and administration
- ◆ Quality control
- ◆ Report preparation

Documented the findings based on identifiable and measurable information and data, to ensure that Verizon NY's existing service quality plans and practices of the five VIP service objectives (customer trouble report rate, percent out of service over 24 hours, percent installation completed in five days, Public Service Commission (PSC) complaints, and outliers), NY telephone service standards, and company guidelines meet applicable service quality performance standards, including reasonably foreseeable events and contingencies. Compiled, wrote, and coordinated input from ten consultants to produce the final reports delivered to the PSC.

Schoolcraft College

Adjunct Faculty

- ◆ American Management Association (AMA) certification courses
- ◆ Computer courses

Supported and delivered business and computer courses for the Continuing Education Services Division. Evaluated, recommended and developed new courses to accommodate weaknesses in existing public offerings. Courses included: *Managing the Customer Satisfaction Process*, *Fundamentals of Business Writing*, *Getting More Done Through Delegation*, *How to Interview Effectively*, *How to Build High Performance Teams*, *Computer Basics & Internet for Seniors*, *Microsoft® Office 2000 and 2002 – An Introduction*, *Microsoft® Office 2000 and 2002 – Level 2: Applying & Integrating Applications*, *Microsoft® Windows98 (and 98 for Seniors)*, *Microsoft® XP – An Introduction*, *Microsoft® Word XP – Level 1 and Level 2*, *Microsoft® Excel – Level 1*, *Computer Art with a Flair!* – *Microsoft® Paint*, *PowerPoint*, *Publisher*, *Adobe® PageMaker*, *Creativity with Microsoft® Word: For the Beginner*, and *Microsoft® PowerPoint 2002 – Presentation Software for Effective Communication*.

Ms. Gail E. Stopar, continued
Support Consultant & Analyst

Virtual Services, Inc.

Documentation & Training Services Manager

- ◆ Customized training services
- ◆ Documentation development, packaging, and delivery
- ◆ Proposal and project planning and development

Delivered standard and customized client training for Ford Motor Company through specialized design, documentation, and delivery. Direct reports were Technical Writers, Instructional Systems Designers, and Multimedia Technicians. Worked with Fairlane Training & Development Center (FTDC) to ensure PDGS (Ford's CAD system) classes were kept to Ford standards. Delivered and recommended Virtual Services' proposals in meetings with Ford Motor Company and other customers. Delivered and worked with Ford Purchasing personnel on purchase order issues or contracts; resolved purchase order issues with appropriate Ford activity (i.e., Ford, SNAPP, AdTEAM).

Program Planning Professionals, Inc. (Pcubed)

Business Director & Business Unit Manager

- ◆ Account management
- ◆ New business development & strategic planning
- ◆ Project planning
- ◆ Proposal development
- ◆ Client solutions
- ◆ Staffing allocation & development
- ◆ Editor-in-chief
- ◆ Web site development

Responsible for new business development within major corporate sectors/accounts, expanding existing contracts, developing new relationships and contract opportunities, and managing overall profitability and staff of assigned business. Managed budget planning for headcount, staff and client training, facilities, outside services, and marketing. Initiated and/or lead organizational improvement activities.

Coordinated business planning and project management efforts between program managers and customers while ensuring satisfaction. Established MPUG's own billing system and monitored invoicing, applications for membership, and accounts payable/receivable. Lead, coached and mentored direct reports through effective management and leadership techniques. Established and managed an MPUGlobal Board of Directors adhering to Roberts Rules-of-Order. Created and maintained the MPUGlobal website (www.mpug.org). Acting editor-in-chief for quarterly 16-20 page newsletter.

Software Services

Senior Technical Writer

- ◆ Documentation development
- ◆ Project scope coordination

Provided analysis, development and maintenance for a large, confidential, online Ford Motor Company Powertrain strategy manual.



Ms. Gail E. Stopar, continued
Support Consultant & Analyst

Digital Equipment Corporation	Developed and updated project schedules, tracked online systems problems and corrections, and coordinated software releases. Created custom project engineering quotes, estimates, test plans, schedules and functional specifications for new sales and worked independently to meet those goals. Established open communications with product engineering team in France and European support groups in Germany. Identified new or expanding business opportunities. Ensured clarity, completeness, technical accuracy, and quality of documents produced. Lead programmer for design, development, and testing of CNC Communications Software (on/off-site) using VAX Fortran and Assembler languages, and provided U.S. customer base in-depth technical support for this manufacturing communications software.
<i>Senior Technical Writer & Software Engineer</i>	
◆ Documentation development ◆ Project management ◆ Software design, development, testing and deployment ◆ Technical support	
World Computer Corporation	Created centralized software documentation storage library system. Analyzed, designed and created software documentation for credit union financial systems. Deployed cooperative program with local high school to staff training audio/visual program and keep expenditures to a minimum. Designed, story boarded, produced, and sold multiple VHS training tapes designed for credit union computer operations. Lead programmer for credit union online operations systems using Fortran and Assembler code. Instrumental in the development and delivery of Individual Retirement Account (IRA) financial programming into credit union systems.
<i>Documentation Specialist & Software Engineer</i>	
◆ Documentation development ◆ Software (re)design, testing and deployment ◆ Audio/Visual training development	
Oakland County (MI)	Provided electronic data entry and document management for Oakland County payroll, taxes, police records, and more. Coordinated and scheduled day-to-day entry activities and computer job break-down and packaging efforts.
<i>Documentation Specialist</i>	
◆ Electronic input systems ◆ Quality inspection ◆ Scheduling management	
Macomb County Schools Employees Credit Union (MCSECU)	As the accounting assistant, Ms. Stopar maintained six accounts for reconciliation and daily teller balances for MCSECU. On weekends, she would operate and maintain the Honeywell mainframe computer.
<i>Accounting Assistant & Computer Operator</i>	
◆ Reconciliations ◆ Computer systems operation	

Ms. Jaye M. Kain

Project Administrator & Analyst

BACKGROUND

Ms. Jaye M. Kain has over 20 years of business experience. Her background, which includes a blend of experience in project administration and management, training, scientific research, and grant writing, provides her with a unique perspective from which to manage investigations and evaluate findings of investigators. Her communication skills make her a natural facilitator for the assimilation of data produced by seemingly disparate specialties.

EDUCATION & CERTIFICATIONS

Ms. Kain holds one Bachelor's degree in Environmental Geoscience and a second Bachelor's degree in Geology from Edinboro University of Pennsylvania. She also holds a Master of Science in Geology from the University of Michigan.

CONSULTING EXPERIENCE

Ms. Kain has served as a *Project Director* for a variety of programs. Her focus was primarily on scientific grants funded by state and federal programs such as the Department of Energy, Environmental Protection Agency, and Department of Natural Resources. After a grant was awarded, organizations contracted Ms. Kain to oversee the spending and subsequent reporting to the appropriate agency(ies). This created a situation where Ms. Kain had the opportunity to establish a long-term relationship with the clients and acted on their behalf and in their best interest.

In the case of the City of Ecorse, Michigan, as money flowed in, residents and business owners became interested in applying for more funds. The contract became long-term and has, at last count, eight people assigned to procuring and managing the grant programs.

DOCUMENTATION EXPERIENCE

Ms. Kain also has significant experience and expertise in the area of documentation control. She has served as document specialist for numerous organizations and implemented the initial system documentation for an investor driven start-up. Additionally, she has been responsible for the project's subcontracting and subsequent reporting to federal agencies and is well acquainted with federal and international standards.

PROFESSIONAL AFFILIATIONS

- ◆ International Association of Geochemistry
- ◆ Geological Society of America
- ◆ Association of Women Geologists



Ms. Jaye M. Kain, continued
Project Administrator & Analyst

PRIOR EXPERIENCE

Prior to joining Schumaker & Company, Ms Kain was with:

- ◆ Neighborhood Funding Resources, Michigan as *Lead Grant Writer & Project Director* – a corporation established to assist cities in obtaining federal funding for community based projects.
- ◆ The Ann Arbor IT Zone, Michigan as *Manager* – a non-profit organization dedicated to helping local entrepreneurs and information technology professionals.
- ◆ The Richard Hale Shaw Group, Michigan as *Business Manager* – where she was more specifically the operations manager and performed business development/marketing for a group of developers and trainers in programming languages.

Representative consulting projects are included on the following pages. Philadelphia Gas Works, Pennsylvania-American Water Company, PECO Energy, and Water Services Corporation of South Carolina management and operations audits were Schumaker & Company projects.

Ms. Jaye M. Kain, continued
Project Administrator & Analyst

Philadelphia Gas Works

Project Administrator & Analyst

- ◆ Project administration and support
- ◆ Analytical support for diagnostic review of functional areas and in-depth analyses of pre-identified issues

Performed a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this management and operations audit is to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted.

Pennsylvania-American Water Company

Project Administrator & Analyst

- ◆ Project administration and support
- ◆ Analytical support for diagnostic review of functional areas and in-depth analyses of pre-identified issues

Performed a stratified management and operations audit of Pennsylvania-American Water Company (PAWC) for the Pennsylvania Public Utility Commission (PaPUC) with the primary focus areas being costs borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses are of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

PECO Energy Company

*Project Administrator & Analyst
June 2006 – August 2007*

- ◆ Project administration and support
- ◆ Analytical support for diagnostic review of functional areas and in-depth analyses of pre-identified issues

Performed a stratified management and operations audit of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission (PaPUC) in with the primary focus areas being PECO, Exelon Energy Delivery, and Exelon Business Services Company functional areas, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues (including affiliate transactions) assessed the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.



Ms. Jaye M. Kain, continued
Project Administrator & Analyst

***Water Services Corporation of
South Carolina***

*Project Administrator & Analyst
June 2006 – April 2007*

- ◆ Project administration and support
- ◆ Analytical support

Performed a management and operations review and assessment of Water Services Corporation (WSC) of South Carolina for the State of South Carolina Office of Regulatory Staff (ORS) with specific focus on the operations of the five subsidiary water and wastewater companies that operate in South Carolina, those being:

- ◆ Carolina Water Service, Inc. (CWS)
- ◆ Tega Cay Water Service, Inc. (TCWS)
- ◆ Utilities Services of South Carolina, Inc. (USSC)
- ◆ Southland Utilities, Inc. (SU)
- ◆ United Utility Companies, Inc. (UUC)

The bottom line of this project was to determine whether the rates charged to the South Carolina ratepayers can be reduced through the implementation of greater efficiencies in organizations, operations, or both. Additionally, another relevant analysis was a determination of whether the ratepayers of South Carolina are being properly and economically served by the range of corporate services that are provided to the WSC operations in South Carolina by the managers located in both West Columbia and Northbrook.

***City of Ecorse
Ecorse, Michigan***

Project Director

- ◆ Community rebuild grant
- ◆ Emerald ash borer grant
- ◆ Community build team
- ◆ Technology tools\infrastructure

Performed a variety of services for the City of Ecorse, Michigan including grant writing and project management. The grants were for such disparate topics as sediment remediation and EPA Phase II to community education and tree planting workshops for middle school children.

- ◆ Phase II site remediation
- ◆ Great Lakes
- ◆ NFL Carbon Mitigation Project
- ◆ Ecorse Rowing Club
- ◆ Eco-fair 2006

The overall purpose of the contract with Ecorse was to remedy years of pollution and neglect in the Downriver Detroit area and assist the leaders in their quest for an economically viable community still faced with crime and high unemployment.

Ms. Jaye M. Kain, continued
Project Administrator & Analyst

***Friends of the Detroit River
Dearborn, Michigan***

Project Manager & Lead Consultant

- ◆ Project management
- ◆ Grant writing
- ◆ Volunteer database

Managed the state and federal grant writing for the Friends of the Detroit River group holding the Required Action Permit (RAP) for the Detroit River. After the Environmental Protection Agency and Michigan Dept. of Natural Resources awarded grants, she managed all project time tables, subcontracting, and agency reporting and then developed a marketing strategy and e-mail campaign for fund raising, volunteer, and awareness events.

***U.S. Green Building Council
Michigan***

Project Director

- ◆ Grant writer
- ◆ Public policy committee

Acted as *Grant Writer* and *Project Director* for Southeastern Michigan's chapter of the national organization. The first Michigan Dept. of Energy grant received was to hold a series of seminars promoting sustainable development and assist planning departments in changing their code to reflect Leadership in Energy and Environmental Design standards. By bringing in architects and engineers knowledgeable in the practice of sustainability and offering sample code to local officials, small communities were given the opportunity to join the movement taking place nationally at virtually no initial cost to the town's budget. Also developed public policy committee marketing opportunities and standards in accordance with national standards, and was instrumental in instituting a speaker's bureau for use by local communities in gaining support from residents and business owners.

***Urban Farming
Detroit, Michigan***

Consultant & Project Director

- ◆ Standards and practices
- ◆ Obtained 501C3 status
- ◆ Business development and marketing

Guided the grass-roots Urban Farming organization and obtained their non-profit status. Wrote community grants soliciting funds from state programs, national foundations, and individual supporters. Also spearheaded a campaign to take the organization to a multi-city level with the intention of making this a national volunteer-based organization dedicated to end hunger in the inner cities through community operated gardens built on abandoned properties. Drafted letters of support to serve as templates for public officials and petition drives.



Ms. Jaye M. Kain, continued
Project Administrator & Analyst

Richard Hale Shaw Group
Ann Arbor, Michigan

Business & Operations Manager

- ◆ Network security
- ◆ Website maintenance and troubleshooting
- ◆ Document specialist
- ◆ Trade shows

Provided support to the Richard Hale Shaw Group that offered worldwide training opportunities to corporations with medium to large information technology departments. Managed all aspects of training sessions (on- and off-site), trade shows, and online courses. She recruited new consultants and acted as document specialist for accounting and certification purposes, maintained the website, and conducted customer surveys, (updating and managing the database).

Mr. Hachin Sunid, MCSE, MCSA, MCP, A+ Technology Support Consultant

BACKGROUND

Mr. Hachin Sunid has eight plus years as a *Computer Professional*, including three years as a *Network Administrator/Engineer*. He is a productive self-starter with a strong work ethic, consistently achieving goals set before him and demonstrating proven experience in network/hardware/operating system troubleshooting, PC assembly, system integration and technical support.

Having performed various professional functions for various professional organizations like Office World Inc., BriteView Technologies, and Stone Computers, Mr. Sunid is able to effectively communicate and work with all forms of management, engineers, administrators, and end users.

TECHNICAL SKILLS SUMMARY

- ◆ *Operating Systems & Enterprise Applications:* Windows 2003 Server, Windows Server 2000, Unix, Apache, Active Directory, MS Exchange, ISA Server, SQL, Symantec Anti Virus Corporate Server, SharePoint Server, Symantec Backup Exec
- ◆ *Protocols & Technologies:* VLAN, TCP/IP, PPTP, IPSec, NetBIOS, DNS, DHCP, SMTP, POP3, IMAP, Terminal Services, Remote Desktop, Telnet, MMC, IIS
- ◆ *Connectivity & Hardware:* WIFI, Ethernet, Cabling, Routers, Switches, Firewalls, Network Printers
- ◆ *Desktop & Programming:* Windows 95/98/2000/XP/Vista, Office 2000/XP/2003/2007, Outlook, Ghost, VMware, C++, VB, VBscript, VBA, PHP, HTML

EDUCATION & CERTIFICATIONS

Mr. Sunid holds a Bachelor of Science in Computer Science Engineering Technology from the University of Toledo.

TECHNICAL CERTIFICATIONS

- ◆ Microsoft Certified Systems Engineer (MCSE) 2000 and 2003
- ◆ MCSE 2000 and 2003: Security
- ◆ MCSE 2000 and 2003: Messaging
- ◆ Microsoft Certified Systems Administrator (MCSA) 2000 and 2003
- ◆ MCSA 2000 and 2003: Security
- ◆ MCSA 2000 and 2003: Messaging
- ◆ Microsoft Small Business Specialist
- ◆ Microsoft Certified Professional (MCP)
- ◆ CompTia A+ (A+)



Mr. Hachin Sunid, MCSE, MCSA, MCP, A+, continued
Technology Support Consultant

**NETWORK
ADMINISTRATOR/
ENGINEER
RESPONSIBILITIES**

- ◆ Remote and onsite installation, development, management, and support of hardware and software associated with clients and Schumaker & Company's information system and networks
- ◆ Design and implementation of LAN/WAN technologies along with as needed troubleshooting of various issues including network connectivity, software/hardware conflicts, and general break/fix
- ◆ User administration, file/directory, net applications, database, backup, security, hardware, etc.
- ◆ Overseer of information technology functions including administration of Windows 2000/2003, Active Directory, DNS server, Exchange server and SQL server, etc.
- ◆ Setup and management of handheld devices
- ◆ Documentation of all network hardware and software, including operating procedures and policies
- ◆ Develop, publish, and maintain in house web sites, such as OWA and SharePoint 2007 server
- ◆ Develop VB scripts for group policies, as well as custom applications using VBA.

Mr. Hachin Sunid's relevant project experience is listed on the following pages. All projects are Schumaker & Company projects.

Mr. Hachin Sunid, MCSE, MCSA, MCP, A+, continued
Technology Support Consultant

Philadelphia Gas Works

Technology Support Consultant

- ◆ Installation and configuration of job site computer network
- ◆ Hardware/software troubleshooting

Performed a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this management and operations audit is to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted.

Pennsylvania-American Water Company

Technology Support Consultant

- ◆ Installation and configuration of job site computer network
- ◆ Hardware/software troubleshooting

Performed a stratified management and operations audit of Pennsylvania-American Water Company (PAWC) for the Pennsylvania Public Utility Commission with the primary focus areas being costs borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assess the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

PECO Energy

Technology Support Consultant

- ◆ Installation and configuration of job site computer network
- ◆ Hardware/software troubleshooting

Performed a stratified management and operations audit of PECO Energy Company (PECO) for the Pennsylvania Public Utility Commission in with the primary focus areas being PECO, Exelon Energy Delivery, and Exelon Business Services Company functional areas, whose costs are borne ultimately by Pennsylvania ratepayers. Schumaker & Company's diagnostic review of functional areas and in-depth analyses of pre-identified issues assessed the condition of each functional area or business unit against evaluative criteria or expected business practice to determine if appropriate management controls, processes, and systems were in place. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.



Mr. Hachin Sunid, MCSE, MCSA, MCP, A+, continued
Technology Support Consultant

Wayne County Airport Authority

Technology Analyst

- ◆ Customer technology and services needs assessment
- ◆ Technology trends tracking
- ◆ Technology tools and training

Provided services to assist the Wayne County Airport Authority (WCAA) Information Technology Division in identifying technology business initiatives and updating its annual performance plan at the Detroit Metropolitan Wayne County Airport. Interviews with key management and staff were crucial to assess customer business needs and identify WCAA's technology initiatives for the next five (5) years, determine if changes are required of the Department of Technology services portfolio to continue to effectively and efficiently meet division business needs, determine the impact of current technology and/or airport business trends on the plan, and develop the plan to reflect project deliverables.

Town of Hilton Head Island

Technology Support Consultant

- ◆ Installation and configuration
- ◆ Hardware/software troubleshooting

Provided services related to an assessment of the Town of Hilton Head Island's current business processes, organization structure, staffing levels, and software that support the management of the Town's employee information. This study evaluated the performance of the subject organization, staffing, operations, and costs with the intended final result of identifying opportunities for improving, revising, or replacing the processes, organization structure, staffing levels, and software. Subsequently, produced a detailed draft organizational review report that was presented to the Town Board for review.

Ameri-serv Group

Information Technology Specialist

- ◆ On-going technical support
- ◆ Installation, configuration, general maintenance, network design and implementation

Performed a customer relationship management (CRM) systems review for this small service firm. Developed a disaster recovery plan for the older existing systems and began to develop and implement a migration plan for moving key line of business applications to a new software application platform. Migrated Ameri-serv to a Microsoft Small Business Server and implemented new firewall and Internet access. Provide ongoing support and administration for the past two years.

Mr. Hachin Sunid, MCSE, MCSA, MCP, A+, continued
Technology Support Consultant

City of Dearborn, Michigan

Information Technician/Support Consultant

- ◆ Customer technology and services needs assessment
- ◆ Technology tools and training

Assisted the City of Dearborn, who like many organizations, was faced with delivering essential services to its citizens with a reduced level of resources, by performing an assessment of selected units, specifically Camp Dearborn, as a means to streamline and consolidate its operations, eliminate non-essential services, and optimize overall level of resources involved in achieving its goals. Also provided consulting services to the City's Technology Committee regarding a definition of its role in relation to its five subcommittees, to MIS, and to City administration so that problems are efficiently resolved and progress is steady; definition of the role of the five subcommittees; and establishment of a one-year development plan to carry forward the recommendations of a previously-defined Technology Committee report.

O'Neal Construction

Information Technology Specialist

- ◆ On-going technical support
- ◆ Installation, configuration and troubleshooting of hardware and software related issues on desktops and the network.
- ◆ Hardware, software and networks troubleshooting

Originally engaged to correct technical problems associated with a Netware to Windows NT migration by another vendor, Schumaker & Company has been the IT department for O'Neal Construction for the last ten years. Numerous security and configuration issues were addressed in the original migration. Assisted in IT improvements, including workstation hardware and software upgrades, reconfiguring of Windows NT server, implementation of Exchange mail system, and enhancing Internet access capabilities. Recommended to management and implemented the migration to a new server and all new workstations to meet performance needs of the users. Provided ongoing network support. Performed five different server migrations and four different workstation/laptop refreshes.

Also designed and developed a construction cost projection model to develop cost projections on individual projects using ODBC connector to access historical construction costs for O'Neal's FOREFRONT accounting system (a Btrieve database) on a real time basis. The application used OLE to populate the information into an Access database for further analysis and presentation. It permits O'Neal Construction project managers to create real time costs projections throughout the construction project.



VI. Schedules and Budgets

This chapter presents the proposed schedule and budgets for the Schumaker & Company project team to perform the forthcoming review of Consolidated Edison Company of New York (CECONY). This chapter summarizes much of the detailed information that is contained in *Appendix B*.

Schumaker & Company uses Microsoft Project for estimating its projects. Various detailed (oversized) worksheets are contained in *Appendix B* as backup materials to the summary information contained in this chapter.

A. Overall Total Project Costs

Our overall total project cost (showing individual professional fees and out-of-pocket expenses and support services separately stated) is shown in *Exhibit VI-1*.

Exhibit VI-1
Project Summary Costs

Professional Fees	\$1,124,080
Travel Expenses	\$209,854
Supplies and Materials	\$22,482
Total	\$1,356,416

Our overall total project cost by staff members, using the fully loaded billing rates, is shown in *Exhibit VI-2*.



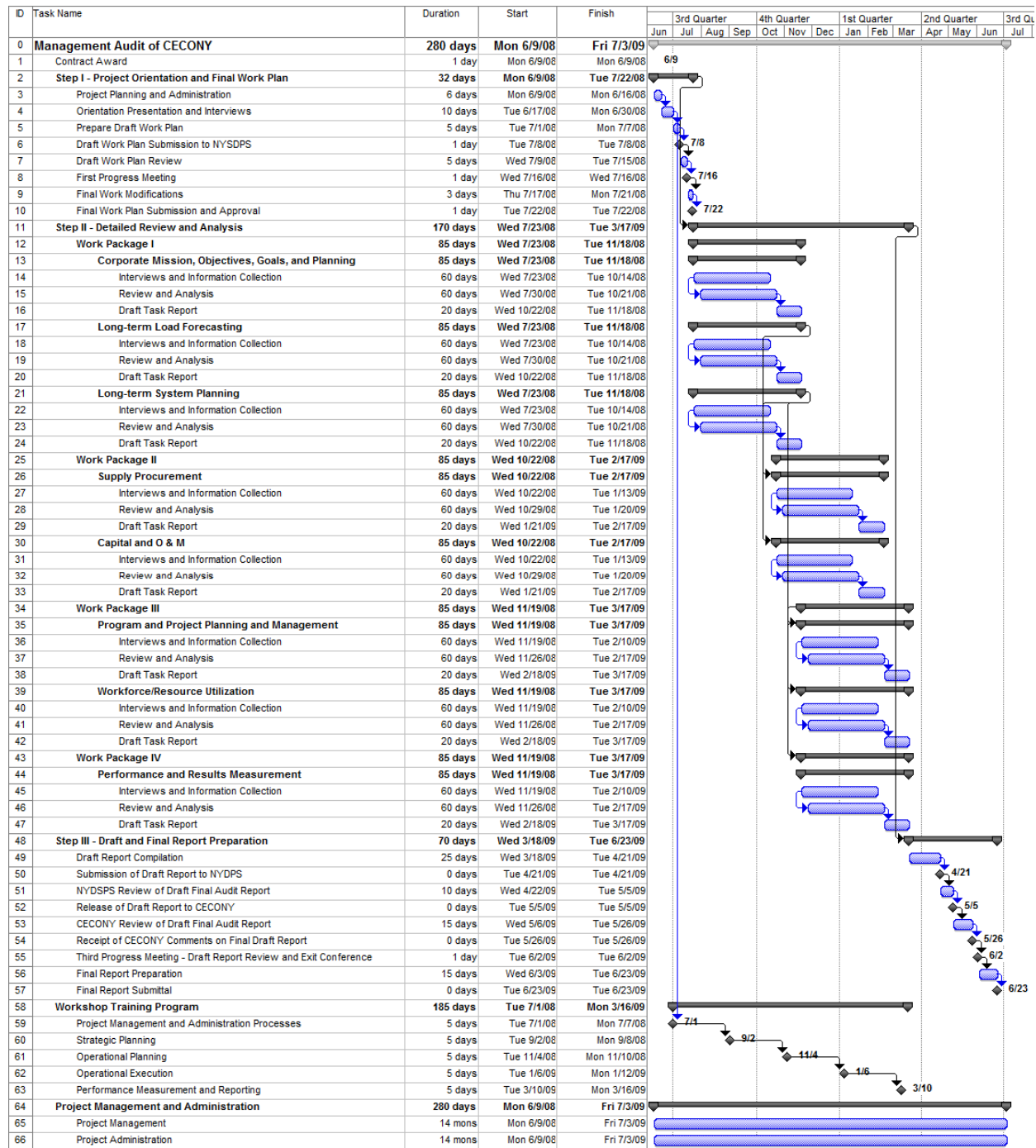
**Exhibit VI-2
Total Project Costs**

<i>Staff Member</i>	<i>Category</i>	<i>Rate</i>	<i>Total Hours</i>	<i>Total Fees</i>
Patricia Schumaker	Engagement Manager and Executive Consultant I	\$292	800	\$233,600
Dennis Schumaker	Project Manager and Executive Consultant I	\$292	1040	\$303,680
Julia Bodamer	Executive Consultant II	\$273	376	\$102,648
Lee Burgess	Executive Consultant II	\$273	296	\$80,808
D. Kerry Laycock	Executive Consultant II	\$273	256	\$69,888
Martin Murphy	Executive Consultant II	\$273	720	\$196,560
Martin Skeer	Executive Consultant II	\$273	376	\$102,648
Robert Rosenkoetter	Executive Consultant II	\$273	608	\$165,984
Gail Stopar	Support Consultant & Analyst	\$145	184	\$26,680
Jaye Kain	Project Administrator & Analyst	\$70	1056	\$73,920
Hachin Sunid	Technology Support Consultant	\$148	64	\$9,472
<i>Total Hours and Fees</i>			5712	\$1,356,416

B. Overall Project Schedule

Our overall schedule as shown in *Exhibit VI-3*.

Exhibit VI-3 Project Schedule



A more detailed schedule is provided in *Appendix B*.



Hours and Professional Fees

Based on our past experience, staff hours were determined by estimating the number of staff hours for each task area using the work breakdown structure. These hours were then used to determine the total expected costs of the project for our professional fees, including travel costs and supplies and materials, using our project cost estimating model.

Schumaker & Company's estimated hours by step, by consultant, and by work plan area are shown in *Exhibit VI-4*, *Exhibit VI-5*, *Exhibit VI-6*, *Exhibit VI-7*, and *Exhibit VI-8*. Our consultants charge their time on a daily basis to a maximum of 10 hours. Time worked in excess of 10 hours per day is not billed to the client.

Exhibit VI-4
Step I – Project Orientation and Final Work Plan Hours by Work Task

Work Loaded Tasks From Schedule	Duration	Total Hours
Step I - Project Orientation and Final Work Plan	32 days	472 hrs
Project Planning and Administration	6 days	48 hrs
Schumaker Dennis J.		24 hrs
Schumaker Patricia H.		24 hrs
Orientation Presentation and Interviews	10 days	264 hrs
Bodamer Juilia		24 hrs
Burgess Lee		24 hrs
Kain Jaye		24 hrs
Laycock D Kerry		24 hrs
Murphy Martin J.		24 hrs
Rosenkoetter Robert		24 hrs
Schumaker Dennis J.		24 hrs
Schumaker Patricia H.		24 hrs
Skeer Martin		24 hrs
Stopar Gail E.		24 hrs
Sunid Hachin		24 hrs
Prepare Draft Work Plan	5 days	144 hrs
Bodamer Juilia		16 hrs
Burgess Lee		16 hrs
Kain Jaye		16 hrs
Laycock D Kerry		16 hrs
Murphy Martin J.		16 hrs
Rosenkoetter Robert		16 hrs
Schumaker Dennis J.		16 hrs
Schumaker Patricia H.		16 hrs
Skeer Martin		16 hrs
First Progress Meeting	1 day	16 hrs
Schumaker Dennis J.		8 hrs
Schumaker Patricia H.		8 hrs

Exhibit VI-5
Step II – Detailed Review and Analysis Work Plan Hours by Work Task

Work Loaded Tasks From Schedule	Duration	Total Hours
Step II - Detailed Review and Analysis	170 days	3,160 hrs
Work Package I	85 days	1,000 hrs
Corporate Mission, Objectives, Goals, and Planning	85 days	320 hrs
Schumaker Patricia H.		80 hrs
Schumaker Dennis J.		80 hrs
Burgess Lee		160 hrs
Long-term Load Forecasting	85 days	320 hrs
Schumaker Dennis J.		80 hrs
Bodamer Juilia		120 hrs
Skeer Martin		120 hrs
Long-term System Planning	85 days	360 hrs
Schumaker Dennis J.		120 hrs
Murphy Martin J.		120 hrs
Rosenkoetter Robert		120 hrs
Work Package II	85 days	760 hrs
Supply Procurement	85 days	320 hrs
Schumaker Dennis J.		80 hrs
Bodamer Juilia		120 hrs
Skeer Martin		120 hrs
Capital and O & M	85 days	440 hrs
Schumaker Patricia H.		120 hrs
Schumaker Dennis J.		80 hrs
Murphy Martin J.		120 hrs
Rosenkoetter Robert		120 hrs
Work Package III	85 days	760 hrs
Program and Project Planning and Management	85 days	400 hrs
Schumaker Dennis J.		80 hrs
Schumaker Patricia H.		80 hrs
Murphy Martin J.		120 hrs
Rosenkoetter Robert		120 hrs
Workforce/Resource Utilization	85 days	360 hrs
Laycock D Kerry		120 hrs
Murphy Martin J.		120 hrs
Rosenkoetter Robert		120 hrs
Work Package IV	85 days	640 hrs
Performance and Results Measurement	85 days	640 hrs
Schumaker Patricia H.		80 hrs
Schumaker Dennis J.		80 hrs
Bodamer Juilia		80 hrs
Burgess Lee		80 hrs
Laycock D Kerry		80 hrs
Murphy Martin J.		80 hrs
Skeer Martin		80 hrs
Rosenkoetter Robert		80 hrs



Exhibit VI-6
Step III – Draft and Final Report Preparation Work Plan Hours by Work Task

Step III - Draft and Final Report Preparation	70 days	600 hrs
Draft Report Compilation	25 days	480 hrs
Schumaker Patricia H.		120 hrs
Schumaker Dennis J.		120 hrs
Murphy Martin J.		120 hrs
Stopar Gail E.		120 hrs
Final Report Preparation	15 days	120 hrs
Schumaker Patricia H.		40 hrs
Schumaker Dennis J.		40 hrs
Stopar Gail E.		40 hrs
Work Loaded Tasks From Schedule	Duration	Total Hours

Exhibit VI-7
Workshop Hours by Work Task

Work Loaded Tasks From Schedule	Duration	Total Hours
Workshop Training Program	185 days	184 hrs
Project Management and Administration Processes	5 days	48 hrs
Schumaker Patricia H.		16 hrs
Schumaker Dennis J.		16 hrs
Kain Jaye		16 hrs
Strategic Planning	5 days	40 hrs
Schumaker Patricia H.		8 hrs
Schumaker Dennis J.		8 hrs
Bodamer Juilia		8 hrs
Burgess Lee		8 hrs
Skeer Martin		8 hrs
Operational Planning	5 days	32 hrs
Schumaker Patricia H.		8 hrs
Schumaker Dennis J.		8 hrs
Bodamer Juilia		8 hrs
Skeer Martin		8 hrs
Operational Execution	5 days	32 hrs
Schumaker Patricia H.		8 hrs
Schumaker Dennis J.		8 hrs
Burgess Lee		8 hrs
Laycock D Kerry		8 hrs
Performance Measurement and Reporting	5 days	32 hrs
Schumaker Patricia H.		8 hrs
Schumaker Dennis J.		8 hrs
Laycock D Kerry		8 hrs
Rosenkoetter Robert		8 hrs

Exhibit VI-8
Project Management and Administration Work Plan Hours by Work Task

Work Loaded Tasks From Schedule	Duration	Total Hours
Project Management and Administration	280 days	1,360 hrs
Project Management	14 mons	320 hrs
Schumaker Patricia H.		160 hrs
Schumaker Dennis J.		160 hrs
Project Administration	14 mons	1,040 hrs
Kain Jaye		1,000 hrs
Sunid Hachin		40 hrs

Various detailed (oversized) worksheets are contained in *Appendix B* as backup materials to the summary information contained in this chapter.

Schumaker & Company consultants would be available for testimony at the conclusion of the project, if necessary, at our standard billing rates.

Travel Expenses/Supplies and Materials Expenses

All travel and supplies and materials expense are included in our fully loaded billing rates. In conducting these investigations, approximately 60% of the Schumaker & Company project team's hours will be spent on-site. Travel expenses have been estimated based on this level of on-site involvement.

In calculating estimated supplies and materials costs, the assumption has been made that CECONY will provide office space, telephones, and access to copying and fax services while our project team consultants are on-site. Our price includes provision of the following:

- ◆ Electronic copies of the task reports, draft report, and final report
- ◆ Word processing and computer usage
- ◆ Copying and miscellaneous supplies
- ◆ Communications, including telephone, overnight freight, postage, and facsimile transmission while not on-site

Our normal procedure for all task and draft reports is to transmit an electronic version of the report, which can be printed locally and any necessary copies made for distribution from that local copy. The cost for all task draft reports (which are transmitted in electronic form) is to be included in the not-to-exceed cost. However, the cost of printing the final report is not to be included in the not-to-exceed



project cost. If the NYSDPS determines that Schumaker & Company should provide printed copies of the final report, we will obtain a separate quote for the printing of the final report.

On-Site Space

The consultant team will require approximately 500 square feet of office space, with three to four desks (or equivalent table space) – an unused conference room would be sufficient, two locking file cabinets, and one additional table for setting up a printer, which we will provide. We will also require access to a copier and a fax machine while on-site.

We will need high speed Internet access with the capability of establishing a virtual private network (VPN) connection to our office network. This can either be provided through a connection to the utility's LAN with a firewall that permits VPN connections or through a totally separated high speed connection to the Internet (DSL or fractional T1).

Schumaker & Company will use our own laptops and will provide a portable printer at any job site, if appropriate. As a result, the office space provided will need to be secure, so that consultants can leave their equipment and printer overnight.

C. Invoicing Procedures

Schumaker & Company normally submits a semi-monthly invoice for fees and expenses associated with a project with a copy of the monthly progress report attached (sent the end of the month only). The invoice will include the following categories: professional fees, travel expenses (transportation, meals, lodging, etc.), and services and materials.

- ◆ Professional fees are determined by multiplying the time spent by the consultant on these investigations during the reporting period by the individual's professional billing rate.
- ◆ Travel expenses are included in our fully loaded billing rates
- ◆ Services and materials are included in our fully loaded billing rates.

We ask that payment be made via ACH direct deposit within 30 days.

Our accounting records are available in our Ann Arbor office for inspection and audit.

VII. Qualifications of the Firm

A. Qualifications of the Consulting Firm

Schumaker & Company is a management consulting and professional services firm committed to assisting utilities and telecommunications firms, state and local governments, and companies in the manufacturing and service industries.

Firm Background

Since our inception as a Michigan corporation in 1986, we have continually expanded our scope of services. Currently, our consultants provide expertise in strategy, management and operations assessments and reviews, business process reengineering and quality improvement, project management and quality assurance, technology implementation, and competitive assessments and customer surveys. We are an employee-owned firm, and a certified woman-owned business in Michigan, Pennsylvania, New Jersey, North Carolina, California, Illinois, Delaware, City of Detroit (Michigan), and Wayne County (Michigan). To better support our national client base, Schumaker & Company maintains offices in four strategic locations across the country, specifically:



Schumaker & Company is results-oriented – our goal is to bring about practical improvement, not propose academic theoretical scenarios. We focus on the implementation of solutions. We have a dual perspective: determining the right solutions (based on objective analysis) and a framework to get from here to there; in other words, a way to manage the change.



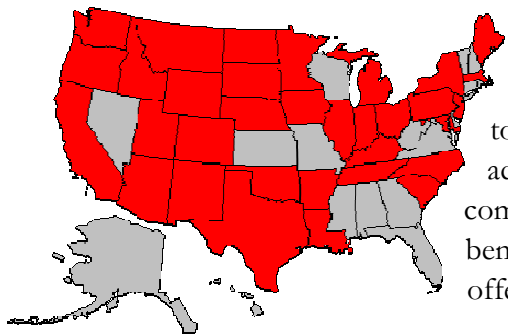
Our People

Schumaker & Company has a unique blend of functional knowledge and hands-on management experience. Our senior consultants have extensive experience in management, operations, and technology consulting in a project environment. They typically hold advanced degrees and average more than 25 years of professional experience. Our project team is expert in the technical aspects of electric, gas, water, and telecommunications operations, as well as relevant regulatory proceedings. This combined knowledge base makes our firm uniquely qualified for the most complex and demanding assignments.

Many of our consultants are *Certified Management Consultants* (CMCs),¹ *Project Management Professionals* (PMPs),² *Certified Public Accountants* (CPAs),³ *Professional Engineers* (PEs), *Microsoft Certified Professionals* (MCPs),⁴ *Microsoft Certified System Engineers* (MCSEs), or *Microsoft Certified Systems Developers* (MCSDs). Schumaker & Company is also a *Microsoft Certified Partner*.

This combined knowledge base of technology, along with operations and management issues, makes our firm uniquely qualified for the most complex and demanding assignments. Our corporate culture is fast moving, technologically advanced, and readily adapted to meet a variety of client needs.

Our consultants have conducted comprehensive and focused management and operations assessments of organizations nationwide. Schumaker & Company has performed consulting assignments for clients



in 33 states. Our clients benefit from the competence, knowledge, and attention of a core team of highly skilled professionals who work well together. This structure enables us to offer the recognized expertise, senior-level staffing, and administrative support characteristic of larger firms, without comparable overhead. Additionally, we provide the important benefits of flexibility and attentiveness that only smaller firms can offer.

A detailed description of the experience and qualifications for all consultants who will be assigned to this project are included in *Chapter V – Consulting Staff Organization*.

¹ “CMC” and CMC logo are certification marks of the Institute of Management Consultants (IMCUSA) that are registered in the US and other nations.

² The PMI logo is a trademark of the Project Management Institute (PMI) that is registered in the United States and other nations. “PMP” and PMP logo are certification marks of PMI that are registered in the US and other nations.

³ The CPA logo is a service mark of the American Institute of Certified Public Accountants (AICPA); CPAs are certified by their respective Board of Accountancy organization in the state where s/he is registered.

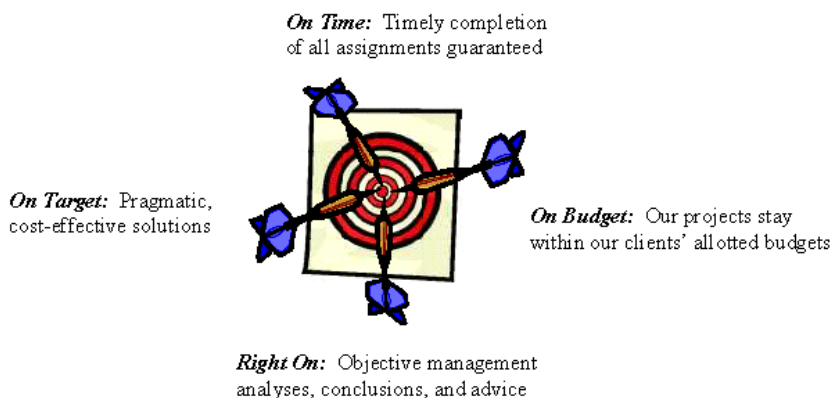
⁴ The MCP, MCSE, and MCSD certifications are designations of Microsoft Corporation.

Ability to Respond Rapidly

At Schumaker & Company, we take pride that we can provide rapid senior management response to a wide variety of client needs. Our culture, size, and use of the latest technology give us a flexibility that our competitors envy. Our consultants and staff have a depth and breadth of experience that will allow us to provide our clients with a final work product in a reasonable time frame and commit to meeting our clients' timeframe, not ours. In addition, we have demonstrated our ability to respond creatively to challenges or obstacles that arise during the course of any project.

Managing Change, Defining Solutions

We work closely, yet unobtrusively, with management to identify specific opportunities for improvement and develop solutions. We develop practical implementation plans to help manage change and achieve the desired improvements. We are committed to delivering results that are:



Our clients retain Schumaker & Company, often for multiple assignments, due to our excellent firm credentials that we bring to assignments. These credentials are briefly described in the following paragraphs.

We use technology to enable a fast and flexible response to client needs. Recently, for example, one of our clients experienced several delays before the start of a project; despite these delays, the end date was mandated and could not be postponed. Schumaker & Company responded by developing a database application to expedite data gathering and reporting, and accomplished the project well within the mandated timeframe. Additionally, we achieved these results using less staff than other firms proposed. We pride ourselves on our ability to respond creatively to the challenges and obstacles that often arise during the course of any project.



We commit to meeting the client's timeframe, not ours. Many of our assignments have deadlines that are mandated by legislation or regulatory agencies and must be met, regardless of the effort involved. Staff departments find themselves bound by obligations created by a regulatory process into which they had no input. You have a job to do and deadlines to meet. Our role is to relieve that time pressure, not to create additional workload for you.

We deliver value-based recommendations to clients. As part of our utility consulting studies, we focus on issues of cost effectiveness and level of service provision and how these issues will impact the company, ratepayers, and other stakeholders. We quantify the costs and benefits (both one-time and recurring) of various actions and alternatives under consideration. We also discuss non-quantifiable benefits and costs as part of our recommendations and describe both actual and potential costs and risks to the organization. Our recommendations are always based on sound findings, conclusions, and supporting analyses that clearly demonstrate how benefits outweigh costs and risks. As a result, nearly 100% of our recommendations have been accepted and implemented by our clients.

Our services are cost-effective. Our project teams are comprised of seasoned executives and senior consultants who bring extensive management and industry experience to bear in developing creative, yet practical, solutions to problems. We use technology to leverage our staff's time, and keep the firm's administrative burden low, so that our clients are not paying for excessive overhead. Our staff is comprised of seasoned talent, which ensures that our clients are not paying for consultants to learn at the client's time and expense.

We are unwaveringly objective. In all our dealings with clients, we maintain independence and objectivity. This allows us to provide the right solution to the identified problems at hand. This ability to "step back" from the situation and view it without organizational or political bias often allows us to develop simple, yet effective, solutions – solutions that may not be readily apparent to those deeply entrenched in the daily operations of the organization.

Exhibit VII-1 presents a summary of the functional advantages that a Schumaker & Company project team brings to an assignment.

Exhibit VII-1
Schumaker & Company Areas of Expertise

Extensive Utility Industry Experience	Our team has worked with more than 100 utility industry clients. Assignments have involved all sectors of the utility industry, including work for utilities, regulators, municipalities, and industry and professional associations. We fully appreciate the legal, regulatory, financial, and cultural factors that complicate planning and operations in the utility industry's competitive environment.
Extensive Regulatory Experience	We have a clear understanding of the purpose and value of the regulatory process, as well as extensive experience in conducting commission assignments, which gives us a keen appreciation for the multifaceted needs of regulators.
Proven Methodologies	Through our broad experience with management, operations, and technology processes, we have developed proven methodologies to identify opportunities for improvement and develop recommendations specifically targeted at improving business processes and systems.
Professional Staff	Our consultants consistently meet the highest standards of professional competence and certification, and each is expert in multiple functional areas.
Management Perspective	We bring a sound, comprehensive management perspective to each project and, accordingly, formulate viable recommendations that significantly improve overall effectiveness short- and long-term.
Operations Expertise	Our consultants have prior backgrounds as managers and staff in many different kinds of utility operations, which allows us to bring real-life experience to our consulting projects.
Information Technology Expertise	Because of our strong expertise in information technology, we can incorporate the latest technology-based capabilities into our recommendations and ensure that our clients achieve the maximum leverage on their information technology investments.
Cross-Functional Experience	As our consulting practice is also involved with industries other than the utility sector, we bring advanced methodologies, techniques, and systems from those industries to our utility clients.
Commitment to Outstanding Consulting Work	As a consulting firm and as individuals, we have demonstrated a commitment to work known for its high quality and objectivity, which is completed on time and on budget.
Implementation Success	We have an enviable record of correctly quantifying expected benefits of recommendations and securing agreement to implement them, followed by successful implementation in a timely manner.
Expert Testimony	Several project team members have provided expert testimony before public utility commissions.
Client References	We believe the most reliable measure of a consulting firm's performance is the testimony of former clients. We invite all prospective clients to contact our references for feedback on our strong commitment to independent and accurate analyses and viable recommendation development.

Prior Utility Experience

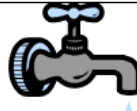
We have conducted comprehensive and focused management, operations, and technology studies at the request of public and municipal utilities, telecommunications firms, state and local governmental agencies, manufacturing firms, and service organizations in 33 states.



We understand the needs of our utility sector clients. Our success has been based on the breadth and depth of experience that we bring to our utility assignments. Our extensive experience with utility



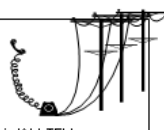
Baltimore Gas & Electric Company
Columbia of Maryland, Inc.
Elizabethtown Gas Company/NUI
Middleborough Gas & Electric
New Jersey Natural Gas Company
Pacific Gas & Electric Company
Peoples Natural Gas Company
Philadelphia Gas Works
Pennsylvania Gas & Water Company/PG Energy
South Jersey Gas Company
Southern California Gas Company
Union Light, Heat, and Power Company/CG&E
Washington Gas Light Company
Western Kentucky Gas Company/Atmos



General Waterworks Corporation-Pine Bluff
Kentucky American Water Company
Pennsylvania American Water Company
Pennsylvania Gas & Water Company
Philadelphia Suburban Water Company
South Carolina Water Services Corporation
United Water New Jersey



AEP/Kentucky
AEP/Kingsport Power Company
AEP/Ohio Power Company
AEP/West Texas Utilities Company
Arkansas Power & Light Company/Entergy
Central & Southwest Corporation/AEP
Central Maine Power Company
Cleveland Electric Illuminating Company/First Energy
Columbus Southern Power Company
Connecticut
Detroit Edison Company/DTE Energy
GPU Energy/First Energy
Middleborough Gas & Electric
Michigan South Central Power Agency
Niles Electric
PECO Energy Company
Pennsylvania Power & Light Company
Public Service Electric & Gas Company
Rockland Electric Company/Con-Ed
Sturgis Electric
Toledo Edison Company/First Energy
Union Light, Heat & Power Company/CG&E



ALLTEL Pennsylvania/ALLTELL
AT&T
Commonwealth Telephone Company
Illinois Bell Telephone Company/SBC
Mountain Bell of Colorado/US WEST
New England Telephone Company/Verizon
New York Telephone Company/Verizon
Ohio Bell Communications
Bell of Pennsylvania Telephone Company/Verizon
SBC Ameritech Indiana
South Central Bell Telephone Company of Kentucky
US WEST
Verizon New York
Verizon Pennsylvania

Schumaker & Company has served numerous clients in different areas of the utility industry.

studies to small, focused studies, as well as implementation projects. Our project management team is extremely familiar with efficient and effective practices for directing and managing such efforts.

Collectively combining our perspectives ensures successful results for clients. Many of our projects have dealt specifically with technology itself; other projects focused on how technology is integrated into the work environment. Our ability to combine both perspectives ensures successful results for our clients. Our role has been to work closely with management to assess program, functional, or technical validity; identify specific opportunities for improvement; and develop practical plans for implementation. A survey of our clients reveals that we have successfully fulfilled this role by working closely, yet unobtrusively, with management.

Clients are satisfied with the results we deliver. In recent years, Schumaker & Company has completed more than 100 major management, operations, and technology projects in the utility industry. Approximately 80% of our projects are for clients with whom we have previously worked. Their willingness and desire to repeatedly work with our firm indicates their satisfaction with our work.

Exhibit VII-2 contains a summary of the specific expertise that Schumaker & Company brings to all of its utility assignments.

Exhibit VII-2
Schumaker & Company Utility Expertise

Regulatory Issues	Examination and evaluation of regulatory practices for public service commissions, including response to changes from competitive entry, technology introduction, service substitution, conservation, cost of service, and customer demands.
Management and Operations Assessments	Evaluation of the overall effectiveness of management, organizational structure, information and work flow, decision processes, policies and practices, and major operating procedures for all aspects of the utility or company to streamline operations and optimize efficiency. Assessment of individual functional units to identify opportunities for improvement through business process re-engineering.
Performance Measurement	Definition and quantification of accurate performance indicators. This process involves establishing acceptable benchmarks for evaluation and providing a continuing vehicle to track performance.
Affiliated Transactions	Investigation and assessment of the processes and methodologies by which affiliated relationships and intercompany allocations are calculated, billed, reported, and evaluated.
Engineering & Construction	Examination, evaluation, and implementation of engineering and construction management processes. Implementation of our recommendations has proven to result in increased effectiveness, shortened lead times, and improved interfaces.
Fuels Management	Analysis and development of procurement practices and fuel requirements planning. Ensure proper contractual, transportation, receiving, storage, and inventory logistics for gas, coal, oil, and uranium.
Information Systems and Technology Optimization	Assessment of technology and systems deployment, maintenance, support, and operations groups to create recommendations to streamline operations and reduce costs. Assistance in strategic migration path engineering by developing and implementing long-range strategic technology and systems plans. Planning, design, development, and implementation of information systems. Assistance in selection of computer and telecommunications hardware and software.
Customer Service	Evaluation of the provision of customer service to the utility's ratepayers, especially in relation to how effectively the needs of the customer for information and problem resolution are handled.
Power Plant Operations	Review and assessment of electric energy production and delivery systems, such as load forecasting, power production and dispatch, purchase and sale, and power plant operations and maintenance.
Power Pool Operations	Assessment of the economic purpose, operating procedures, benefits and problems, and strategic direction associated with major U.S. power pools.
Work Force Management	Design and implementation of comprehensive programs to improve workforce productivity, reduce labor costs, and improve departmental cooperation. Enhance decision-making and shorten lead times for business processes.
Technical Assessments	Assessment, design, and implementation of management practices, procedures, and systems in facility operations and maintenance, often extending to customer service, meter reading, transmission and distribution, power plants, fuel and natural gas procurement, engineering and construction activities, licensing, quality assurance, physical plant operations, research and development, environmental affairs, and workforce management.
Human Resources	Review of functional staffing levels in relation to assigned responsibilities and industry benchmarks. Investigation and assessment of the compensation levels of salary grades and hourly positions, including base rate, perquisites, benefits, and short- and long-term incentives.
Nuclear	Evaluate nuclear power plant operations, such as operating characteristics, historical and current industry factors, NRC requirements and concerns, and need for economic dispatch of units. Determine the relative level of management prudence and overall effectiveness as it relates directly to nuclear operating facilities and programs.



Typical Projects

Our firm and staff have been involved in numerous management and operations review, planning, process review, and technology implementation projects. Additionally, we have provided project management services. Our role has been to work closely with utilities and regulatory entities to optimize operations through a comprehensive review of processes, people, and technology within various organizations. Examples of the types of services that we typically provide include:



- ◆ Management and operations reviews and assessments
- ◆ Competitive assessments and customer surveys
- ◆ Strategic and operations planning
- ◆ Business process reengineering and quality improvement programs development
- ◆ Performance measurement development
- ◆ Project management and quality assurance services
- ◆ Project management and work management systems implementation assistance
- ◆ Information technology planning and optimization

When performing these services, our consultants perform the following activities:

Management and Operations Reviews and Assessments – We evaluate the overall effectiveness of a utility’s management, organizational structure, information and work flow, decision processes, and major operating policies and procedures as a means by which to streamline operations, increase efficiency, and optimize profit potential. During this type of study, we also perform assessments of individual functional units to identify opportunities for improvement. In addition, these studies often focus on how information technology can be successfully integrated into the work environment.

Competitive Assessments and Customer Surveys – We develop and analyze results from customer surveys to assist management in evaluating the customer’s perception of the effectiveness and efficiency of a utility. We also perform competitive assessments to assist the utility in benchmarking their operations against those of similar organizations. Studies such as these allow the organization to view their operations through the eyes of the recipients of their services, as well as their peers.

Strategic and Operations Planning – We assist clients through strategic and operations planning processes that are designed to provide results. Generally, one of the most important process elements involves gathering key participants who work together to develop and agree on all that a strategic plan entails. It is typically best that key participants meet off-site where they can focus their complete and undivided attention on the identification of underlying assumptions; mission; and strengths, weaknesses, opportunities, and threats (SWOT) analysis. These sessions lead to development of specific goals and objectives, commitments to action, timetables, and the foundation for comprehensive roll-out plans.

Business Process Reengineering and Quality Improvement Programs Development – We work together with a utility to evaluate its overall effectiveness or the effectiveness of a particular unit within

its organization, including a review of policies, procedures, activities, staffing levels, performance measurements, annual expenditures and capital expenditures. We provide assistance in defining and critiquing specific business processes, flow of work activities, strategies, outputs and levels of customer service, and in developing recommendations for improvements through the use of process analysis teams to identify redundant or unneeded activities, bottlenecks in processes, etc.



Performance Measurement Development – We define and quantify fundamental indicators by which management can accurately measure performance. This process involves establishing acceptable benchmarks to evaluate management and providing a vehicle for continued performance tracking.

Project Management and Quality Assurance Services — We provide dedicated, professional project managers and quality assurance managers who can direct the undertaking and implementation of large, comprehensive projects involving people, process, and technology. We subscribe to the Project Management Institute’s *Project Management Body of Knowledge*. Our staff is skilled in the latest project management tools, techniques, and methodologies for addressing key knowledge areas, such as integration management, scope management, time management, cost management, quality management, human resource management, communications management, risk management, and procurement management, as a means to keeping projects on time and within budget while at the same time upholding the quality level desired by management.

Project Management and Work Management Systems Implementation Assistance – We select and implement computerized project management or work management systems. Results include increased productivity, improved coordination between departments and overall decision making, shortened lead times, and increased profitability. We incorporate the identification of performance indicators, conduct orientation sessions, develop systems and procedures, and train personnel.

Information Technology Planning and Optimization – When our clients are concerned about the overall effectiveness of management, organizational structure, technical environment, or major operating policies and procedures with regard to information technology or data processing functions, we perform assessments of their development, maintenance, support and operations activities; recommend alternatives; and assist in the implementation of changes as a means of streamlining operations and reducing costs. We assist our clients in determining the basic direction of their information systems and technology plans and ensuring that they align with the organization’s overall strategies and plans. We help to determine the information needs of different levels of users as input to planning, designing, developing, and deploying systems and applications.

Firm Stability

Schumaker & Company has experienced continuous growth resulting in a level of financial viability and resource acquisition that allow us to take on large projects. We have a large number of consultants and associates available for staffing projects. We have always been able to perform our clients’ projects in a



comprehensive and timely manner. Our projects have typically ranged from a one-person, \$5,000, 50-hour effort to a 20-person, \$1 million, 9,000-hour effort. Most of our projects range from \$200,000 to \$1 million in billings. Our projects often involve several consultants over many months. We have the requisite project management methodologies in place to effectively control such large efforts.

Testimony by Schumaker & Company Staff



Schumaker & Company staff members have provided expert testimony to a number of state commissions, including:

Year	Commission	Subject
1993	Maine	Focused Management Audit of Central Maine Power Company
	Illinois	Focused Management Audit of the Affiliated Transactions of Illinois Bell Telephone Company
1992	Philadelphia	Management Audit Follow-up of the Philadelphia Gas Works
	Arkansas	Management Audit of General Waterworks of Pine Bluff
	Ohio	Fuel-Related Practices of Cleveland Electric Illuminating
1991	Ohio	Fuel-Related Practices of Cleveland Electric Illuminating
	Ohio	Fuel-Related Practices of Toledo Edison Company
1990	Ohio	Fuel Procurement Practices of Columbus Southern Power Company
	Ohio	Fuel Procurement Practices of Ohio Power Company
	Maine	Customer Service System Project Implementation of Central Maine Power Company
1989	Ohio	Fuel Procurement Practices of Ohio Power Company
1986	Ohio	Fuel Procurement Practices of Cleveland Electric Illuminating
1984	Ohio	Fuel Procurement Practices of Toledo Edison
	Ohio	Fuel Procurement Practices of Cleveland Electric Illuminating
1983	New York	Allowable Costs of Shoreham Nuclear Plant
1982	Wisconsin	Cost Overrun of Pleasant Prairie Project
1981	Pennsylvania	Formation of GPU Nuclear Corporation

Prior Experience

The following table provides a partial list of our most relevant projects for state and local governments, telecommunications firms, utilities, service companies, and manufacturing firms with which our consultants have worked during the last several years. Descriptions of selected projects follow. We urge you to call the references in this selected projects list to obtain corroborating feedback regarding our strong commitment to independent objectivity and superior results.



Consultant Representative Assignments

ELECTRIC, GAS, & WATER UTILITIES

AEP/Kentucky
 AEP/Kingsport Power Company
 AEP/Ohio Power Company
 AEP/West Texas Utilities Company
 American Natural Resources
 Arkansas Power and Light Company/Entergy Corporation
 Baltimore Gas & Electric Company
 Central Maine Power Company
 Cincinnati Gas and Electric Company (CG&E)
 Cleveland Electric Illuminating Company
 Columbia of Maryland, Inc.
 Columbus Southern Power Company
 Conectiv
 Consumers Power Company
 Cooperative Power Association
 Dayton Power and Light Company
 Detroit Edison Company
 Electricity Supply Board of Ireland
 Elizabethtown Gas Company/NUI Corporation
 Empire Electric District Company
 Enbridge
 Florida Power and Light Company
 Georgia Power Company
 General Waterworks Corporation (Pine Bluff)
 GPU Energy
 Illinois Electric Co., Illinois Power Co.
 Iowa-Illinois Gas & Electric Company
 Jacksonville Electric Authority
 Jersey Central Power and Light Company
 Kentucky-American Water Company
 Metropolitan Edison Company
 Michigan South Central Power Agency
 Michigan Wisconsin Pipeline
 Missouri Public Service Company
 Nebraska Public Power District
 New Jersey Natural Gas Company
 New Orleans Public Service Inc.
 Niagara Mohawk Corporation
 Pacific Gas and Electric Company
 PECO Energy Company
 People's Natural Gas Company
 Pennsylvania-American Water Company
 Pennsylvania Gas & Water Company
 Pennsylvania Power & Light Company
 Philadelphia Gas Works
 Philadelphia Suburban Water Company
 Public Service Electric and Gas Company
 Rockland Electric Company
 Sierra Pacific Power Company
 Springfield City Utilities
 Southern California Edison Company

ELECTRIC, GAS, & WATER UTILITIES, CONTINUED

Southern California Gas Company
 South Jersey Gas Company
 Sunflower Electric Cooperative
 Tennessee Valley Authority
 Toledo Edison Company
 Union Electric Power Company
 Union Light, Heat and Power Company/CG&E
 United Water New Jersey
 Utilicorp United, Inc.
 Washington Gas Light Company
 Water Services Corporation
 Western Kentucky Gas Company
 Wisconsin Electric Power Company

TELECOMMUNICATIONS COMPANIES

ALLTEL, Inc.
 American Telephone & Telegraph Company (AT&T)
 Bell of Pennsylvania Telephone Company
 Commonwealth Telephone Company
 Contel (Illinois and Texas)
 Illinois Bell Telephone Company
 Mountain Bell of Colorado
 New England Telephone Company
 New York Telephone Company
 Ohio Bell Communications
 SBC Ameritech Indiana
 South Central Bell Telephone Company of Kentucky
 United Telephone of Texas
 U S WEST
 Verizon New York
 Verizon Pennsylvania

STATE GOVERNMENT AGENCIES

Alaska Regulatory Commission
 Arizona Corporation Commission, Utilities Division
 Arkansas Public Service Commission
 California Public Utilities Commission
 Colorado Public Utilities Commission
 Idaho Public Utilities Commission
 Illinois, Illinois Commerce Commission
 Indiana Utility Regulatory Commission
 Iowa Utilities Board
 Kansas Corporation Commission
 Kentucky Public Service Commission
 Maine Public Utilities Commission
 Maryland Public Service Commission
 Massachusetts Department of Public Utilities
 Michigan Commission for the Blind
 Michigan Department of Agriculture
 Michigan Department of Community Health
 Michigan Department of Corrections



Consultant Representative Assignments, Continued

STATE GOVERNMENT AGENCIES, CONTINUED

Michigan Department of Environmental Quality
 Michigan Department of Labor
 Michigan Department of Management & Budget
 Michigan Department of Treasury
 Michigan Department of Consumer & Industry Services
 Michigan Family Independence Agency
 Michigan Insurance Bureau
 Michigan MAIN
 Michigan Office of Financial and Insurance Services

Michigan State Hospital Finance Authority
 Minnesota Public Utilities Commission
 Mississippi Public Service Commission
 Montana Public Service Commission
 National Transportation Safety Board
 Nebraska Public Service Commission
 Nevada Public Service Commission
 New Jersey Board of Public Utilities
 New York Public Service Commission
 North Dakota Public Service Commission
 Ohio Public Utilities Commission
 Oregon Public Utilities Commission
 Pennsylvania Public Utility Commission
 Public Service Commission of Utah
 Public Service Commission of Wisconsin
 Public Utility Commission of Texas
 South Carolina Office of Regulatory Staff
 South Dakota Public Utilities Commission
 Synthetic Fuels Corporation
 Tennessee Regulatory Authority
 Tennessee Valley Authority, Board of Directors
 U.S. Air Force - Wright Patterson Air Force Base
 U.S. Army, Information Management Offices
 Washington Utilities & Transportation Commission
 Wyoming Public Service Commission

LOCAL GOVERNMENT AGENCIES

City of Clinton (Michigan)
 City of Coldwater (Michigan)
 City of Dearborn (Michigan)
 City of Detroit (Michigan)
 City of Hillsdale (Michigan)
 City of Marshall (Michigan)
 City of Niles (Michigan)
 City of Philadelphia (Pennsylvania)
 City of Springfield (Missouri)
 City of Sturgis (Michigan)
 City of Union City (Michigan)
 Michigan South Central Power Agency
 Town of Hilton Head Island (South Carolina)
 Town of Middleborough (Massachusetts)
 Wayne County Airport Authority (Michigan)

MANUFACTURING/DISTRIBUTION FIRMS

Accuma Corporation
 A.C. Spark Plug
 Amoco Oil
 Ann Arbor Plastics
 Applied Dynamics International
 Bank Building Corporation
 Bosquett & Company
 Design & Test Technologies
 General Motors/Chevrolet & Pontiac
 Divisions
 Griffith Labs
 Holcim Corporation
 Owens Corning
 Rockwell/Eaton AIL

SERVICE COMPANIES

The ABOW Companies
 Baltimore Cass Auto Wash
 Bank of Montreal
 Coopers & Lybrand
 Crocker International
 C.S. Mott Foundation
 E.D.S.
 E. F. Hutton
 Henry Ford Community College
 High Scope Educational Research Foundation
 Home Box Office
 Intech Leasing
 JARC
 LaLonde & Co.
 Main Hurdman
 Manufacturers Hanover Trust
 M-CARE
 NBD Bank, NA
 O'Neal Construction
 Servant Publications
 Thorondor International

RETAIL FIRMS

Albert's
 Busch's Valu Land
 Circus World Toy Stores
 K-Mart Corporation



ELECTRIC UTILITY ASSIGNMENTS

**PECO Energy
Company**

Philadelphia,
Pennsylvania



**June 2006 – August
2007**

Mr. John Clista
Management Audit Supervisor
Pennsylvania Public Utility Commission
Bureau of Audits, 3rd Floor East
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
(717) 772-0317
jclista@state.pa.us

Mr. Richard A. Schlesinger
Sr. Rate Specialist/Regulatory Process Lead
PECO Energy Company
Regulatory & Governmental Affairs
2301 Market Street S15-2
Philadelphia, PA 19103
(215) 841-5771
rich.schlesinger@peco-energy.com

Assisting the Pennsylvania Public Utility Commission (PUC) staff in a stratified management and operations audit of PECO Energy Company. This audit consisted of three phases. The first phase was a diagnostic review assessing the condition of each functional area or business unit against evaluative criteria or expected business practice. While this review was primarily limited to determining if appropriate management controls, systems and processes are in place, it is of sufficient scope to identify significant problems, if any, requiring additional focused analysis. The second phase was an in-depth analysis of pre-identified areas or issues. These analyses are of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any. The third phase was an in-depth, focused analysis of two issues (emergency response and GIS) approved by the Bureau of Audits resulting from the diagnostic review.

This assignment involved ten consultants in roughly 4000 hours during a 13-month effort for a total project cost of approximately \$843,000.

AEP/Kentucky

Hazard, Kentucky



**August 2002 – April
2003**



Mr. John Rogness
Kentucky Public Service Commission
211 Sower Blvd., P.O. Box 615
Frankfort, KY 40601
(502) 564-3940 ext 229
jarogness@mail.state.ky.us

Mr. Errol Wagner, Administrator
AEP/Kentucky
101 A Enterprise Drive, P.O. Box 5190

Performed an assessment of the reliability of service within AEP/Kentucky's distribution system in its Hazard service territory (a forested mountainous terrain), which has historically experienced a greater number of electric service interruptions than other AEP/Kentucky service areas and, additionally, these interruptions have tended to be longer in duration. This assignment involved six consultants in roughly 700 hours of effort during a 6-month effort for a total project cost of approximately \$145,000.



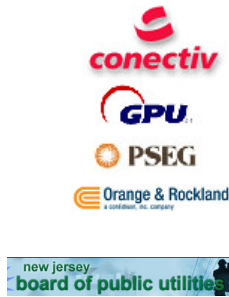
Frankfort, KY 40602-5190
(502) 696-7010
ekwagner@aep.com

ELECTRIC UTILITY ASSIGNMENTS

***New Jersey
Board of Public
Utilities***

Newark, New Jersey

***Conectiv
GPU Energy
Public Service Electric
&
Gas
Rockland Electric***



November 2000 – April 2001

Mr. Chris Molner
Principal Utility Mgmt Analyst
New Jersey Board of Public Utilities
Two Gateway Center, 8th Floor
Newark, NJ 07102-5003
(973) 648-7690
molner@bpu.state.nj.us

Assisted New Jersey Board of Public Utilities (BPU) staff in reviewing and monitoring the implementation of recommendations resulting from an investigation of system reliability of New Jersey's electric utilities. Assisted Board staff in the review and investigation of information supplied by the utilities (Conectiv, GPUE, Public Service Electric & Gas Company, Rockland Electric Company) in connection with implementation of the selected recommendations as ordered by the Board. Worked closely with BPU staff in reviewing implementation of recommendations to assist in fulfilling the Board's obligation to assure that, notwithstanding the changes occurring in the electric industry, customers are provided reliable, safe, and adequate service now and in the future, in which particular emphasis was placed on activities to improve and/or maintain CAIDI and SAIDI indicators at acceptable levels, including issues regarding work force management and construction program planning were addressed. Additionally, performed assessments of each utility's system, specifically the distribution system planning and engineering practices, load flow analysis, transmission and substation maintenance practices and procedures, and adequacy of lightning protections. This assignment involved three consultants in roughly 900 hours of effort during a 5-month effort for a total project cost of approximately \$221,000.

***Illinois Commerce
Commission***

Springfield, Illinois

May 1999 – March 2000



Designed survey to measure customer satisfaction with electric service reliability and quality, clarity of billing, rates, and services. Provided an Electric Service Customer



Mr. Ken Kirchner
Consumer Counselor
527 East Capitol Avenue
Springfield, IL 62701
(217) 785-8438
kkirchne@icc.state.il.us

Satisfaction Survey Rules to instruct electric service providers to administer the survey and to understand, interpret, and present its results. Conducted workshops to train electric service providers to implement the customer satisfaction survey. This assignment involved five consultants in approximately 750 hours of effort during a 10-month period for a total project cost of approximately \$130,000.

ELECTRIC UTILITY ASSIGNMENTS

City of Sturgis
Sturgis, Michigan



April 1997 – January 1998

Mr. John Griffith
Department Superintendent
130 N. Nottawa, P.O. Box 280
Sturgis, MI 49091
(269) 659-7204

Performed a management and operations review of various city departments, conducted a customer satisfaction and needs assessment, and developed a strategic plan. Addressed the changes occurring within the electric utility industry and the competitive threats felt by the electric operations department. The effort involved: (1) performing a competitive assessment and benchmarking and (2) surveying customer attitudes to identify issues that required addressing in the strategic plan (3) conducting a management and operations review of the relevant city departments and (4) assisting the electric utility in conducting a strategic planning session. This assignment involved three consultants in approximately 620 hours of effort during a 7-month period for a total project cost of approximately \$60,000, with a strategic planning effort undertaken in January 1998.

***Town of Middleborough
Gas & Electric
Department***
Middleborough,
Massachusetts



December 1996 – February 1998

Mr. James Collins
Mr. James Smith (Retired)
General Manager
Middleborough Gas & Electric Dept.
32 South Main Street
Middleborough, MA 02346
(508) 946-3777

Performed a competitive assessment of the operations of this municipal gas and electric department, which included a management review of all functional areas, benchmarking of major performance indicators in relation to other Massachusetts municipalities and the best practices of other public and investor-owned utilities. Two consultants spent about 300 hours over a four-month period. Subsequently Schumaker & Company has been providing strategic planning and information technology assessment and planning services to this organization. The costs of these projects totaled approximately \$150,000.



ELECTRIC UTILITY ASSIGNMENTS

City of Coldwater Board of Public Utilities

Coldwater, Michigan



November 1996

Ms. Sue Rubley
Mr. Dwight C. Woodman (Retired)
Director
8 West Chicago Street, P.O. Box 469
Coldwater, MI 49036-0469
(517) 279-9531

Developed, performed, and analyzed the results of a customer survey (a follow-up to a survey two years earlier) to assess satisfaction with the city utility and other city services. Three consultants worked about 200 hours over three months for a total project cost of approximately \$25,000.

Kingsport Power Company

Kingsport, Tennessee



Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0505
1.800.342.8359

***February – September
1996***

Mr. William H. Novak
(formerly of Tennessee Regulatory Authority)
now with Atlanta Gas Light
(404) 584-4000
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0505
(800) 342-8359

Ms. Judy Gallo
Senior Rate Coordinator
American Electric Power Service Corporation
1 Riverside Plaza
28th Floor, Rate Department
Columbus, OH 43215
(614) 578-2209

Performed a comprehensive management review of an American Electric Power (AEP) operating company. The review included evaluations of customer service, electric operations, and many of the administrative, financial, and technology support activities provided by AEP Service Corporation. Examined the methods used by AEP Service Corporation and Appalachian Power Company (another AEP operating company) for billing for services provided to Kingsport Power Company. This project, representing \$96,400, involved five consultants in 700 hours of effort over four months.

Michigan South Central Power Agency

Litchfield, Michigan



***December 1995 – June
1997***

Mr. Glenn White
Mr. Jack Bierl
720 Herring Road
Litchfield, MI 49252

Developed and implemented a relationship development (key accounts) program aimed at the larger commercial and industrial customers. We developed an ongoing communication/public relations program for the agencies, councils, and member communities. This project involved four consultants in approximately 1,600 hours of effort during an 18-month



(517) 542-2346

period, totaling about \$130,000, with follow-up assignments having been subsequently performed.



ELECTRIC UTILITY ASSIGNMENTS

Michigan South Central Power Agency

Litchfield, Michigan



December 1994 – December 1995

Mr. Jack Bierl
720 Herring Road
Litchfield, MI 49252
(517) 542-2346

Assisted in developing a strategic plan for this power agency, owned by five Michigan municipalities: Coldwater, Clinton, Hillsdale, Marshall, and Union City. The plan addressed the changes within the electric utility industry and the competitive threats felt by the agency. Performed a competitive assessment and benchmarking of the power agency and surveyed customer attitudes (mail survey to residential and non-residential customers) to identify issues for the strategic plan. Four consultants spent about 600 hours over a 12-month period on these assignments for a project total of approximately \$50,000.

A 1935 Public Utility Holding Company

Confidentiality Requested

May 1995 – September 1995

Reviewed charges for services provided by a public utility holding company to its affiliates. The review was used to determine whether the services were reasonable, necessary, non-duplicative and calculated in compliance with appropriate allocation formulas. This four-month project involved five consultants and approximately 1,000 hours for a total cost of approximately \$150,000.

Hillsdale Utilities Department

Hillsdale, Michigan



November 1994

Mr. Rick Rose
45 Monroe Street, P.O. Box 271
Hillsdale, MI 49242-0271
(517) 437-3387

Developed a strategic plan that included a mission statement; identified the organization's strengths, weaknesses, opportunities, and threats; and formulated long-term goals and objectives.



ELECTRIC UTILITY ASSIGNMENTS

Pennsylvania Power & Light

Allentown, Pennsylvania

February 1993 – June 1994

Mr. Tom Sheets
 Pennsylvania Public Utility
 Commission
 Bureau of Audits
 400 Third Street
 Commonwealth Keystone Bldg., P.O. Box 3265
 Harrisburg, PA 17105-3265
 (717) 783-5000

Mr. William Hecht
 Chairman, President & CEO
 Pennsylvania Power & Light Company
 Two North Ninth Street
 Allentown, PA 18101-1179
 (610) 774-5151



Performed a stratified management review, beginning with an initial diagnostic review of all functional areas in the PP&L organization. This was followed by in-depth investigation of 23 issues pre-identified by the PAPUC and PP&L, including affirmative action/EEO programs; salaries, wages, and benefits; staffing plans and levels; corporate-wide information technology; nuclear de-commissioning; power plant materials management; a competitive assessment of in-house construction; and maintenance workforces. Found, for example, that PP&L had been unable to achieve its objectives for improving its information technology and systems. Made 18 major recommendations were made, including detailed steps necessary for bringing technology up-to-date. PP&L accepted 153 of 156 recommendations and within a month implemented 30 and expected to complete another 50 within six months. Total estimated savings and/or increased efficiency associated with our recommendations exceeded \$70 million (annually) and \$40 million (one-time). This 17-month engagement involved over 20 consultants and 9,000 to 10,000 hours for a total project cost of approximately \$911,300.

Central Maine Power Company

Augusta, Maine

February – September 1993

Ms. Joanne Steneck
 Maine Public Utilities Commission
 242 State Street
 State House Station 18
 Augusta, ME 04330-6845
 (207) 287-3831
joanne.steneck@maine.gov



Evaluated CMP's organizational structure and staffing, executive compensation, customer service operations, management efficiency, and cost controls. Our findings and conclusions were referenced when Commissioners granted only 31% of \$83 million dollars requested. Savings we identified were credited for \$26 million of the reduction. Following the rate decision, CMP's Board approved an integrated cost-containment plan (with capital and operating budget reductions and a 42% cut in its quarterly dividend); the restructuring saved



Mr. David Flanagan (Retired)
President
Central Maine Power Company
83 Edison Drive
Augusta, ME 04336
(207) 623-3521

\$10 million in its first year. CMP emerged a stronger, more viable competitor, on a course to permanent improvement in all aspects of business management. This seven-month engagement involved seven consultants and about 2,500 hours for a total project cost of approximately \$242,400.

ELECTRIC UTILITY ASSIGNMENTS

Toledo Edison Company
Cleveland Electric
Illuminating Company
 Columbus, Ohio



Investigated the fuel procurement policies and procedures for fossil and nuclear fuels and provided testimony on the findings and conclusions.

Phase I: August 1991 – December 1991
Phase II: August 1992 – December 1992

Mr. Ray Strom
 Project Coordinator
 Public Utilities Commission of Ohio
 180 East Broad Street
 Columbus, OH 43215-3793
 (614) 466-7534

Ms. Eileen Mikkelsen
 Manager
 Regulatory Affairs and Revenue Requirements
 Centerior Energy
 6200 Oak Tree Boulevard
 Independence, OH 44131
 (216) 447-2753

Public Service Electric and Gas
 Newark, New Jersey



Assisted in preparing a long-range strategic generation plan. Assessed PSE&G's computer information systems for generation planning and scenario analysis. Reviewed selected scenarios for political and qualitative considerations and prepared a comprehensive presentation for senior management. Two consultants spent approximately 2,000 hours of effort over ten months.

March 1991 – December 1991

Mr. Pete Landrieu
 Vice President, Fossil Production
 Public Service Electric and Gas Company
 80 Park Plaza, P.O. Box 570
 Newark, NJ 07102
 (201) 430-8195

City of Niles
Utilities Department
 Niles, Michigan



April 1991 – June 1991

Mr. Bernard A. Van Osdale (Retired)
 City Administrator
 City of Niles
 508 East Main Street
 Niles, MI 49120

Performed a management and operations review and assisted in developing a long-term action plan. For this 55-person municipal department, we identified potential annual benefits approaching \$250,000. This three-month engagement involved four consultants and more than 250 hours of effort.



(269) 683-4700



ELECTRIC UTILITY ASSIGNMENTS

Arkansas Public Service Commission

Little Rock, Arkansas



April 1991 – February 1992

Ms. Donna Gray
Director, Audits and Financial Analysis
Arkansas Public Service Commission
1000 Center Building
Little Rock, AR 72201
(501) 682-5720
dkgray@psc.state.ar.us

Trained Arkansas Public Service Commission (APSC) members in how to monitor and control a management and operations review of Arkansas Power and Light Company and its parent organization, Entergy Corporation. This project included a written and oral review of the proposal and detailed work plan prepared by the team of outside consultants selected by APSC to perform the management review. Assisted the APSC in managing the project, which included quality control checks of the outside consultant project team and its results. This 11-month assignment involved three consultants and approximately 750 hours for a total project cost of approximately \$95,000.

West Texas Utilities Company

Abilene, Texas



December 1989 – October 1990

Mr. Richard Greffe
Assistant Director
Public Utility Commission of Texas
1701 North Congress Avenue
Austin, TX 78711
(512) 458-0338

Mr. Dennis Sharkey
Vice President Administration
West Texas Utilities Company
301 Cypress Street
Abilene, TX 79601
(915) 674-7000

Performed a comprehensive management and operations review of a wholly owned subsidiary of Central and South West Corporation, a registered public utility holding company. Our review included assessments of all functional areas within WTU, and of WTU's relationships and transactions with its parent and other affiliate companies. We identified ways to save over \$2.5 million annually. All 85 recommendations were accepted. This assignment required 11 months, engaging over ten consultants for 4,500 hours for a total project cost of approximately \$451,160.



ELECTRIC UTILITY ASSIGNMENTS

**Central Maine Power
Company**

Augusta, Maine


July 1990 – October 1990

Ms. Joanne Steneck
Maine Public Utilities Commission
242 State Street
State House Station 18
Augusta, ME 04330-6845
(207) 287-3831
joanne.steneck@maine.gov

Mr. Robert Connell
Mr. Wilbert Whitney
Central Maine Power Company
83 Edison Drive
Augusta, ME 04336
(207) 623-3521

Performed a focused management review of the implementation for CMP's Customer Service System. Provided testimony at a general rate hearing in which a portion of the implementation costs was disallowed for ratemaking purposes, due to mismanagement at CMP. This four-month assignment included two consultants and approximately 500 hours for a total project cost of approximately \$48,800.

**Ohio Power Company
Columbus Southern Power
Company**

Columbus, Ohio


**December 1988 – March
1990**

Mr. Ray Strom
Project Coordinator
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793
(614) 466-7534

Mr. Paul Daley (Retired)
Director Rates Department
AEP Service Corporation
1 Riverside Plaza
Columbus, OH 43215
(614) 687-3033

Reviewed the fuel-related practices and procedures of these companies for two consecutive years, including overall organizational structure, management decision processes, and the computer information systems supporting these activities. Provided testimony on our findings and conclusions. This 12-month review involved three consultants and more than 1,000 hours.

ELECTRIC UTILITY ASSIGNMENTS

***Union Light, Heat and
Power Company***

Cincinnati, Ohio



October 1988 – August 1989

Mr. Aaron Greenwell
Director
Kentucky Public Service Commission
211 Sower Blvd., P.O. Box 615
Frankfort, KY 40601
(502) 564-8119
adgreenwel@mail.state.ky.us

Mr. David Zanitsch
Manager, Gas Operations
Cincinnati Gas and Electric Company
139 East Fourth Street
Cincinnati, OH 45202
(513) 287-3356

Performed a management and operations review of ULH&P, a subsidiary of Cincinnati Gas and Electric Company. Essentially run as a single company, our review covered all areas of both operations, including management and organization, electric operations (excluding power production and fuels management), gas supply and operations, customer services, financial management, human resources, marketing and external relations, and corporate services. We also reviewed ULH&P's relationships and transactions with its parent company and other affiliate companies. This 11-month assignment involved more than 10 consultants and 2,000 hours for a total project cost of approximately \$250,000.



GAS UTILITY ASSIGNMENTS

Philadelphia Gas Works

Philadelphia, Pennsylvania

***October 2007 – July 2008***

Mr. John Clista
 Management Audit Supervisor
 Pennsylvania Public Utility Commission
 Bureau of Audits
 3rd Floor East,
 Commonwealth Keystone Building
 400 North Street
 Harrisburg, PA 17120
 (717) 772-0317
jclista@state.pa.us

Mr. Nicholas J. Vaccarino
 Director, Strategic Development
 Philadelphia Gas Works
 800 West Montgomery Avenue
 Philadelphia, PA 19122
 (215) 684-6790
Nick.Vaccarino@pgworks.com

Assisted the Pennsylvania Public Utility Commission (PaPUC) in performing a stratified management and operations audit of Philadelphia Gas Works (PGW). The primary focus of this audit was to review those PGW business components subject to regulation by the PaPUC, specifically PGW service delivery and production, whose costs are borne ultimately by Pennsylvania ratepayers. Specifically, our firm looked for economies, efficiencies, or improvements which benefit PGW and its ratepayers. In doing so, Schumaker & Company identified which, if any, economically practical opportunities for cost saving measures can be instituted. The first phase was a diagnostic review assessing the condition of each functional area or business unit against evaluative criteria or expected business practice. While this review was primarily limited to determining if appropriate management controls, systems and processes were in place, it was of sufficient scope to identify significant problems, if any, requiring additional focused analysis. The second phase was an in-depth analysis of pre-identified areas or issues. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any.

This nine-month engagement involved seven consultants and approximately 2,300 hours for a total project cost of approximately \$526,000.

Enbridge

Toronto, Canada



Collaborated on a multi-million dollar asset management solution delivery to Enbridge, a



April 2004 – July 2004



Mr. Eric Kobosh/Mr. Andrew Benedict
Opvantek
28 South State Street, 2nd Floor
Newtown, PA 18940
(215) 968-7790
vantage@vantage-mgt-solutions.com

large energy utility in Canada. Partnered with Opvantek (previously VMSI) and Accenture as a subcontractor to deliver two major enhancements to Pipe Maintenance Tracking System (PMTS), a gas asset management system. This assignment involved four consultants over a four-month time period totaling approximately 870 hours and \$55,000 in costs.



GAS UTILITY ASSIGNMENTS

***New Jersey Board
of Public Utilities***

Newark, New Jersey


***Elizabethtown Gas
Company***
NUI Corporation
***New Jersey Natural Gas Company
New Jersey Resources Corporation***
***South Jersey Gas Company
South Jersey Industries Corporation***
July 2000 – October 2000

Mr. Jim Rekulak
Principal Utility Mgmt Analyst
New Jersey Board of Public Utilities
Two Gateway Center
8th Floor
Newark, NJ 07102-5003
(973) 648-4516
rekulak@bpu.state.nj.us

Conducted compliance audits of the competitive services of New Jersey's gas utilities, specifically South Jersey Gas Company (South Jersey Industries Corporation), New Jersey Natural Gas Company (New Jersey Resources Corporation), and Elizabethtown Gas Company (NUI Corporation), as a part of utility industry restructuring in New Jersey. The purpose was to ensure that the utilities or their related competitive business segments do not have an unfair competitive advantage over other, non-affiliated purveyors of competitive services, and to evaluate and review the allocation of costs between the utilities' competitive and non-competitive services. We offered our expert opinion, based on appropriate methodology, as to whether there was strict separation and allocation of each utility's revenues, costs, assets, risks, and functions between the utility's electric and/or gas distribution operations and its related competitive business segments. The audits determined whether there was (1) cross subsidization between utility and non-utility segments within a public utility or holding company; (2) whether the separation of utility and non-utility organizations was reasonable based on the New Jersey Board of Public Utilities (BPU) affiliate relation and fair competition standards; (3) the effect on ratepayers of the use of utility assets in the provision of non-safety-related competitive services; (4) the effect on utility workers; (5) the effect of utility practices on the market for such services; and (6) ensured compliance with New Jersey legislation. The audits provided the BPU with the information needed to determine whether the competitive services identified are in any way cross-subsidized by the individual utility's regulated activities and to

determine the reasonableness of the lump-sum charges (i.e. service contract rates) and time-and-materials charges encountered in a competitive environment. This assignment involved five consultants in approximately 1,700 hours of effort during a 3-month effort for a total project cost of approximately \$357,000.



GAS UTILITY ASSIGNMENTS

***Pacific Gas & Electric
Company***

San Francisco, California



***June 1994 – September
1994***

Mr. James Wuchler
California Public Utilities Commission
CACD: Accounting and Auditing Branch
California State Building
505 Van Ness Avenue
San Francisco, CA 94102-3298
(415) 703-2655

Ms. Karen Forsgard
Project Coordinator
Pacific Gas & Electric Company
77 Beale Street, P.O. Box 770000
San Francisco, CA 94177
(415) 973-6069

Performed a compliance audit of the costs of PG&E's gas pipeline expansion project to determine if the appropriate level of incremental A&G and O&M costs were charged to the project before and after commercial operation in November 1993. We also provided data needed to forecast the incremental operating costs of expanding interstate and intrastate pipeline operations serving California markets. Reviewed PG&E's integrated pipeline operations that supply natural gas from Canada to California for retail customers, pipeline shippers, and interruptible customers. Our review showed that the intended project costing had been properly implemented, ensuring an equitable distribution of costs between regulated retail customers and unregulated project shippers. Seven consultants spent approximately 1,500 hours over four months in which Schumaker & Company was one of the subcontractors.

***Pennsylvania Gas & Water
Company***

Wilkes-Barre, Pennsylvania



April 1992 – May 1993

Mr. Thomas Sheets
Pennsylvania Public Utility Commission
400 Third Street
Commonwealth Keystone Bldg., P.O. Box 3265
Harrisburg, PA 17105-3265
(717) 783-5000

Mr. Robert Lopatto
Pennsylvania Gas and Water Company
One PEI Center
Wilkes-Barre, PA 18711-0601
(717) 829-8600

Reviewed PG&W gas operations; cash flow statements; dividends paid to PG&W's parent company (Pennsylvania Enterprises, Inc.); allocation of fees (affiliated relationships and transactions with affiliated companies); management information systems; data processing; staffing and compensation levels; and recruiting, hiring, and promotion. Schumaker & Company was a subcontractor on this assignment.

GAS UTILITY ASSIGNMENTS

Philadelphia Gas Works

Philadelphia, Pennsylvania

***1991***

Mr. Thurman Bullock
 Commissioner, Philadelphia Gas Commission
 1515 Arch Street, 9th Floor
 Philadelphia, PA 19102
 (215) 686-6682

Mr. William Gallagher
 Philadelphia Gas Works
 800 West Montgomery Avenue
 Philadelphia, PA 19122
 (215) 684-6489

Performed a follow-up review two years after a management and operations review that involved reviewing results of additional studies recommended during the management audit and developing a request for proposal for long-term strategic options.

***Baltimore Gas & Electric
Columbia Gas of
Maryland.***

Washington Gas Light
 Baltimore, Maryland

***March 1988 – June 1990***

Mr. Charles Kruff
 Chief Auditor
 Maryland Public Service Commission
 William Donald Schaefer Tower
 6 St. Paul Street, 16th Floor
 Baltimore, MD 21202-6806
 (301) 333-6020

Mr. Frank Hollewa
 Vice President Gas Supply
 Washington Gas & Light Company
 6801 Industrial Rd.
 Springfield, VA 22151
 (703) 750-4265

Mr. Steve Shaiko
 Director Gas Control
 Washington Gas & Light Company
 6801 Industrial Rd.
 Springfield, VA 22151
 (703) 750-4804

Performed a two-year review of gas supply and purchasing practices. This unique project included formal training of Maryland Public Service Commission staff members in gas supply review methods and the establishment of formal MPSC gas purchasing reporting requirements for the three companies beginning in 1989. Schumaker & Company provided oversight to MPSC staff during an internal review of gas supply plans submitted for 1989/90 by these gas distribution companies. This 27-month assignment involved three consultants and approximately 1,000 hours for a total project cost of approximately \$99,880



GAS UTILITY ASSIGNMENTS

Western Kentucky Gas

Owensboro, Kentucky

**April 1989 – December 1989**

Mr. Aaron Greenwell
 Audit Manager
 Kentucky Public Service Commission
 211 Sower Blvd., P.O. Box 615
 Frankfort, KY 40601
 (502) 564-8119
adgreenwel@mail.state.ky.us

Mr. Earl Fischer (Retired)
 President
 Western Kentucky Gas Company
 311 West Seventh Street
 Owensboro, KY 42302
 (502) 685-8000

Performed a management and operations review that covered all areas of this gas company's operations: management and organization, gas supply and operations, customer services, financial management, human resources, marketing and external relations, and corporate services. Also reviewed WKG's relationships and transactions with its parent company (Atmos Energy Corporation) and other Atmos affiliate companies in Louisiana and West Texas. (WKG's service territory was essentially a rural area with many smaller communities in Kentucky.) This project was particularly successful in that the results of the study were presented by all three participants – specifically, the WKG president, a Kentucky Public Service Commission representative, and Schumaker & Company's engagement manager – before the Subcommittee on Management Analysis during the NARUC 1990 Summer Meeting. This nine-month project involved 10 consultants and more than 3,000 hours for a total project of approximately \$343,360.

Philadelphia Gas Works

Philadelphia, Pennsylvania

**March 1989 – November 1989**

Mr. Thurman Bullock
 Commissioner, Philadelphia Gas Commission
 1515 Arch Street, 9th Floor
 Philadelphia, PA 19102
 (215) 686-6682

Mr. Dennis Stinson
 Philadelphia Gas Works
 800 West Montgomery Avenue
 Philadelphia, PA 19122

Reviewed all operational areas, including organization structure and planning (corporate policy, philosophy, strategic planning; corporate and operations planning; organizational structure, authority and responsibility; human resources; capital program planning; gas operations organization and work-management effectiveness); systems supply; finance and accounting; procurement of outside services and nonfuel commodities; support functions; and quality of service (corporate mission, customer billing, meter reading, customer dispute process, office operations,

(215) 684-6314

energy theft, and customer relations). This nine-month engagement involved 15 consultants and approximately 4,000 hours for a total project cost of approximately \$400,000.



TELECOMMUNICATIONS ASSIGNMENTS

Verizon New York
New York, New York



**October 2003 –
September 2004**



Mr. John Coleman
Service Quality Audit Project Manager
Office of Telecommunications
New York Office of Public Services
Three Empire State Plaza
Albany, NY 12223-1350
(518) 486-2947
john_coleman@dps.state.ny.us

Mr. Dick Jasinski
Project Liaison
Verizon New York, Inc.
1095 Avenue of the Americas
New York, New York 11530
(212) 395-5186
dick.jasinski@verizon.com

As a subcontractor, Schumaker & Company consultants held *Project Manager*, *Lead Consultant*, and *Senior Consultant* positions to perform a review and evaluation of Verizon NY's efforts to provide retail service quality that consistently met the requirements of the New York telephone service standards, as required by the New York Public Service Commission (PSC). In February 2002, the PSC ordered Verizon NY to institute a retail service quality plan, so named the Verizon Incentive Plan (VIP). After comparing 2002 service results with the same period in 2003, results generally declined and the PSC ordered an investigation to be conducted to review Verizon NY's retail service quality effort from four perspectives: performance, analysis, capital expenditures and maintenance, and best practices.

Analyzed, documented, and verified, through findings based on identifiable and measurable information and data, to ensure that Verizon NY's existing service quality plans and practices of the five VIP service objectives (customer trouble report rate, percent out of service over 24 hours, percent installation completed in five days, PSC complaints, and outliers), NY Telephone Service Standards, and company guidelines meet applicable service quality performance standards, including reasonably foreseeable events and contingencies. Developed and documented recommendations to improve or modify these service quality practices and/or plans where existing plans and practices were not sufficient to ensure that applicable standards were met. Reviewed Verizon NY's processes for service quality performance and its employees, technology, and work processes related to the planning, design, construction, installation, maintenance, repair, and delivery of product to retail customers within Verizon NY's service territory. This one-year assignment involved 11 consultants (of which

Schumaker & Company provided four) and required over 6,900 hours for a total project cost of approximately \$1,600,000.



TELECOMMUNICATIONS ASSIGNMENTS

Verizon Pennsylvania

Philadelphia,
Pennsylvania

**May 2003 – September
2003**



Mr. Louis Mazza
Project Officer
Pennsylvania Public Utility Commission
Bureau of Audits
400 Third Street
Commonwealth Keystone Bldg.,
P.O. Box 3265
Harrisburg, PA 17105-3265
(717) 772-0300
lomazza@state.pa.us

Mr. Jim MacDonald
Executive Director-Network Operations
Verizon Pennsylvania
741 Zeckendorf Blvd., Room 410
Garden City, New York 11530
(516) 832-3686
james.p.macdonald@verizon.com

As a DCI subcontractor, performed a review and evaluation of Verizon PA's performance metrics and related remedies, as required by the Pennsylvania Public Utility Commission (PAPUC). The PAPUC supported Verizon PA's application for Section 271 relief (i.e. authorization for offering long distance service within its serving area), based on satisfactory performance with respect to the FCC's 14 check list items, which define areas in which incumbent local exchange carriers must demonstrate that they have irrevocably opened their markets to local competition by providing non-discriminatory support to competitive local exchange carriers. The PAPUC ordered the investigation to be conducted one year after approval of Verizon PA's Section 271 application. Reviewed Verizon PA's processes for performance metric development (pre-ordering, ordering, provisioning, maintenance/repair, network performance, billing, operator services, and general standards) from source system inputs (including operational support systems and manual data input) to the data mart, where performance reporting occurred. Examined the utility's underlying information and operations support systems that provided data for use in calculating the performance metrics and remedies. Obtained the source information from Verizon and attempted to replicate the information and calculations in a separate data warehouse using various technologies, such as Oracle 8i, SAS, and Microsoft SQL server tools. Developed computer code to represent the C2C performance metrics and worked with Verizon PA and the PAPUC to resolve differences identified. Also ran comparisons, compiled, and documented results for pre-ordering and maintenance/repair metrics. This five-month

assignment involved 14 consultants (of which Schumaker & Company provided five) and required over 4,700 hours for a total project cost of approximately \$990,000.



WATER UTILITY ASSIGNMENTS

WATER UTILITY ASSIGNMENTS

Pennsylvania-American Water Company

Hershey, PA

August 2007 – June 2008

Mr. John Clista
Audit Supervisor & Project
Officer

Pennsylvania Public Utility
Commission

Bureau of Audits, 3rd Floor
East

Commonwealth Keystone
Building

400 North Street
Harrisburg, PA 17120

(717) 772-0317

jclista@state.pa.us

Mr. Louis Tschachler
American Water
800 Hersheypark Drive
Hershey, PA 17033

(717) 533-5000

www.amwater.com



Assisted the Pennsylvania Public Utility Commission (PaPUC) staff in a stratified management and operations audit of Pennsylvania-American Water Company (PAWC). Specifically, it was intended that the management audit encourage economies, efficiencies or improvements which benefit the utility and its ratepayers and identify which, if any, cost saving measures can be instituted. The ultimate purpose was to explore economically practical opportunities for giving ratepayers lower rates and/or better service.

This audit consisted of three phases. The first phase was a diagnostic review assessing the condition of each functional area or business unit against evaluative criteria or expected business practice. While this review was primarily limited to determining if appropriate management controls, systems and processes were in place, it was of sufficient scope to identify significant problems, if any, requiring additional focused analysis. The second phase was an in-depth analysis of pre-identified areas or issues. These analyses were of sufficient depth to provide specific recommendations for changes together with projected costs and potential dollar savings or other quantifiable benefits, if any. The third phase was an in-depth, focused analysis of two issues approved by the Bureau of Audits resulting from the first phase, specifically items in the human resources and water operations areas.

This assignment involved eight consultants in roughly 3,093 hours during a 10-month



effort for total project costs of
approximately \$651,694.

WATER UTILITY ASSIGNMENTS

Water Services Corporation

West Columbia, South
Carolina
Northbrook, Illinois



June 2006 – February 2007

Mr. Willie J. Morgan PE
Program Manager
State of South Carolina Office
of Regulatory Staff
Water/Wastewater
Department
1441 Main Street, Suite 300
Columbia, SC 29201
(803) 737-0827

wmorgan@regstaff.sc.gov

Mr. Steve Lubertozzi
Chief Regulatory Officer
Utilities Inc.
2335 Sanders Road
Northbrook, IL 60062
(847) 498-6440
smlubertozzi@uiwater.com

Assisted the South Carolina Office of Regulatory Staff (SOR) staff to conduct a management audit of Water Services Corporation (WSC) with regard to five subsidiary water and wastewater companies operating in South Carolina with a focus on the following three areas: 1) basic corporate decision-making; 2) major operational activities; and 3) staff functions. The final report consisted of audit findings and management recommendations. A cost/benefit analysis accompanied each recommendation.

The bottom line of this project focused on WSC was to determine whether the rates charged to the South Carolina ratepayers could be reduced through the implementation of greater efficiencies in organizations, operations, or both. Additionally, another relevant analysis was the determination of whether the ratepayers of South Carolina were being properly and economically served by the range of corporate services provided to the WSC operations in South Carolina by the managers located in both West Columbia and Northbrook. Significant consideration was given to the investigation and quantification of potential benefits that would result from the consolidation or merger of the affiliated companies of WSC.

This assignment involved four consultants in roughly 520 hours of effort during a 5-month effort for a total project cost of approximately \$75,000.



WATER UTILITY ASSIGNMENTS

United Water New Jersey

Harrington Park, New Jersey



April 1996 – August 1996

Mr. Jim Rekulak, Project Officer
State of New Jersey Board of Public Utilities
Two Gateway Center, 8th Floor
Newark, NJ 07102-5003
(201) 648-2026
rekulak@bpu.state.nj.us

Mr. Walton Hill
United Water Management & Services
200 Old Hook Road
Harrington Park, NJ 07640
(800) 664-4552 (Extension 2880)

Analyzed financial management, information technology and other support services, customer service, and human resources in this comprehensive management and operations review. Schumaker & Company was a subcontractor on this assignment, in which seven consultants spent 1,500 hours during a five-month period, with fees and expenses totaling \$65,500.

General Waterworks Corporation of Pine Bluff

Pine Bluff, Arkansas



February 1992 – June 1992

Ms. Donna Gray
Director, Audits and Financial Analysis
Arkansas Public Service Commission
1000 Center Building
Little Rock, AR 72201
(501) 682-5720
dkgray@psc.state.ar.us

Mr. Walton Hill, UWM&S
(Formerly General Waterworks Corporation)
200 Old Hook Road
Harrington Park, NJ 07640
(800) 664-4552 (Extension 2880)

Performed a management and operations review, including a review of affiliated relationships and transactions. At the request of the Arkansas Public Service Commission, our final report was submitted as testimony in a general rate hearing of General Waterworks Corporation of Pine Bluffs. This five-month assignment involved four consultants and approximately 500 hours.

WATER UTILITY ASSIGNMENTS

Pennsylvania Gas & Water Company

Wilkes-Barre, Pennsylvania



April 1992 – May 1993

Mr. Thomas Sheets
 Pennsylvania Public Utility Commission
 400 Third Street
 Commonwealth Keystone Bldg., P.O. Box 3265
 Harrisburg, PA 17105-3265
 (717) 783-5000

Mr. Robert Lopatto
 Pennsylvania Gas and Water Company
 One PEI Center
 Wilkes-Barre, PA 18711-0601
 (717) 829-8600

Reviewed PG&W gas operations; cash flow statements; dividends paid to PG&W's parent company (Pennsylvania Enterprises, Inc.); allocation of fees (affiliated relationships and transactions with affiliated companies); management information systems; data processing; staffing and compensation levels; and recruiting, hiring, and promotion. Schumaker & Company was a subcontractor on this assignment.

Kentucky-American Water Company

Lexington, Kentucky



November 1990 – June 1991

Mr. Aaron Greenwell
 Audit Manager
 Kentucky Public Service Commission
 211 Sower Blvd., P.O. Box 615
 Frankfort, KY 40601
 (502) 564-3940
adgreenwel@mail.state.ky.us

Mr. Robert Edens
 General Manager
 Kentucky-American Water Company
 2300 Richmond Road
 Lexington, KY 40502
 (606) 268-6317

Performed a comprehensive management and operations review involving executive management, corporate planning, operations planning, engineering and construction, transmission and distribution, treatment and pumping, financial systems, customer service and marketing, human resource management, support functions, and comparative analysis. This project also included a review of Kentucky-American's relationships and transactions with its parent company (American Water Works Company) and other affiliate companies (primarily American Water Works Service Company). This eight-month engagement involved over 10 consultants and 2,000 hours of effort for a total project cost of approximately \$223,307.



WATER UTILITY ASSIGNMENTS

Philadelphia Suburban Water Company

Philadelphia, Pennsylvania

*September 1989 –
September 1990*



Mr. Tom Sheets

Director

Pennsylvania Public Utility Commission

400 Third Street

Commonwealth Keystone Bldg., P.O. 3265

Harrisburg, PA 17105-3265

(717) 783-5000

Mr. Richard Hugus

Vice President and Treasurer

Philadelphia Suburban Water Company

762 Lancaster Avenue

Bryn Mawr, PA 19010

(610) 527-8500

Performed a comprehensive management review involving all company functions. Specific emphasis was placed on staffing and compensation levels, management information systems, allocation of fees from affiliated companies, customer service, engineering and construction, operations and maintenance, water purchase agreements, and capacity planning. This project also included PSW's relationships and transactions with its parent company and other affiliate companies. This 13-month engagement involved 10 consultants and over 3,000 hours for a total project cost of approximately \$289,400.



B. Qualifications of Individual Consultants

Our team is composed of selected individuals, whose talents and expertise complement one another, allowing Schumaker & Company to provide a highly skilled and well-rounded team. The single most important element Schumaker & Company brings to an assignment is the breadth and depth of our project team's experience. Our team has a strong working knowledge of management and organization issues, as well as the application of information technologies to streamline operations. Each individual has been carefully selected according to his or her experience, technical expertise, and education in the areas for which he or she is proposed. Our consultants are seasoned veterans with many years of consulting, industry, and financial management experience, as described both in this chapter and in their individual resumes. They are mature and experienced, with advanced degrees and practical business management experience, consistently meeting high standards of professional competence within their disciplines and demonstrating the team skills needed to work collaboratively with client organizations.

A detailed description of the experience and qualifications for all consultants who will be assigned to this project are included in detail in *Chapter V – Consulting Staff Organization*, where we identify the lead consultant and the name and experience of each consultant member who will be involved, including the specific area(s) to which each will be assigned. Resumes for our proposed consultants can also be found in *Chapter V – Consulting Staff Organization* (location as designated in the request for proposal). Also, a background and experience summary is provided there along with a listing of pertinent assignments in which the respective consultant has gained experience relevant to his/her responsibilities for this assignment



Schumaker & Company



**Consolidated Edison Company of New York, Inc.
Preliminary Project Management Manual**

March 2008

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I. Project Setup Documentation

A. Project Organization

The project team proposed for this assignment is illustrated in *Exhibit I-1*.

Exhibit I-1
Project Team Organization
After Contract Award

B. Consultant Team

Our consultants are mature and experienced, with advanced degrees and practical business management experience. The educational and professional designations of the proposed staff are summarized in *Exhibit I-2*.

Exhibit I-2
Consultant Team Experience

Name	Responsibility	Years Exp.	Education and Professional Designations
Patricia H. Schumaker	Engagement Manager & Executive Consultant I	31	BSBA (Accounting), MBA (Operations Research) CMC®, CPA, PMP®
Dennis J. Schumaker	Project Manager & Executive Consultant I	31	BME (Mechanical Engineering), MS (Nuclear Engineering), MBA (Strategic & Corporate Planning), CMC®, PMP®, MCSE
Julia D. Bodamer	Executive Consultant II	20	BA (Business and Finance), Associate Degree in Legal Studies
Lee E. Burgess	Executive Consultant II	23	BS, MBA, CPIM
D. Kerry Laycock	Executive Consultant II	21	BS (Business Administration and Management), MS (Organizational Development), CMC®
Martin J. Murphy	Executive Consultant II	29	BCE (Engineering), MS (Engineering), MBA, PE
Robert L. Rosenkoetter	Executive Consultant II	25	BSBA, MBA (Finance), MPA (Professional Accountancy)
Martin H. Skeer	Executive Consultant II	20	BS (Civil Engineering), MS (Engineering Mechanics), MBA (Finance), Ph.D., and CMC®
Gail E. Stopar	Support Consultant & Analyst	22	BS (Quality Management), MSA (Human Resource Management), Certificate in Accounting
Jaye M. Kain	Project Administrator & Analyst	20	BS (Environmental Geoscience), BS (Geology), MS (Geology)
Hachin Sunid	Technology Support Consultant	8	BS (Computer Science Engineering)

C. Project Hours Budgets

Work Plan Areas and Hours and Professional Fees Breakdown

Schumaker & Company's estimated hours are shown in *Exhibit I-3*.

Exhibit I-3
Estimated Hours
After Contract Award

D. Project Work Paper Organization

We will be using Schumaker & Company's *PMIA* system for managing all of the work papers associated with the project. We have set up the work plan codes as shown in *Exhibit I-4*.

Exhibit I-4
Project Work Plan Codes
After Contract Award

Interview requests and information requests will be assigned to various work plan areas within PMIA. We have created two addresses for use on the CECONY project. All information responses from CECONY should be sent to CECONYInfoResponse@schuco.com. Jaye or the intern will load the attachments into our PMIA system. All interview schedules from CECONY should be sent to CECONYInterviewResponse@schuco.com.

II. Project Procedures

We have pulled together some of the information you will need to participate in this project, and placed it in the binder that accompanies this memo.

A. Project Communications

Email, instant messaging, and telephone calls (or conference telephone calls) will be used as the most prevalent forms of communications on the project. The Schumaker & Company conference call number for this project is (605) 990-0200 and its pass code is 279041#.

B. Time and Expense Reporting

Time and expense reporting is to be done on a daily basis using Schumaker & Company's Internet *TEIRS* application. The project's time and expense documentation be submitted twice each month, for the periods 1st - 15th and 16th - end of month in which work was done and/or time or expenses were charged to this project. Only the Schumaker & Company T&E forms completed electronically through Schumaker & Company's Internet T&E site will be accepted.

T&Es and supporting documentation should be submitted by the second working day of each time period, as follows:

- ◆ Enter time and expenses into Schumaker & Company's Internet T&E site and send via email (PDF) or fax a copy of your signed T&E forms and supporting documentation to Jaye Kain (jkain@schuco.com).
- ◆ If you do not have the capability to send your signature or supporting documents electronically, then fax a signed copy of your time and expense reports and all necessary supporting documents to 734-998-5590. You should keep all original documentation. If you can scan in your signature and supporting documentation, there is no need to fax T&Es and supporting documents; rather, you can send everything by e-mail message.

Time and expense reports (with supporting documents) that are not received by the second working day of the period following the time period for which the reports are submitted may not be included in the current invoice, but will be included in the next period's client billing. Any time and expense report not received in time for inclusion in the next following period's invoice may not be honored. For example, T&E reports for October 1 – 15, 2007 are due on October 17, 2007. If they are not received by Schumaker & Company by October 17, 2007, they may not be included in Schumaker & Company's

October 1-15, 2007 invoice. If T&Es for October 15-31, 2007 are not received by November 2, 2007, they may not be paid by Schumaker & Company.

Time Reporting

Time should be reported in multiples of no less than a half-hour. Time can be reported for any day of the week (including Saturday or Sunday), but cannot exceed 10 hours for any day. Time reports will be reviewed and approved by the *Project Manager* for this project.

Expense Reporting

Expense documentation for all transportation, lodging, and meal expenditures must be submitted with your time and expense report. A clear and accurate report of business expenditures must be set forth on each expense report. Consultants must include copies of their receipts with their expense report for transportation, hotel bills, meals, car rentals, etc. for all separate charges in excess of \$25. It is required that all time reports containing expense charges be supported by an expense report. Expense reports will be reviewed and approved by the *Project Manager* for this project.

Every effort will be made to reduce the number of days and the distance away from home. Yet, quality of work and client satisfaction must remain the primary consideration in this engagement. All approved business travel will be reimbursed to the consultant. While away from home, evening and/or weekend travel for the diversion of a consultant does not qualify as client business. Because the IRS does not allow Schumaker & Company to compensate its consultants for evening or weekend entertainment or personal expenses, they should not be included in the expense report.

All travel should be conducted in the most cost-effective manner available. Please refer to the following instructions as you complete expense reports:

- ◆ Break out each expense category on a daily basis.
- ◆ Note that only room charges are to be listed in the “Lodging” category. Other charges on your hotel bill should be included in the appropriate categories.
- ◆ Provide clear and legible documentation. If a match between the documentation and the charge is not obvious, please make a written explanation of the difference in the “Descriptions” field (or refer to a separate piece of paper). Also, explain any charges that do not have receipts. If you cannot obtain a receipt, note this on your expense report and explain why. All charges in excess of \$25 require receipts.

- ◆ We will use \$50 meal per diem for this project (\$7 - breakfast, \$10 - lunch, \$33 - dinner). The appropriate per diems are built into TEIRS. If you pay for another staff person's meal, that person should not request the relevant per diem; rather, you should report and receive it. No receipts are required for meals, because we will use the per diem allowances. Report this expense using the appropriate per diem category.
- ◆ ☎ Please send a copy of your telephone bill(s) with CECONY charges highlighted or otherwise indicated.
- ◆ Copies and faxes are generally not chargeable.
- ◆ Note that any equipment or other property purchased by a consultant for whom he or she is reimbursed under the agreement shall be turned over to Schumaker & Company upon completion of the consultant's services under this agreement. This means that we will not charge our own personal computers to this project.
- ◆ Secretarial or clerical charges must be accompanied by personnel time sheets showing name, date(s), and hours worked. No secretarial or other administrative support time (other than that provided by Schumaker & Company's Ann Arbor office) is to be charged without prior written approval by the *Project Manager* regarding the hours and hourly rates.
- ◆ Arbitrary charges or allocations are never acceptable.
- ◆ ➔ Allocations of (air) travel tickets are acceptable if accompanied by a step-by-step explanation on the pertinent expense form.
- ◆ Personal automobile use will be reimbursed at a rate of 48.5 cents per mile.
- ◆ No fees will be reimbursed without time reports. No expenses will be reimbursed without expense reports and supporting documentation.
- ◆ Time reports will require logging hours by work package (work plan area) (e.g., CorGv), because some staff are assigned to more than one area. If the PaPUC asks for greater detail, we will so inform you.

Please note that Schumaker & Company's policy does not provide for pre-payment of subcontractors prior to Schumaker & Company's reimbursement by the client.

Air Transportation

All air travel will be via coach class. Anyone traveling night-reduced rates may travel first class if this ticketing is available at coach rates.

Ground Transportation

The use of a consultant's own automobile for travel to the job site is allowable with approval by the *Project Manager*, but it may not exceed the costs of equivalent air travel. Reimbursement will be made at the rate of 48.5 cents per mile for only the excess of total business mileage over the miles involved in a

round trip from the consultant's home to his or her own office. The mileage allowance is expected to cover operating expenses, depreciation, and insurance. Consultants are expected to carry insurance in amounts adequate to protect them from financial consequences of accidents. Expenses for transportation between the consultant's home and office are not allowed as business deductions by the IRS and, therefore, cannot be allowed as reimbursable expenses.

Rental cars can be used judiciously when away from home, and their use should be coordinated with the *Project Manager* to eliminate duplication. The size of rental car used should be appropriate to the number of individuals traveling. All employees are to decline all collision and medical insurance offered by auto rental agencies; Schumaker & Company's insurance coverage applies.

Consultants required to remain on the client's site over the weekend may use rental automobiles (if applicable), but only with the approval of the *Project Manager*.

Lodging

Consultants are reimbursed for room charges plus taxes only. Any additional room charges, such as movie rentals, personal telephone calls, or mini-bar charges, are the consultant's responsibility and should not be included on the expense report.

Meals

Consultants are reimbursed for meals in on a per diem basis at a rate of \$7 for breakfast, \$10 for lunch, and \$38 for dinner. If the *Engagement Manager* or *Project Manager* picks up a meal charge for a consultant, the consultant cannot charge through the amount of his or her per diem for that meal on their expense report.

Invoicing Procedures

Schumaker & Company normally submits a semi-monthly invoice for fees and expenses associated with a project, when allowed by the client, with a copy of the monthly progress report attached (sent the end of the month only).

C. Lodging Recommendations

Updated After Contract Award

The ____ is the recommended hotel for this contract. To make reservations, call ____ (toll free) or go to <http://www.lathamhotel.com>. **Please use the least expensive rate that you can.** The rates vary

by date and are based on single occupancy. You should try to make your reservation at least one week (if not two) ahead to get the best rate.

Payment

All individuals will be responsible for their own room, tax, and incidental charges and must submit a time and expense form for the appropriate reimbursement.

Guarantee and Cancellation Policy

A credit card will be required to confirm all reservations. Cancellations must be made at least 24 hours before check-in time or you will be liable for the full room rate.

Checking Out Early

The hotel may hold you responsible if you don't cancel extra nights by 6 PM on the day you check-in.

D. Contact List

Attachment A contains an updated contact list for the project. This list will be periodically revised as new information or corrections are received. This list is maintained in Microsoft Outlook; therefore, Vcards can be sent to those whose email supports Vcards.

E. RFP and Proposal Materials

The final RFP and our revised proposal (including your preliminary work plans and information requests) are available electronically from the project website.

F. Information/Data Requests

Attachment B contains the latest information/data requests listing of requests already submitted to CECONY. This list is available from *PMLA* and will be provided on a periodic basis or on request.

G. Interview Requests

Attachment C contains the latest interview requests listing of requests already submitted to CECONY. This list is available from *PMLA* and will be provided on a periodic basis or on request.

H. Project Team Training Meeting

In addition to the written materials that everyone is expected to have read regarding project policies and procedures, we will be conducting on-site training sessions early in the project. All consultants are expected to attend – that is, if anyone expects to bill time to this project, they need to attend the training session. The training session will discuss the topics identified in *Exhibit II-1*.

Exhibit II-1
Training Session

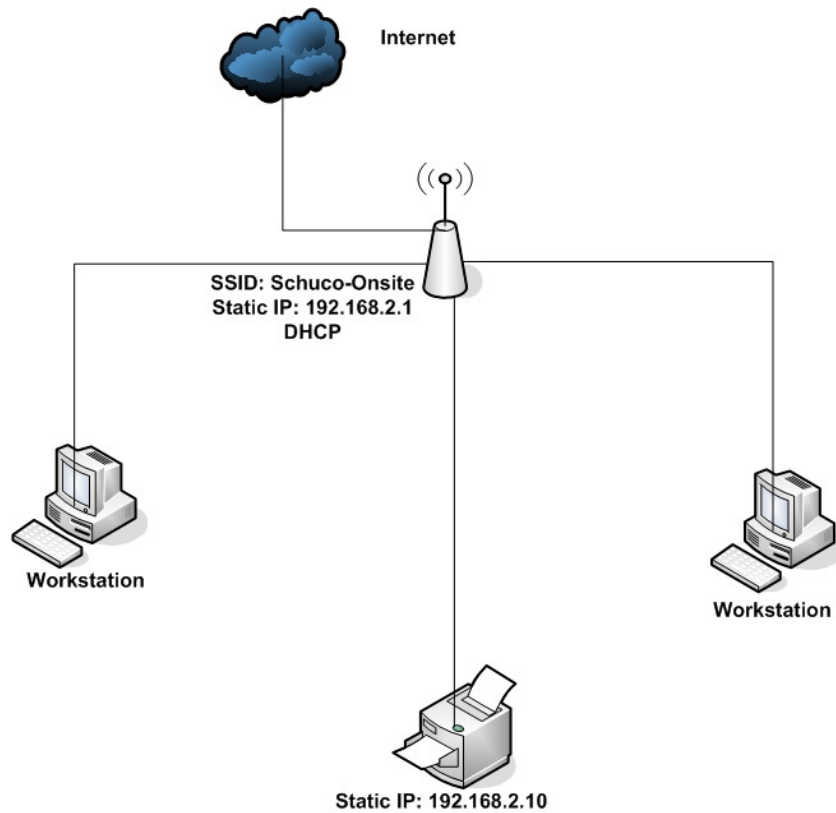
Proposed Timeframe	Topic	Instructor
15 minutes	Confidential Security Information Disclosure Protection Act	TBD, Consolidated Edison Company of New York, Inc.
15 minutes	Project Communication Standards	Patricia Schumaker
30 minutes	PMIA for Information Requests	Patricia/Dennis Schumaker
30 minutes	PMIA for Interview Requests (Including Summaries)	Patricia/Dennis Schumaker
15 minutes	Time and Expense Reporting Procedures	Patricia Schumaker
30 minutes	Project Jobsite Network	Dennis Schumaker
30 minutes	CECONY Style Standards	Patricia Schumaker/Gail Stopar
30+ minutes	Project Reports Using SCHUCO Word Tools	Dennis Schumaker



I. Project Computer Technology

We will have a printer on-site that will be connected to a wired network and we will be implementing. Internet access will be available at the jobsite. The firewall will not allow you to VPN to Walnut Ridge.

**Exhibit II-2
Onsite Network Diagram**



III. SCHUCO Project Platform

A project must be well planned and managed to ensure that the client's objectives are realized and to prevent disruption of the subject entity's operations. In the conduct of comprehensive and focused management and operations audits, Schumaker & Company's project platform addresses both technical and administrative issues. To this end, Schumaker & Company is dedicated to ensuring that a thorough, detailed work plan is developed and executed, and that the project is completed on schedule, within budget.

We use conventional, as well as Schumaker & Company proprietary, project management and control tools and techniques that include (but are not limited to) project meetings, progress or status reporting, tracking and monitoring of project schedules, budget performance monitoring and reporting, issues tracking and resolution, and change control management.

Schumaker & Company searched the market for a project management tool that unified and simplified communication while maintaining a suitable audit trail for consulting engagements. Unfortunately, there were no suitable off-the-shelf software programs on the market that could organize the complex information that consultants collect.

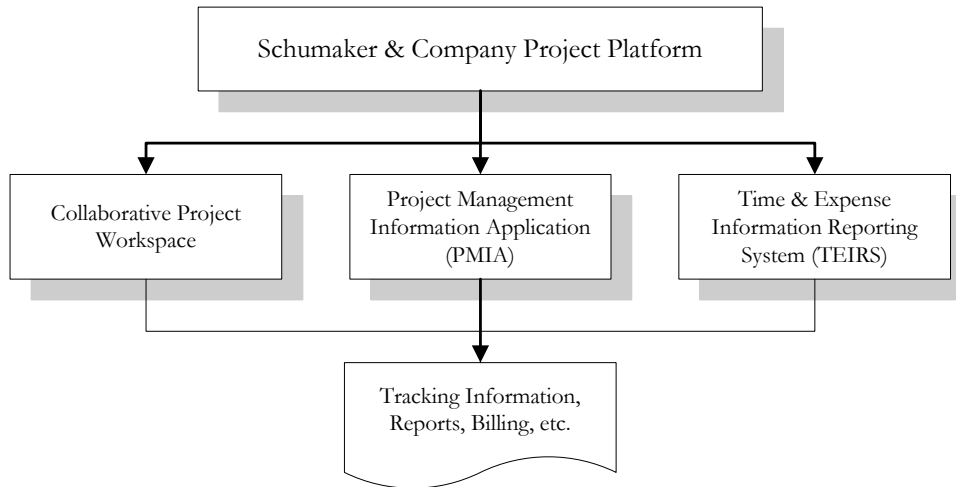
With this in mind, and as a result of our commitment to the principles of the *Project Management Institute*, Schumaker & Company developed a project platform of methodology and tools that consistently apply project management techniques to all our projects so that we could balance the competing demands of:

- ◆ Scope, time, cost, quality
- ◆ Stakeholders with differing needs and expectations
- ◆ Identified requirements (needs) and unidentified requirements (expectations)

A. Solution Environment

Combining computer technology and the Internet, Schumaker & Company developed a package of tools which enhanced collaboration with document management and issue tracking. We integrated the best of various commercially available tools and technologies, along with our own, to make communicating and sharing project information easier. This is especially beneficial when working a large multi-dimension project. A Schumaker & Company project platform is described in the flowchart shown in *Exhibit III-1*.

Exhibit III-1
Schumaker & Company Project Platform Flowchart



Proven by over 30 major projects, Schumaker & Company has succeeded in increasing the quality and velocity of communication helping to build more effective business teams. Teams that eliminated manual workflows with minimal customization and realized direct benefits through cost savings and enhanced delivery of services.

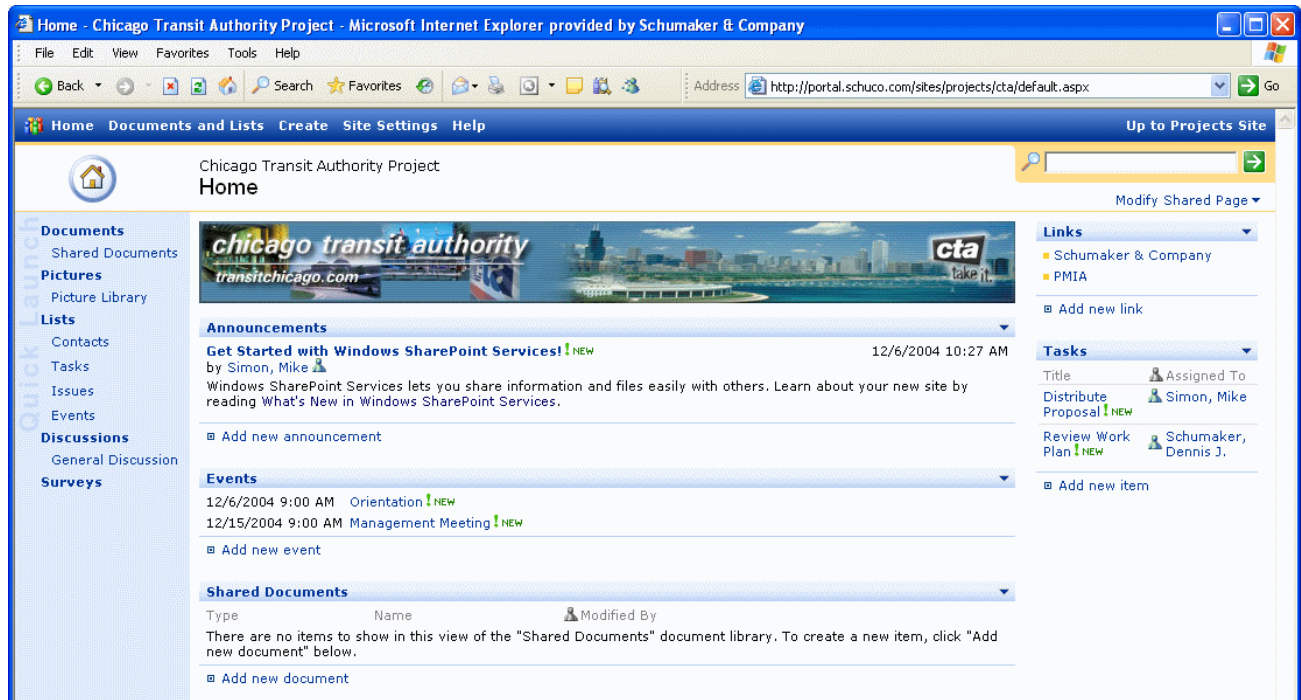
B. Collaborative Project Workspace

A project workspace website, based on Microsoft Windows SharePoint Services, created at project start-up allows the team to share and manage documents quickly, track issues, allow authorized users to create custom views, and prevent unauthorized access to sensitive information.

Microsoft Windows SharePoint Services provides a place where a team can communicate, share documents, and work together on a project. SharePoint sites allow facilitation of team participation in discussions, information capture and sharing, document collaboration, and surveys—benefits that help increase individual and team productivity. Document collaboration features permit simple check in, check out, and document version control. In addition, team and site managers can coordinate site content and user activity easily.

An example of your Schumaker & Company developed project workspace is shown in *Exhibit III-2*.

Exhibit III-2 Project Workspace Example



Individual Empowerment

Issue tracking improves the efficiency and effectiveness of project management, because it allows you to communicate about problems and related action items with team members and stakeholders. Issue tracking provides rich reporting, status indications, e-mail notifications, and alerts to help ensure that issues that come up during the completion of a project get attention and are resolved. Issues can be associated with projects, tasks, documents, and other issues.

Project workspace members can find and communicate with key contacts and experts, both by e-mail and with instant messaging. Site content can be easily searched, and users can receive alerts to tell them when existing documents and information have been changed, or when new information or documents have been added. Users can also do the following:

- Post documents to share with other team members
- Hold newsgroup-style discussions
- Take a poll of the team to make a decision

As team members add or delete documents, lists, discussions, and surveys, the project workspace automatically updates links to the content so that it's always easy to find.

Site pages display lists of information, allowing team members the ability to organize the information any way they want, such as by subject, due date, or author. For example:

- Restricting the display to see only the set of information that applies to a particular user
- Hiding information that doesn't interest a user
- Changing the order in which the information is listed
- Setting up customized views to make it easy for team members to focus quickly on pertinent information

Accessibility

Information, such as events, to-do items, and names and phone numbers of people with whom the team communicates, can be viewed or added to the site. Such site content is accessible from both a Web browser and through clients that support Microsoft Web Services.

Microsoft Office 2003 programs can read and edit site content, and Microsoft Office Outlook 2003 allows site event calendars to be viewed side-by-side with personal calendars. It also creates meeting-specific workspaces to augment group appointments.

Security

The project workspace uses standard communication protocols to transmit information over the Internet and site groups to manage security across a site. Support for the HTTPS protocol allows each session to be individually secured and encrypted to protect sensitive data.

User IDs and site groups are used to manage security across a site. Each user must be a member of at least one site group in order to view or access a site and each site group possesses corresponding rights, which are rules associated with the system as a whole, granted to local groups, global groups, and users.

C. Project Management Information Application (PMIA)

To unify and simplify communication while maintaining an audit trail for consulting engagements, Schumaker & Company developed *Project Management Information Application (PMIA)*, a proprietary software program that integrated the teachings of the *Project Management Institute*.

PMIA performs a variety of important tasks through a standard web browser, including:

- ◆ Creating a standardized and accurate information collection process
- ◆ Tracking interview and information requests that easily identify fulfillment delays
- ◆ Establishing interview times with specific time and range and tracking confirmations

- ◆ Organizing document filing and retrieval through a built-in cross-referencing system between the database and paper files
- ◆ Permitting searches on the database by keyword, subject and many other criteria, allowing for quick and easy information identification and retrieval
- ◆ Giving managers instant summaries of the project through numerous reports
- ◆ Allowing information requests and reports to be sent electronically
- ◆ Providing a consistent structure for interview summaries

We are committed to establishing project administrative procedures that will facilitate the conduct of our projects without placing any undue burdens on any of the involved parties, thereby ensuring that the project's scope is identified, agreed upon, and controlled.

The *Project Management Information Application (PMLA)* gives the ability to request documents from clients, retrieve documents, and request interviews with clients, consultants or anyone working on the project. It provides a collection of organized information.

D. PMIA Access

PMLA is on a secure internet connection. *PMLA* allows consultants the ability to enter and edit pending information and interview requests. It allows consultants the ability to search/filter requests, print reports, view information responses and interview summaries and download information. It also has the ability to view calendar of interviews and information requests. This application also has the ability to burn interview summaries and information responses to CD. Once uploaded, interview summaries and information responses are read only. It allows a flexible way to issue information and interview request. Request interview times with specific time and range, and the ability for clients and companies to confirm interviews. It has the ability to upload information responses to the client site and allowing for two stages of confirmation. Specific user security features are built into *PMLA*. The web address for *PMLA* is: <http://tpmia.schuco.com>.

PMLA allows consultants to enter and edit pending information and interview requests, view a calendar of these requests, search and filter requests, print reports, view information responses and interview summaries, and download information. *PMLA* also has the ability to burn interview summaries and information responses to CD for times when internet service is not available or to minimize project management/paper activities.

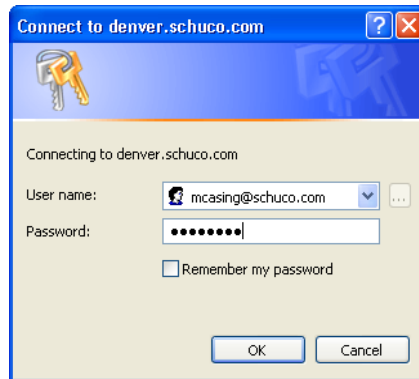
There are different levels of security built into the application. *Exhibit III-3* shows who has access to what.

Exhibit III-3
Security Access

	A	B	C	D	E	F
	PMIA Consultant User	Right Used	PMIA Consultant User	PMIA Company User	PMIA Client User	PMIA Administration User
1						
8	Info Request Reports	6	X	X	X	X
9	Cancel Information Request	24	X			X
10	Mark Information Requests Received Complete	25	X			X
11	Edit Information Request Button	26	X	X	X	X
12	Delete Information Request Button	27	X			x
13	Interview Requests					
14	Enter Interview Requests	7	X			X
15	Issue Interview Requests	8				X
16	Confirm Interview Schedule	9		X		X
17	Receive/Upload Interview Summary	10	X			X
18	View Interview Calendar	11	X	X	X	X
19	User List	12	X		X	X
20	View Interview Summaries	13	X		X	X
21	Interview Request Reports	14	X	X	X	X
22	Cancel Interview Request	23	X			X
23	Edit Interview Request Button	28	X	X	X	X
24	Delete Interview Request Button	29	X			X
25	Project Setup					
26	Clients	15				X
27	Companies	16				X
28	Consultants	17				X
29	Handling Types	18				X
30	Project Information	19				X
31	Work Plan Area	20				X
32	Company Representatives	21				X
33	Project Setup Report	22				X
34	Project setup	30				X

Shown in *Exhibit III-4* is the log on window. The user will use his/her Schuco network credential for the initial login, or select his/her name using the drop down arrow if available, and then enter a password. The username should be in following format: username@schuco.com. Select the **OK** button to continue. Otherwise, select the **Cancel** button to disregard this login.

Exhibit III-4
Network Logon Window



If the user is already logged in to the network, then the user will not be shown the log in screen but will proceed to the PMIA logon page. In *Exhibit III-5*, the logon window for PMIA access is shown. Enter your username as “schuco” and designated password and select the **Sign In** button. These passwords will enable you to update your interview and information requests.

Exhibit III-5
PMIA Logon Window



E. Information Request/Response Business Processes

This is where the information requests are entered and listed. The information business processes for *PMLA* are shown in *Exhibit III-6* and *Exhibit III-7*.

Exhibit III-6
Information Process

Information Request Business Process

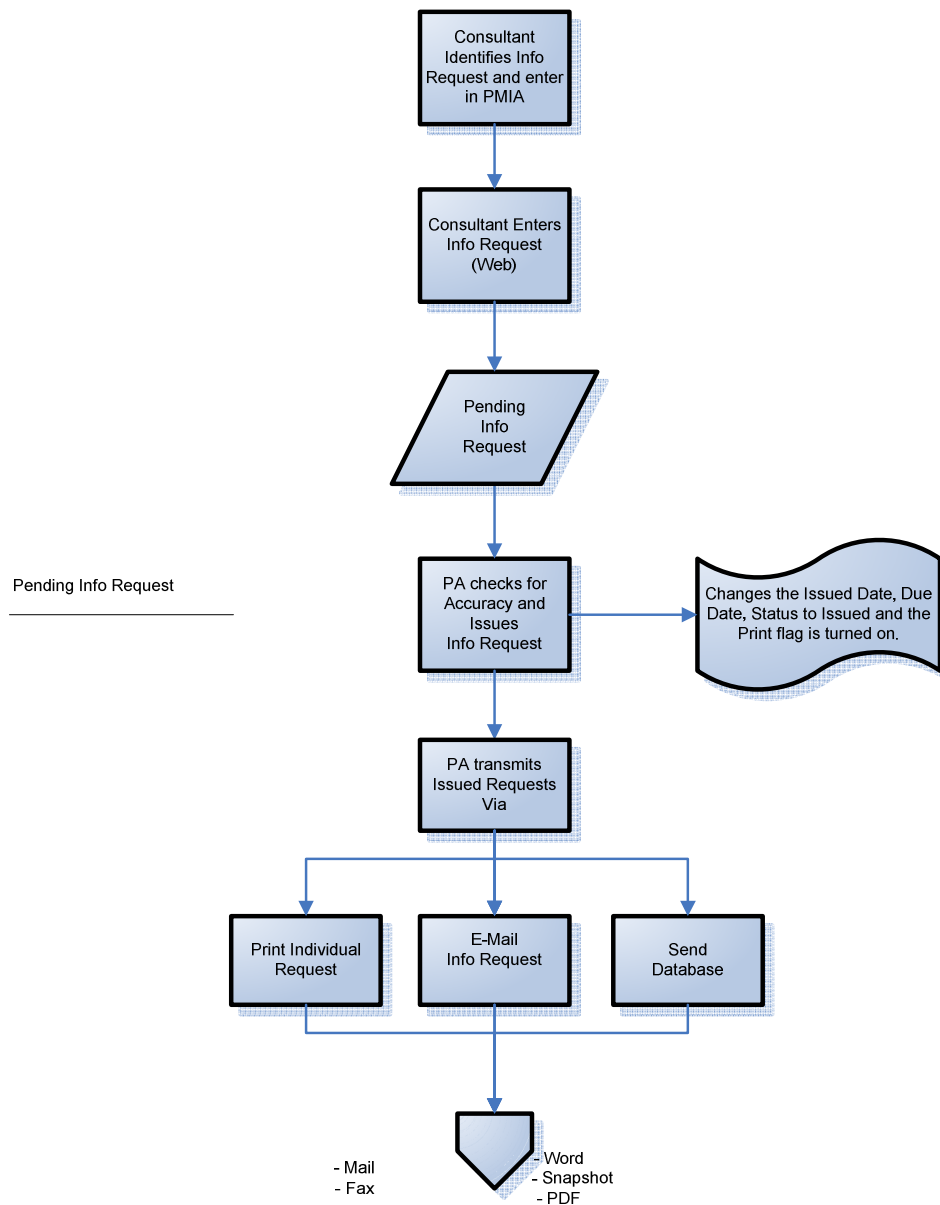
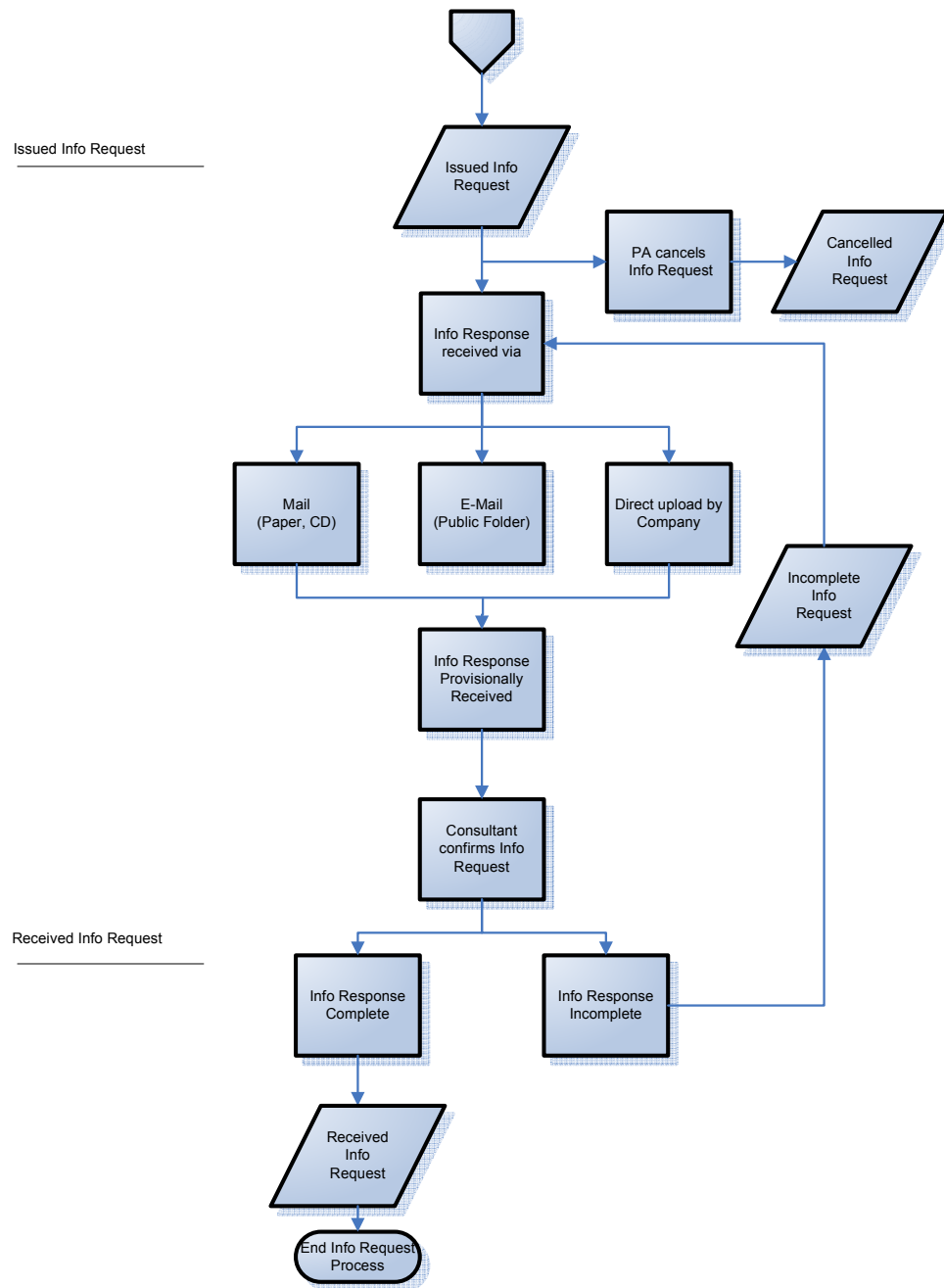


Exhibit III-7
Information Process
(continued)



Depending on who has logged on, the user will see a different *Information List* window. Security levels have determined what view the user will see when logged on. One of the differences is that the Issue button will not appear for someone who is not a *Project Administrator*.

After logging in the *Administrator* will see the *Information List* window shown in *Exhibit III-8*. The *Information List* window shows the user the information requests that are currently in *PMLA* for that project.

Exhibit III-8
Information Window

PMIA
Schumaker & Company

Signed In As **james** Sign out Database - Pennsylvania-American Water ::

Information List | Interview List | Information Calendar | Interview Calendar | Information Report | Interview Report

Criteria

Req From: All Lead Consultant: All Handling Type: All

Req To: All Status: All

Issued Date From: Date To: Keyword: Search Reset

WPA: All

Information Request

Add New Entry

Req Num	Status	WPA	Description	Consultant	Issued Date	Due Date	Recv'd Date	Edit View
1	Received Complete	ExMgt	Detailed organization charts for each department within PAW and any American Water/RWE departments serving PAW departments; include city location and staffing levels for each box within organization chart	Burgess, Lee	7/6/2007	8/10/2007	8/23/2007	Edit View (3)
2	Received Complete	ExMgt	Department and division descriptions, including goals and objectives for each department	Burgess, Lee	7/6/2007	8/10/2007	9/13/2007	Edit View (1)
3	Received Complete	ExMgt	Any data and analysis of organizational effectiveness performed by PAW in last five years	Burgess, Lee	7/6/2007	8/10/2007	9/12/2007	Edit View (1)
4	Received Complete	ExMgt	Documentation pertaining to any organizational restructuring occurring during the 2003 to 2007 period	Burgess, Lee	7/6/2007	8/10/2007	8/14/2007	Edit View (3)
5	Received Complete	ExMgt	Listing of all company committees, their roles and responsibilities, frequency of meeting, membership, and sample meeting minutes	Burgess, Lee	7/6/2007	8/10/2007	9/18/2007	Edit View (1)
6	Received Complete	ExMgt	Listing of all mechanisms used by PAW to communicate with their employees	Burgess, Lee	7/6/2007	8/10/2007	7/27/2007	Edit View (1)
7	Received Complete	ExMgt	Listing and samples of regular management reports sent upward in the organization (by PAW to American Water management), including report routing and distribution lists	Burgess, Lee	7/6/2007	8/10/2007	9/17/2007	Edit View (1)
8	Received Complete	ExMgt	Any policy and procedures documentation, including listing of all departmental operational and administrative manuals	Burgess, Lee	7/6/2007	8/10/2007	9/15/2007	Edit View (1)
9	Received Complete	ExMgt	Documentation relating to strategic and corporate planning processes, including schedules or timelines for development and approval activities, identification of key staff, approvals required, and any process flowcharts	Burgess, Lee	7/6/2007	8/10/2007	8/30/2007	Edit View (3)
10	Received Complete	ExMgt	Documentation relating to any other business unit, marketing, financial, construction, and operations planning/budgeting processes	Burgess, Lee	7/6/2007	8/10/2007	8/30/2007	Edit View (1)
11	Received	ExMot	Documents relating to the formulation and updating of corporate, region, and	Burgess, Lee	7/6/2007	8/10/2007	9/13/2007	Edit View

The user can also type in a search criteria in the text box next to the **Keyword** and click the **Search** button. This search will perform a search on the Description, Comments and Title fields as shown in *Exhibit III-9*.

Exhibit III-9 Filter by Search



Signed In As james  [Sign out](#) **Database - Pennsylvania-American Water** ::

[Information List](#) | [Interview List](#) | [Information Calendar](#) | [Interview Calendar](#) | [Information Report](#) | [Interview Report](#) | [Project Setup](#)

Criteria



Req From: All

Req To: All

Issued ▼ Date From:

Date To:

Lead Consultant: All

Status: All

Keyword: business Search Reset

WPA: All

Handling Type: All

 **Information Request**

 Add New Entry

Req Num	Status	WPA	Description	Consultant	Issued Date	Due Date	Recv'd Date	
10	Received Complete	ExMgt	Documentation relating to any other business unit, marketing, financial, construction, and operations planning/budgeting processes	Burgess, Lee	7/6/2007	8/10/2007	8/30/2007	Edit View (1)
12	Received Complete	ExMgt	Copies of any corporate, business unit, and departmental business plans	Burgess, Lee	7/6/2007	8/10/2007	9/24/2007	Edit View (7)
159	Received Complete	CorGv	Disclosure of any ongoing business relationship between a Board member and PAW or any of its affiliates or between individual Board members	Burgess, Lee	7/6/2007	8/10/2007	8/9/2007	Edit View (1)
243	Received Complete	OpPer	Description of business continuity planning process	Schumaker, Dennis	7/6/2007	8/10/2007	9/18/2007	Edit View (1)
264	Received Complete	CusSv	Call center business plan	Laycock, Kerry	8/30/2007	9/13/2007	9/15/2007	Edit View (2)
269	Received Complete	CusSv	Business plan for current year	Laycock, Kerry	8/30/2007	9/13/2007	9/13/2007	Edit View (2)
289	Received Complete	HR	HR business plan for 2007, goals and accomplishments for 2003-2006, specific to PA where possible	Laycock, Kerry	8/31/2007	9/14/2007	10/10/2007	Edit View (8)
300	Received Complete	Fin	June, 2007 Southeast Region Business Performance Package, including list of contributors and recipients	Rosenkoetter, Robert	9/4/2007	9/18/2007	9/29/2007	Edit View (2)
310	Received Complete	OpPer	Business case for Computerized Maintenance Management System (CMMS) software purchase and implementation.	Murphy, Martin	9/5/2007	9/19/2007	9/13/2007	Edit View (2)

Information Request Entry

The user can add, edit and delete an entry. To add an entry, the user selects **Add New Entry**, which is located in the **Information Request** section. **Add New Entry** is located in two places in the window; just below the title **Information Request** and at the bottom of the window in the left hand corner, if the user scrolls to the bottom as shown in *Exhibit III-10*.

Exhibit III-10
Add New Entry

PMIA Schumaker & Company Signed In As **james** Sign out Database - Pennsylvania-American Water ::

Information List | Interview List | Information Calendar | Interview Calendar | Information Report | Interview Report | Project Setup

Criteria

Req From: All Req To: All Lead Consultant: All Status: Cancelled Handling Type: All

Issued Date From: Date To: Keyword: Search Reset WPA: All

Information Request

Add New Entry

Req Num	Status	WPA	Description	Consultant	Issued Date	Due Date	Recv'd Date	
479	Cancelled	OpPer	Names and titles of the members of each of the twelve Best Operating Practices working groups and the goals and objectives of each of the groups	Murphy, Martin	10/4/2007	10/18/2007		Edit

Add New Entry

After selecting **Add New Entry** the information request will appear in the add mode window as shown in *Exhibit III-11*.

Exhibit III-11 Add Information Request

Signed In As **james** Sign out Database - Pennsylvania American Water ::

Req Num:

* Consultant: --Select item--

* Description:

* Company: PAW

* Work Plan Area: GEN - General Materials

Ref Source:

Dept:

Request From:

Status: Pending

Issued Date:

Due Date:

Comments:

Entered Date: 1/9/2008

Save Save & Add Cancel << Previous Next >>

From here the user will notice that the **Entered Date** is defaulted to the current date, if the user does not want the entered date to be the current date, then the user should change the date using the arrow buttons, or the calendar button next to the date field as shown in *Exhibit III-12*. The arrow buttons will change the date one day forward or backward.

Exhibit III-12 Information Window - Calendar



Signed In As **james** Sign out Database - Pennsylvania American Water ::

Req Num: 3 * Entered Date: 7/5/2007

* Consultant: Burgess, Lee

* Description: Any data and analysis of organizational effectiveness performed by PAW in last five years

* Company: PAW

* Work Plan Area: ExMgt - Executive Management & External Relations

Ref Source: Initial Request List

Dept:

Request From: Initial Request List

Status: Received Complete

Issued Date: 7/6/2007

Due Date: 8/10/2007

Comments: Duplicate of 177

Jul 2007

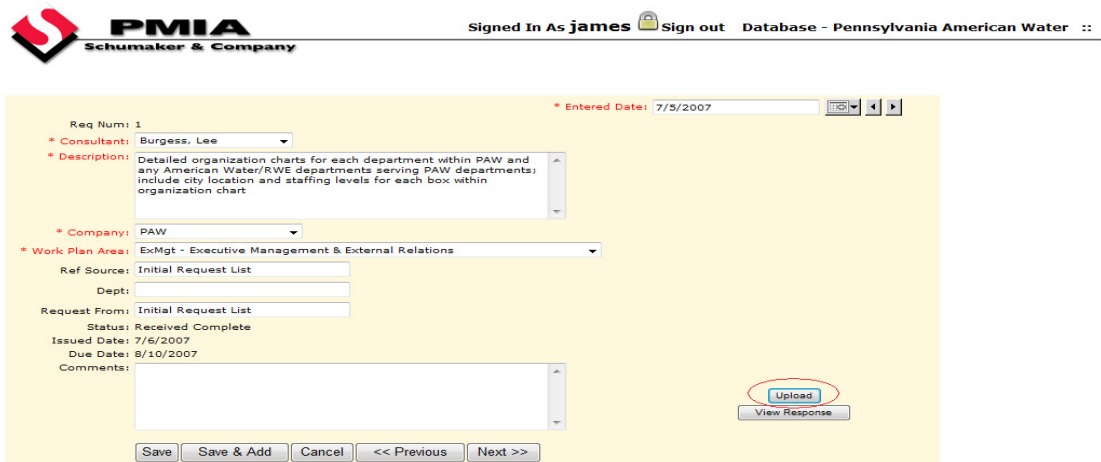
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Today is 9 Jan 2008

Upload Information Responses

Documents can be uploaded via the web interface. Click **Edit** in the far right of the desired response to open the edit mode, and then click **Upload** button to open the upload window, as shown in *Exhibit III-13*.

Exhibit III-13 Edit Window



Req Num: 1

* Entered Date: 7/5/2007

* Consultant: Burgess, Lee

* Description: Detailed organization charts for each department within PAW and any American Water/RWE departments serving PAW departments; include city location and staffing levels for each box within organization chart

* Company: PAW

* Work Plan Area: ExMgt - Executive Management & External Relations

Ref Source: Initial Request List

Dept:

Request From: Initial Request List

Status: Received Complete

Issued Date: 7/6/2007

Due Date: 8/10/2007

Comments:

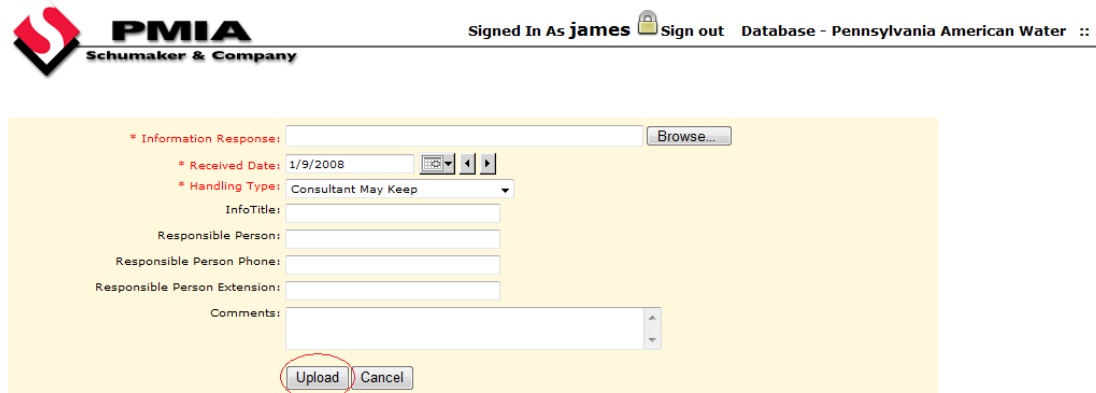
Upload

View Response

Save Save & Add Cancel << Previous Next >>

In the upload window, click **Browse** button to browse the file that will be uploaded, and set the Received Date and Handling type. The rest of the information is optional. Click **Upload** button to complete the upload, as shown in

Exhibit III-14 Document Upload



* Information Response: Browse...

* Received Date: 1/9/2008

* Handling Type: Consultant May Keep

InfoTitle:

Responsible Person:

Responsible Person Phone:

Responsible Person Extension:

Comments:

Upload Cancel

View Uploaded Information Responses

Once documents have been uploaded, the user will be able to view the documents. There are two ways to do it. First, click **Edit** for a request that you know has a document attached select the **View Response** button as shown in *Exhibit III-15*. The faster way of viewing documents is to click **View** next to **Edit**, the number is indication of how many documents are attached to the information response.

Exhibit III-15
View Response Button

The screenshot shows the PMIA Schumaker & Company web application interface. At the top, there is a navigation bar with the company logo and name, and a user status bar indicating 'Signed In As james' with a 'Sign out' link. Below the navigation bar, there is a 'Criteria' section with various filters and search options. The main content area displays a table of 'Information Request' entries. Each entry includes a 'Req Num', 'Status', 'WPA', 'Description', 'Consultant', 'Issued Date', 'Due Date', 'Rec'd Date', and two action buttons: 'Edit' and 'View'. The 'View' button for the first entry is circled in red, indicating the focus of the exhibit.

Req Num	Status	WPA	Description	Consultant	Issued Date	Due Date	Rec'd Date	Edit	View
1	Received Complete	ExMgt	Detailed organization charts for each department within PAW and any American Water/RWE departments serving PAW departments; include city location and staffing levels for each box within organization chart	Burgess, Lee	7/6/2007	8/10/2007	8/23/2007	Edit	View (3)
2	Received Complete	ExMgt	Department and division descriptions, including goals and objectives for each department	Burgess, Lee	7/6/2007	8/10/2007	9/13/2007	Edit	View (1)
3	Received Complete	ExMgt	Any data and analysis of organizational effectiveness performed by PAW in last five years	Burgess, Lee	7/6/2007	8/10/2007	9/12/2007	Edit	View (1)
4	Received Complete	ExMgt	Documentation pertaining to any organizational restructuring occurring during the 2003 to 2007 period	Burgess, Lee	7/6/2007	8/10/2007	8/14/2007	Edit	View (3)
5	Received Complete	ExMgt	Listing of all company committees, their roles and responsibilities, frequency of meeting, membership, and sample meeting minutes	Burgess, Lee	7/6/2007	8/10/2007	9/18/2007	Edit	View (1)
6	Received Complete	ExMgt	Listing of all mechanisms used by PAW to communicate with their employees	Burgess, Lee	7/6/2007	8/10/2007	7/27/2007	Edit	View (1)
7	Received Complete	ExMgt	Listing and samples of regular management reports sent upward in the organization (by PAW to American Water management), including report routing and distribution lists	Burgess, Lee	7/6/2007	8/10/2007	9/17/2007	Edit	View (1)
8	Received Complete	ExMgt	Any policy and procedures documentation, including listing of all departmental operational and administrative manuals	Burgess, Lee	7/6/2007	8/10/2007	9/15/2007	Edit	View (1)
9	Received	ExMgt	Documentation relating to strategic and corporate planning processes, including including schedules	Burgess, Lee	7/6/2007	8/10/2007	8/30/2007	Edit	View

The user will be shown one of two things: If there is only one document attached the document will open automatically, else if there is more than one document attached the user will be shown the window in *Exhibit III-16* to select which document to view.

Exhibit III-16 Response Document List Window



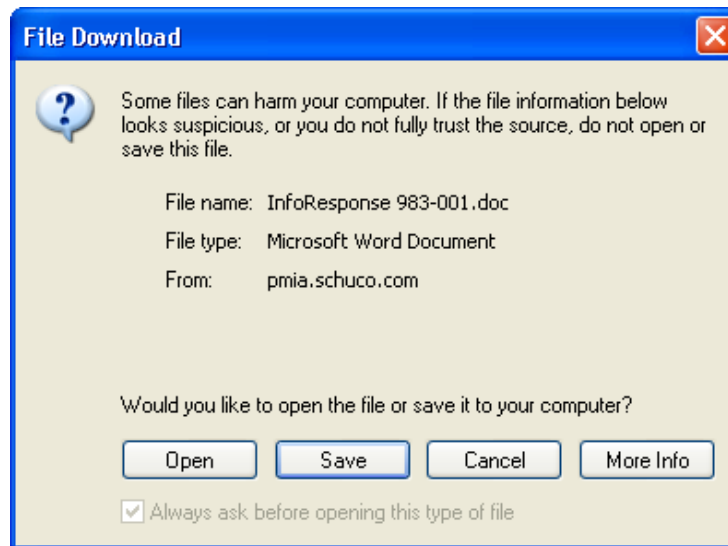
Database - Verizon NY Retail Service Quality :: Close Window

File Name	Received Date	Original File	Comments
InfoResponse 983-001.doc	11/30/2004	Copy of Test document for PMIA.doc	View
InfoResponse 983-002.doc	11/30/2004	Copy of Test document for PMIA.doc	View
InfoResponse 983-003.doc	11/30/2004	Copy of Test document for PMIA.doc	View

[Cancel](#)

The user will select **View** for the response the user wants to view. Upon receiving a document, it will be numbered and in sequential order. The numbering system determines what order the document was received. After selecting **View**, the user will be shown the window in *Exhibit III-17*. This lets the user know the File name, File type and from where. To open the document, select the **Open** button and the document will open. To disregard opening the document, select the **Cancel** button.

Exhibit III-17 File Download Window



After receiving and viewing documents, the user can determine whether the request is Received Complete.

Information Request Reports

Shown in *Exhibit III-18* is the *Information Report* window.

Exhibit III-18
Information Reports Window

The filter is available for all reports. The reports can be filtered by **Search**, **Status**, **Consultant**, **Request From** and **To**, **Issued Date From** and **To**, by **Work Plan Area** and by **Print Flag**. Filter fields can be reset by using the **Reset** button.

A list box of all of the reports is added to the screen. Shown below is a list of all of the reports available.

- ◆ Information Request Form
- ◆ Information Request Listing (Summary & Detail can be selected via radio button)
 - By Request Number
 - By Status
 - By Consultant
 - By Work Plan Area
 - By Search Word
- ◆ Information Request

- Turnaround Report
- ◆ Information Request Labels

After the user has selected the filter criteria and selected the report, the user will select the **Print Preview** button to generate the report.

F. Interview Request/Summaries Business Processes

This is where the interview requests are entered and listed. The interview business processes for *PMLA* are shown in *Exhibit III-19* and *Exhibit III-20*.

Exhibit III-19 Interview Process

Interview Request Business Process

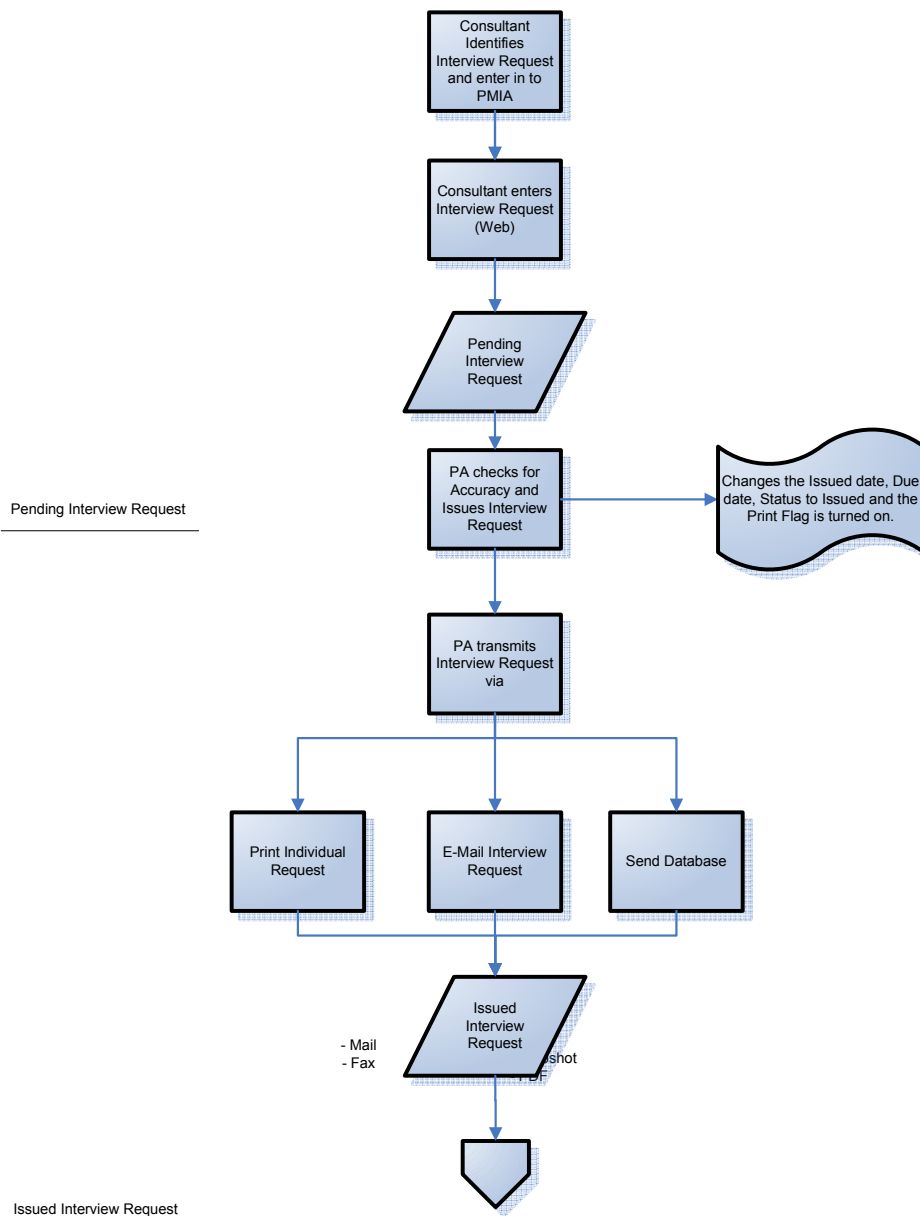
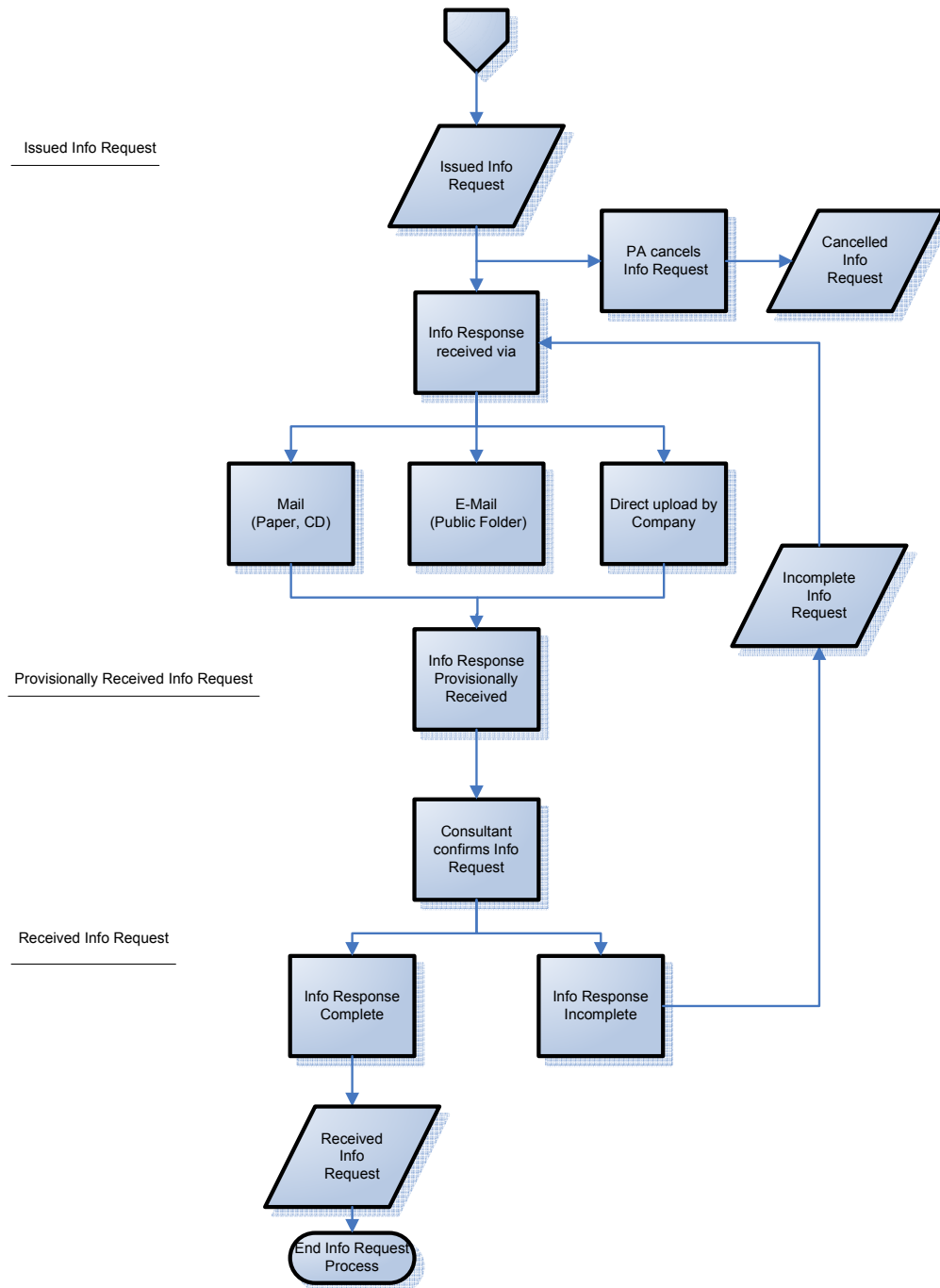


Exhibit III-20
Interview Process, cont.



When the user selects **Interview List**, the user will be shown the interview requests as shown in *Exhibit III-21*.

Exhibit III-21 Interview List

Req Num	Status	Interviewee	Title	Description	Consultant	WPA	Date	Time	Type	
1	Pending	Rochelle Kowalski/Bill Cox	Finance & IT	68 (Why IT expenditures going down; why 2004 so high, revenues)	Schumaker, Patricia	Fin	1/16/2008	8:00 AM	Req'd	Edit Delete
1	Completed	Various		Kick-off Meeting in Hershey PA	Schumaker, Patricia	GEN	8/28/2007	8:00 AM	Sch'd	Edit
2	Completed	John Young	American Water COO	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Executive Management, Affiliate Interests, Support Services, Operational Performance)	Schumaker, Patricia	ExMgt	8/28/2007	1:30 PM	Sch'd	Edit View (1)
3	Completed	Chuck Johnston	Business Development	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (BD)	Burgess, Lee	ExMgt	8/28/2007	2:30 PM	Sch'd	Edit View (1)
4	Completed	Rochelle Kowalski	Regional Director, Finance	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Financial Management and Executive Management)	Rosenkoetter, Robert	Fin	8/29/2007	8:00 AM	Sch'd	Edit View (1)
5	Completed	Kathy Pape	President, PAW	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Executive Management, Affiliate Interests)	Burgess, Lee	ExMgt	8/29/2007	10:00 AM	Sch'd	Edit View (1)
6	Scheduled	Glenn Milton	VP Customer Service	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Customer Service)	Schumaker, Dennis	CusSv	8/28/2007	1:30 PM	Sch'd	Edit
7	Completed	Kim Legg	Regional Director, HR	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (HR, Diversity/EEO)	Laycock, Kerry	HR	8/28/2007	3:30 PM	Sch'd	Edit View (1)
8	Completed	Dan Hufton	Regional Director, Production	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Water Operations, Operational Performance)	Schumaker, Dennis	WaOps	8/28/2007	3:30 PM	Sch'd	Edit View (1)
9	Completed	Traci Follmer	Regional Director, Customer Relations	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Customer Service)	Schumaker, Dennis	CusSv	8/29/2007	8:00 AM	Sch'd	Edit View (1)

Additional Check Boxes

Aside from all the filters mentioned above, there are three check boxes that will provide additional information, as shown in *Exhibit III-22*.

Exhibit III-22

Interview Check Boxes



Signed In As **james**
 Sign out
Database - Pennsylvania American Water ::

[Information List](#) | [Interview List](#) | [Information Calendar](#) | [Interview Calendar](#) | [Information Report](#) | [Interview Report](#) | [Project Setup](#)

Criteria



Req From: All

Req To: All

Schd ▼

Lead Consultant: All

Attending Consultant: All

Attending Company Rep: All

Attending Client: All

Date From:

Date To:

Status: All

Keyword:

WPA: All

Search

Reset

Interview Request

Add New Entry

Req Num	Status	Interviewee	Title	Description	Consultant	WPA	Date	Time	Type		
	Pending	Rochelle Kowalski	Finance	Conference call to discuss IR#68 (why IT expenditures going down; why 2004 so high, revenues)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd	Edit	Delete
	Pending	Bill Cox		Conference call to discuss IR #76/560(metrics and associated results, why taretas not met)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd	Edit	Delete
1	Completed	Various		Kick-off Meeting in Hershey PA	Schumaker, Patricia	GEN	8/28/2007	8:00 AM	Sch'd	Edit	
2	Completed	John Young	American Water COO	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Executive Management, Affiliate Interests, Support Services; Operational Performance)	Schumaker, Patricia	ExMgt	8/28/2007	1:30 PM	Sch'd	Edit	View (1)
3	Completed	Chuck Johnston	Business Development	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (BD)	Burgess, Lee	ExMgt	8/28/2007	2:30 PM	Sch'd	Edit	View (1)
4	Completed	Rochelle Kowalski	Regional Director, Finance Management	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Financial Management and Executive Management)	Rosenkoetter, Robert	Fin	8/29/2007	8:00 AM	Sch'd	Edit	View (1)

When the box next to **Attending Consultant** is checked, a column names **Attending Consultants** appears next to **Type** column in Interview Request window, which shows all attending consultant for each request, as shown in *Exhibit III-23*.

Exhibit III-23
Attending Consultant Check Box



Signed In As James
[Sign out](#)
[Database - Pennsylvania American Water](#)

[Information List](#) |
 [Interview List](#) |
 [Information Calendar](#) |
 [Interview Calendar](#) |
 [Information Report](#) |
 [Interview Report](#) |
 [Project Setup](#)

Criteria



Schd

Req From:

All

Req To:

All

Date From:

10/10/2007

10/10/2007

Date To:

10/10/2007

10/10/2007

Lead Consultant:

All

Attending Consultant:

All

☒

Attending Company Rep:

All

☐

Attending Client:

All

☐

Status:

All

Keyword:

WPA:

All

Search

Reset


Interview Request


Add New Entry

Req Num	Status	Interviewee	Title	Description	Consultant	WPA	Date	Time	Type	Attending Consultants	Edit	Delete
	Pending	Rochelle Kowalski	Finance	Conference call to discuss IR #68 (why IT expenditures going down; why 2004 so high, revenues)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd	Schumaker, Patricia;	Edit	Delete
	Pending	Bill Cox		Conference call to discuss IR #76/560(metrics and associated results, why taretts not met)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd	Schumaker, Patricia;	Edit	Delete
1	Completed	Various		Kick-off Meeting in Hershey PA	Schumaker, Patricia	GEN	8/28/2007	8:00 AM	Sch'd	Burgess, Lee; Laycock, Kerry; Murphy, Martini; Rosenkoetter, Robert; Schumaker, Dennis; Schumaker, Patricia;	Edit	
2	Completed	John Young	American Water COO	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Executive Management; Affiliate Interests, Support Services, Operational Performance)	Schumaker, Patricia	ExMgt	8/28/2007	1:30 PM	Sch'd	Burgess, Lee; Murphy, Martini; Rosenkoetter, Robert; Schumaker, Patricia;	Edit View (1)	

When the box next to **Attending Company Rep** is checked, a column named **Attending Company Reps** appears next to **Type** column in Interview Request window, which shows all attending company reps for each request, as shown in *Exhibit III-24*.

Exhibit III-24
Attending Company Reps Column



Signed In As **james**  Sign out
Database - Pennsylvania American Water ::

[Information List](#) | [Interview List](#) | [Information Calendar](#) | [Interview Calendar](#) | [Information Report](#) | [Interview Report](#) | [Project Setup](#)

Criteria

Req From: All
Req To: All

Lead Consultant: All
Attending Consultant: All
Status: All

Schd
Date From:
Date To:

Attending Company Rep: ☒
Keyword:

Attending Client: All
WPA: All

Search
Reset

Interview Request

Add New Entry

Req Num	Status	Interviewee	Title	Description	Consultant	WPA	Date	Time	Type	Attending Company Reps	Edit	Delete
	Pending	Rochelle Kowalski	Finance	Conference call to discuss IR#68 (why IT expenditures going down; why 2004 so high, revenues)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd		Edit	Delete
	Pending	Bill Cox		Conference call to discuss IR #76/560(metrics and associated results, why taretts not met)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd		Edit	Delete
1	Completed	Various		Kick-off Meeting in Hershey PA	Schumaker, Patricia	GEN	8/28/2007	8:00 AM	Sch'd	Tschachler, Louis;	Edit	
2	Completed	John Young	American Water COO	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Executive Management, Affiliate Interests, Support Services, Operational Performance)	Schumaker, Patricia	ExMgt	8/28/2007	1:30 PM	Sch'd		Edit	View (1)
3	Completed	Chuck Johnston	Business Development	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (BD)	Burgess, Lee	ExMgt	8/28/2007	2:30 PM	Sch'd		Edit	View (1)
4	Completed	Rochelle Kowalski	Regional Director, Finance	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Financial Management and Executive Management)	Rosenkoetter, Robert	Fin	8/29/2007	8:00 AM	Sch'd		Edit	View (1)
5	Completed	Kathy Pape	President, PAW	Orientation interview describing organization, major processes and	Burgess, Lee	ExMgt	8/29/2007	10:00	Sch'd		Edit	View

When the box next to **Attending Client** is checked, a column named **Attending Clients** appears next to **Type** column in Interview Request window, which shows all attending clients for each request, as shown in *Exhibit III-25*.

Exhibit III-25
Attending Clients Column

The screenshot shows the PMIA Schumaker & Company web application interface. The top navigation bar includes links for Information List, Interview List, Information Calendar, Interview Calendar, Information Report, Interview Report, and Project Setup. The user is signed in as 'james'. The 'Criteria' section on the left includes filters for Req From, Req To, Date From, Date To, Lead Consultant, Attending Consultant, Attending Company Rep, Attending Client, Status, Keyword, and WPA. The 'Interview Request' table below has columns for Req Num, Status, Interviewee, Title, Description, Consultant, WPA, Date, Time, Type, and Attending Clients. The 'Attending Clients' column is circled in red. The table contains three rows of data, with the third row showing a completed meeting in Hershey PA.

Req Num	Status	Interviewee	Title	Description	Consultant	WPA	Date	Time	Type	Attending Clients	Edit	Delete
	Pending	Rochelle Kowalski	Finance	Conference call to discuss IR #68 (why IT expenditures going down; why 2004 so high, revenues)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd			
	Pending	Bill Cox		Conference call to discuss IR #76/560(metrics and associated results, why taret's not met)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd			
1	Completed	Various		Kick-off Meeting in Hershey PA	Schumaker, Patricia	GEN	8/28/2007	8:00 AM	Sch'd	Burger, Lori; Clista, John; Hosler, Dennis; Irani, Porus; Lesney, Carl; Palewicz, Mike;	Edit	Delete

A consultant can select any number of check boxes or all if desired. Shows all boxes checked.

Exhibit III-26
Exhibit Title

The screenshot shows the PMIA Schumaker & Company web application interface. The top navigation bar includes links for Information List, Interview List, Information Calendar, Interview Calendar, Information Report, Interview Report, and Project Setup. The user is signed in as 'james'. The 'Criteria' section on the left includes filters for Req From, Req To, Date From, Date To, Lead Consultant, Attending Consultant, Attending Company Rep, Attending Client, Status, Keyword, and WPA. The 'Interview Request' table below has columns for Req Num, Status, Interviewee, Title, Description, Consultant, WPA, Date, Time, Type, Attending Consultants, Attending Company Reps, and Attending Clients. The 'Attending Consultants', 'Attending Company Reps', and 'Attending Clients' columns are circled in red. The table contains three rows of data, with the third row showing a completed meeting in Hershey PA.

Req Num	Status	Interviewee	Title	Description	Consultant	WPA	Date	Time	Type	Attending Consultants	Attending Company Reps	Attending Clients	Edit	Delete
	Pending	Rochelle Kowalski	Finance	Conference call to discuss IR #68 (why IT expenditures going down; why 2004 so high, revenues)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd	Schumaker, Patricia;			Edit	Delete
	Pending	Bill Cox		Conference call to discuss IR #76/560 (metrics and associated results, why taret's not met)	Schumaker, Patricia	SS-IT	1/14/2008	8:00 AM	Req'd	Schumaker, Patricia;			Edit	Delete
1	Completed	Various		Kick-off Meeting in Hershey PA	Schumaker, Patricia	GEN	8/28/2007	8:00 AM	Sch'd	Burgess, Lee; Laycock, Kerry; Murphy, Martin; Rosenkoetter, Robert; Schumaker, Dennis; Schumaker,	Tschachler, Louis;	Burger, Lori; Clista, John; Hosler, Dennis; Irani, Porus; Lesney, Carl;	Edit	Delete

Interview Request Entry

The user can add, edit and delete an entry. To add an entry, the user selects **Add New Entry**, which is located in the **Interview Request** section. **Add New Entry** is located in two places in the window; just below the title **Interview Request** and at the bottom of the window in the left hand corner, if the user scrolls to the bottom. After selecting **Add New Entry** the interview request will appear in the add window as shown in *Exhibit III-27*.

Exhibit III-27
Add Interview Request

PMIA Schumaker & Company

Signed In As **james** Sign out Database - Pennsylvania American Water ::

Req Num:

* Interviewer:

Title:

* Work Plan Area: GEN - General Materials

* Req. Date: 9/4/2007

Alt. Date:

Act. Date:

* Est. Hrs: 2

Client Reps

Company Reps

Consultants

* Description:

Issued Date:

Comments:

Phone:

Confirm Date:

☐ Draft ☐ Final

* Entered Date: 1/10/2008

* Consultant: --Select Item--

* Company: PAW

Dept:

* Req. Time: 8 AM

Alt. Time: --

Act. Time: --

Status: Pending

Due Date:

Location:

Ext:

Summary Date:

Save Save & Add Cancel << Previous Next >>

After selecting the **Save** button, the user will be taken back to the edit window where the user will not see the **Confirm Interview Request** button as shown in *Exhibit III-28* and the status will change to Scheduled. The user must select the **Save** button on the Edit window in order for the request to be confirmed.

Exhibit III-28 Scheduled Interview Request



Signed In As **james** Sign out Database - Pennsylvania

Req Num: 58		* Entered Date: 9/3/2007	
* Interviewee: Unknown		* Consultant: Schumaker, Patricia	
Title:		* Company: PAW	
* Work Plan Area: DEEO - Diversity & EEO		Dept:	
* Req. Date: 9/12/2007	* Req. Time: 8 AM 00	Alt. Time: -- 00	
Alt. Date: 9/14/2007	Alt. Time: 8 AM 00	Act. Time: 8 AM 00	
Act. Date: 9/12/2007			
* Est. Hrs: 2			
Client Reps Company Reps Consultants			
* Description: Person responsible for developing PAWC EEOC-1 and affirmative action reports and any other diversity statistics		Status: Scheduled	
Issued Date: 9/5/2007		Due Date: 9/12/2007	
Comments: Kerry to discuss with Susan Caruso, then decide if this interview is needed		Location: Hershey	
Phone:		Ext:	
Confirm Date:		Summary Date:	
☐ Draft ☐ Final		Upload Interview Summary	
Save Save & Add Cancel << Previous Next >>			
Cancel Request			

View Interview Summary

Interviews are conducted by consultants and then need to be logged and recorded for future reference.

To view the interview summary, if the user is already in the Edit window for a request, select the **View Interview Summary** button. Otherwise, if the user is not already on the Edit window, select **Edit** next to the interview request corresponding to the interview summary. Once on the Edit window, the user will see the **View Interview Summary** button as shown in *Exhibit III-29*. The **View Interview Summary** button will only appear if there are summaries attached to the interview request.

Exhibit III-29 View Interview Summary Button

The screenshot shows the PMIA Schumaker & Company interface. At the top, it says "Signed In As james" with a "Sign out" link and "Database - Pennsylvania American Water". The main form contains various fields for an interview request, including "Req Num: 7", "Interviewee: Kim Legg", "Title: Regional Director, HR", "Work Plan Area: HR - Human Resources", "Req. Date: 8/28/2007", "Alt. Date:", "Act. Date: 8/28/2007", "Est. Hrs: 2", "Client Reps: Palewicz, Mike", "Company Reps:", "Consultants: Laycock, Kerry; Schumaker, Patricia; Stopar, Gail", "Description: Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (HR, ...)", "Issued Date: 8/9/2007", "Comments: Also attending was Carole Dascoli, Interim American Water HR Director", "Phone:", "Confirm Date:", "Status: Completed", "Due Date: 8/16/2007", "Location: Hershey", "Ext:", "Summary Date: 10/3/2007", and "Upload Interview Summary" button. The "View Interview Summary" button is circled in red.

Alternatively, Interview Summary can be viewed simply clicking **View** next to **Edit**. The number indicates the number of interview summaries. As shown in *Exhibit III-30*. The **Next** and **Previous** buttons are very self explanatory, they allow consultants to view next or previous request without exiting the edit mode.

Exhibit III-30 Interview Summary View

The screenshot shows the PMIA Schumaker & Company interface. At the top, it says "Signed In As james" with a "Sign out" link and "Database - Pennsylvania American Water". Below the navigation bar, there are search criteria for "Criteria" including "Req From: All", "Lead Consultant: All", "Req To: All", "Attending Consultant: All", "Status: Completed", "Schd", "Date From:", "Date To:", "Attending Company Rep: All", "Attending Client: All", "Keyword:", and "WPA: All". There are "Search" and "Reset" buttons. Below the criteria, there is a table titled "Interview Request" with columns: "Req Num", "Status", "Interviewee", "Title", "Description", "Consultant", "WPA", "Date", "Time", "Type", and "Edit View". The table contains 8 rows of data. The "Edit View" column for the second row is circled in red.

Req Num	Status	Interviewee	Title	Description	Consultant	WPA	Date	Time	Type	Edit View
1	Completed	Various		Kick-off Meeting in Hershey PA	Schumaker, Patricia	GEN	8/28/2007	8:00 AM	Sch'd	Edit View
2	Completed	John Young	American Water COO	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Executive Management, Affiliate Interests, Support Services, Operational Performance)	Schumaker, Patricia	ExMgt	8/28/2007	1:30 PM	Sch'd	Edit View (1)
3	Completed	Chuck Johnston	Business Development	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (BD)	Burgess, Lee	ExMgt	8/28/2007	2:30 PM	Sch'd	Edit View (1)
4	Completed	Rochelle Kowalski	Regional Director, Finance	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Financial Management and Executive Management)	Rosenkoetter, Robert	Fin	8/29/2007	8:00 AM	Sch'd	Edit View (1)
5	Completed	Kathy Pape	President, PAW	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Executive Management, Affiliate Interests)	Burgess, Lee	ExMgt	8/29/2007	10:00 AM	Sch'd	Edit View (1)
7	Completed	Kim Legg	Regional Director, HR	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (HR, Diversity/EEO)	Laycock, Kerry	HR	8/28/2007	3:30 PM	Sch'd	Edit View (1)
8	Completed	Dan Hufton	Regional Director,	Orientation interview describing organization, major processes and systems, key accomplishments, and upcoming initiatives (Water Operations, Operational Performance)	Schumaker, Dennis	WaOps	8/28/2007	3:30 PM	Sch'd	Edit View (1)

If there are more than one interview summaries attached, the user will see the window in *Exhibit III-31*. If there is only one interview summary attached, then the interview summary will open automatically on the screen. Upon uploading a document the summary will be given a numbering system. The standard will be to include **InterSummary** then the request number, a dash, and the sequence number. The numbering system determines what order the document was uploaded.

Exhibit III-31
View Interview Summary List



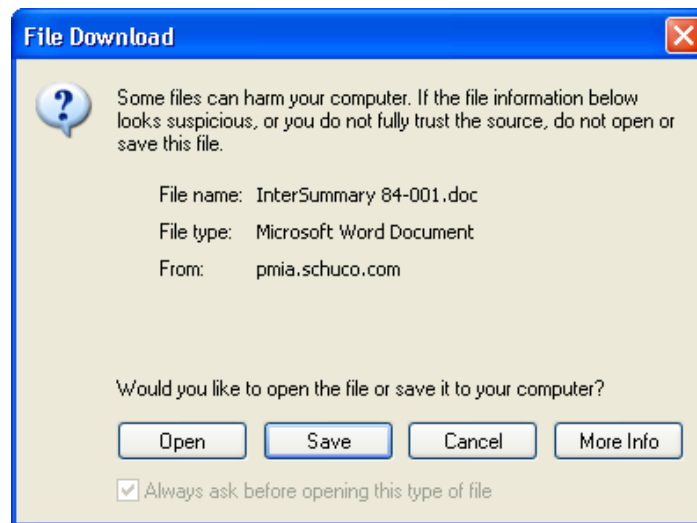
Database - Verizon NY Retail Service Quality :: Close Window

File Name	Summary Date	Comments
InterSummary 84-001.doc	11/19/2004	View
InterSummary 84-002.doc	11/19/2004	View

Cancel

To view a summary, select **View** next to the response to be viewed. After selecting **View**, the user will be shown the window in *Exhibit III-32*. This lets the user know the file name, file type, and from where.

Exhibit III-32
File Download Window



Interview Request Calendar

The Interview Request Calendar shows the scheduled information request in the corresponding date for the current month by default. Consultants can also view previous or next month by clicking the months shown on top corners of the calendar, as shown in *Exhibit III-33*. Consultants can open the edit mode of any information request by clicking the corresponding request in the calendar.

Exhibit III-33
Interview Request Calendar

PMIA Schumaker & Company Signed In As **james** Sign out Database - Pennsylvania American Water ::

Information List | Interview List | Information Calendar | **Interview Calendar** | Information Report | Interview Report | Project Setup

Criteria

Req From: All Lead Consultant: All
 Req To: All Attending Consultant: All
 Issued Date From: Date To: Attending Company Rep: All Keyword: Search Reset
 Date To: Attending Client: All WPA: All

<< December 2007 **January 2008** February 2008 >>

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
	9:00 AM/161 Bill Komianos 10:00 AM/158 James Li 11:00 AM/159 Joe Kuchmek 2:00 PM/172 Jim Lesney 3:00 PM/160 Mike Shanko		10:00 AM/169 Emily Ashworth/Ellen Wolf			
13	14	15	16	17	18	19
20	21	22	23	24	25	26
			9:00 AM/162 Deb Schmid/Donna Trickle			

Interview Request Reports

The *Interview Request Listing* reports allows the *Project Manager* to see how many interview requests there are, how many have been issued, how many have been received, how many have been confirmed or not confirmed, and how many are still pending. It gives the user a detail of the interview. It shows the consultants attending the interview, the appointment date and time, the request number, the meeting place, the client attending, description of the interview, status of the interview and any special instructions. The consultants and *Project Manager* use these reports to follow-up on the project.

Shown in *Exhibit III-34* is the *Interview Report* window.

Exhibit III-34
Interview Reports Window

The screenshot displays the 'Interview Reports Window' interface. At the top, the PMIA Schumaker & Company logo is on the left, and the user is signed in as 'james' with a 'Sign out' link and the database name 'Pennsylvania American Water'. A navigation bar contains links: Information List, Interview List, Information Calendar, Interview Calendar, Information Report, Interview Report, and Project Setup. The main area is divided into two sections. The top section, titled 'Criteria', contains a 'Schd' dropdown and several filter fields: 'Req From: All', 'Req To: All', 'Date From' and 'Date To' with calendar icons, 'Lead Consultant: All', 'Attending Consultant: All', 'Attending Company Rep: All', 'Attending Client: All', 'Print Flag: All', 'Status: Completed', 'Keyword' (with a search icon), and 'WPA: All'. A 'Reset' button is on the right. The bottom section, titled 'Select Interview Report', contains a list box with the following items: 'Interview Request Form - Blank', 'Interview Request Form', 'Interview Request Listing By Scheduled Time', 'Interview Request Listing By Request Number', 'Interview Request Listing By Status', 'Interview Request Listing By Consultant', 'Interview Request Listing By Work Plan Area', 'Interview Request Listing By Search Word', 'Interview Label', and 'Interview Label - 3 Up'. A 'Print Preview' button is located below the list box.

The filter is available for all reports. The user can filter by **Search**, **Status**, **Consultant**, **Print Flag**, **Attending Consultant**, **Request From** and **To**, **Issued Date From** and **To**, and by **Work Plan Area**. The user can reset the filter fields by using the **Reset** button.

A list box of all of the reports is added to the screen. Shown below is a list of all of the reports available.

- ◆ Interview Request Form
- ◆ Interview Request Listing (Summary & Detail can be selected via radio button)

- By Request Number
- By Status
- By Consultant
- By Work Plan Area
- By Search Word
- ♦ Interview Request
 - Turnaround Report
- ♦ Interview Request Labels

They saw the amount of administrative time that the system saved, time that was then spent performing the actual investigative and analytical work.

IV. CECONY Report Standards

The following report standards will be used for the CECONY report resulting from the stratified management and operations audit of CECONY.

A. Project Software

For the CECONY project, all consultants will be using the Windows software applications listed in *Exhibit IV-1*.

Exhibit IV-1 Approved Software Applications	
Software Application	Usage
Microsoft Word 2003 (XP)	Word processing
Microsoft Excel 2003 (XP)	Spreadsheets, charts, and graphs used for data analysis
Microsoft Visio 2003 (XP)	Organization charts and other diagrams
Project Management Information Application (PMLA) (Web)	Project management
Time and Expense Information Reporting System (TEIRS) (Web)	Time and expense reporting and billing

B. Report Structure

A preliminary table of contents for the draft and final report is contained in *Section L* of *Chapter III – CECONY Report Standards* to this document and a generalized outline for each task area is contained in *Section M* of *Chapter III – CECONY Report Standards*.

C. Word Fundamental Concepts

This section discusses the fundamental concepts of Word, which include:

- ◆ Document formatting/section formatting
- ◆ Paragraph formatting
- ◆ Character formatting

An understanding of these fundamental concepts is a prerequisite of effective and proficient use of this software tool.

Document Formatting/Section Formatting

 **Key Concept** – Section formatting (e.g., margins, justification, line spacing, headers and footers, page orientation, etc.) is stored in the section mark.

There is no such thing as document formatting. In place of document formatting, Word offers section formatting. In essence, documents are composed of one or more sections. A section can encompass as little as one character or as much as an entire document. If the whole document contains just one section – by far the most common situation – section formatting (margins, paper size, etc.) is the same throughout the entire document. In documents containing more than one section, a section either encompasses all the information from the document's beginning to the section break or all the information from one section break to the next. Changes in section formatting will be applied only to the selected (highlighted) section(s) of the document.

 **Key Concept** – At Schumaker & Company, each chapter is usually a separate document – i.e., file. Therefore, the whole document contains one section. We rarely insert section marks in any of our documents. However, section marks are automatically inserted when making a master document of the entire report.

Paragraph Formatting

Paragraph marks appear on the screen as the following character: ¶. A paragraph consists of all the information contained between the previous paragraph mark and the current paragraph mark. The only exception to that definition pertains to tables in Word. Each row in a table is considered a paragraph and can be formatted accordingly.

 **Key Concept** – Paragraph formatting is stored in the paragraph mark. Once you understand what constitutes paragraph formatting in Word and realize that the paragraph formatting moves with the paragraph mark, you will have overcome the largest hurdle in understanding Word.

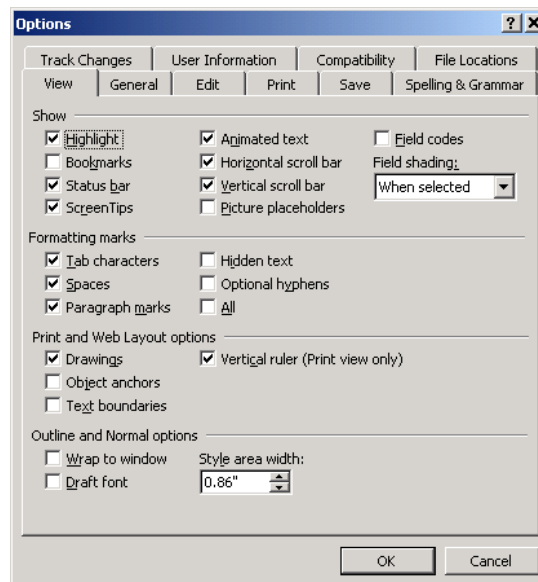
You should always be able to see the paragraph marks in your documents to remind you where the formatting is stored. **You cannot tell what Word considers a paragraph by looking at a printed version of the document.**

Paragraph marks inherit their formatting. If you place your cursor anywhere inside a paragraph and hit enter, that newly created paragraph mark inherits the original paragraph's formatting. For example, if your cursor is positioned in front of a *twelve-point, Garamond, left-justified, single-spaced* paragraph mark and

you hit enter ten times, you suddenly have ten new *twelve-point, Garamond, left-justified, single-spaced* paragraphs in your document.

The only accurate presentation of paragraphs can be seen on-screen in the normal or page layout views when the PARAGRAPH MARKS box on the TOOLS\OPTIONS view tab has been checked. To verify this setting and others that are related to it have been turned on, click on **Tools**, then **Options**, and make sure the TAB CHARACTERS, SPACES, PARAGRAPH MARKS, and OPTIONAL HYPHENS (if desired) boxes are checked in the VIEW tab as seen in *Exhibit IV-2*.

Exhibit IV-2
Paragraph Marks



Word takes certain liberties as to what it considers paragraph formatting. Aside from the obvious items – factors affecting pagination, indentation, and spacing (all the things you see when you click on **Format**, then **Paragraph**) – there is a fair amount of paragraph formatting that is not so obvious, such as borders, shading, and tabs.

Tabs

Key Concept – Like all paragraph formatting, the tab stops travel with the paragraph marks. Due to the power of Word's table feature, tabs should be used only when other Word features – specifically tables – cannot achieve the desired effect.

Tabs are imperative at Schumaker & Company because the width of each character is not uniform; it depends on the character, unlike a Courier font. If a paragraph is right-justified, the spacing between

each character is micro-justified to improve the paragraph's appearance. Never attempt to position text in a line by using the space bar. What you see on the screen is not necessarily what you will get in the printed version. Furthermore, tables, rather than tabs, should be used to format text. The table feature of Word is a much more powerful formatting device than tabs.

Character Formatting

Unlike paragraph formatting, which travels on the back of a paragraph mark, character formatting in Word is just *there*. All you have to do is select the characters and apply the formatting – usually by clicking on the appropriate tool bar button. Characters inherit their character formatting from the character preceding the cursor – or from the character following the cursor when the cursor is positioned at the beginning of a line. If you place your cursor in a line and start typing, the new characters take on the characteristics of the adjacent characters. That is why unwanted character formatting can propagate through a document. If you mistakenly place the cursor near a bolded, 18-point character and begin typing or hit the ENTER key a few times and start typing, you suddenly have bolded, 18-point characters throughout your document.

Most character formatting is apparent: font, point size, bold, italic, underline, etc. Some of the less apparent formatting options include double underlines, word only underlines, ^{subscript} and ^{superscript}. Characters can also be formatted ~~strike-through~~, SMALL CAPS (SMALL CAPS are used throughout the style guide to distinguish Word commands and keystrokes like ENTER), or ALL CAPS. You can choose from 16 different colors, including “Auto,” which is usually black. Moreover, you can specify kerning for a character. Kerning is simply a measurement of the distance from one character to the next. `T h e s e
a r e a l l k e r n e d a t + 5 p o i n t s .`

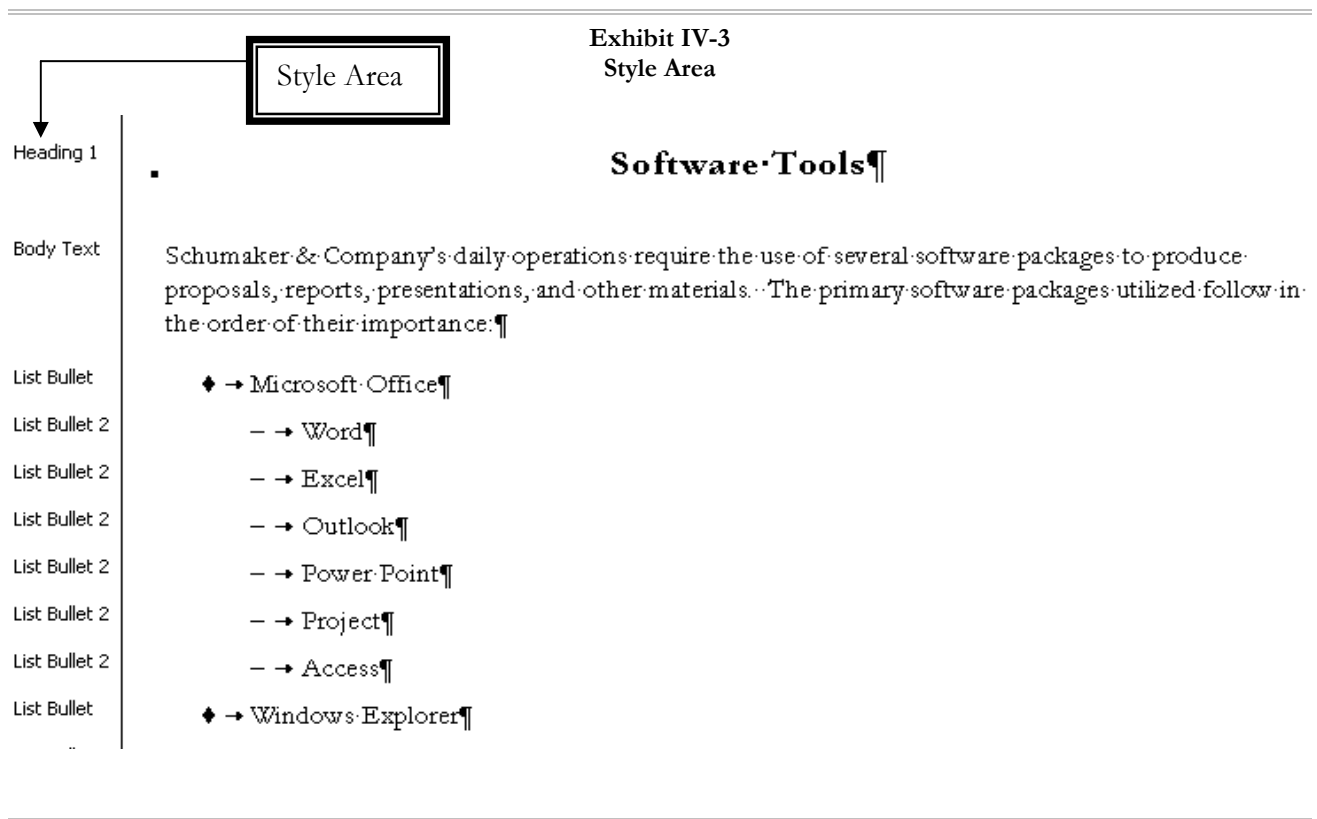
Key Concept – Schumaker & Company does not use manual character formatting. Character styles have been developed that support all the character formatting used by Schumaker & Company.

Styles

A style is a collection of paragraph and character formatting instructions stored under a style name so the same formatting can be applied quickly, easily, and consistently. After creating a style, several formats can be applied by assigning that style rather than individually choosing the formatting commands. Each paragraph has its own style, which can be the same as or different from the paragraphs around it. The style name remains with that paragraph for as long as you choose.

To change the format of the paragraph at any time, you can apply a different style. To change the format of all paragraphs assigned the same style, you can modify the formatting of the style. Word will

then apply those formatting changes to each paragraph assigned that style. The Style Area can be seen in *Exhibit IV-3*.



Styles are used at Schumaker & Company for the following reasons:

- ◆ Consistent formatting within and among documents
- ◆ Readily-altered formatting for several paragraphs
- ◆ One-step application of multiple formatting options
- ◆ Structured documents (e.g., using Word's outlining features)
- ◆ Headings, which make creating a table of contents fast and easy

You can apply a style to any paragraph in any part of a document. If you begin to create a document simply by typing, Word applies the BODY TEXT style to all your paragraphs. To use a style other than BODY TEXT, you must specifically apply it. The NORMAL style forms the base for most other styles.

AutoText

AutoText is just a way to reduce the drudgery of typing. You store something – anything – in a template and give it a name. For example, you could click on insert, then autotext, then the autotext tab,

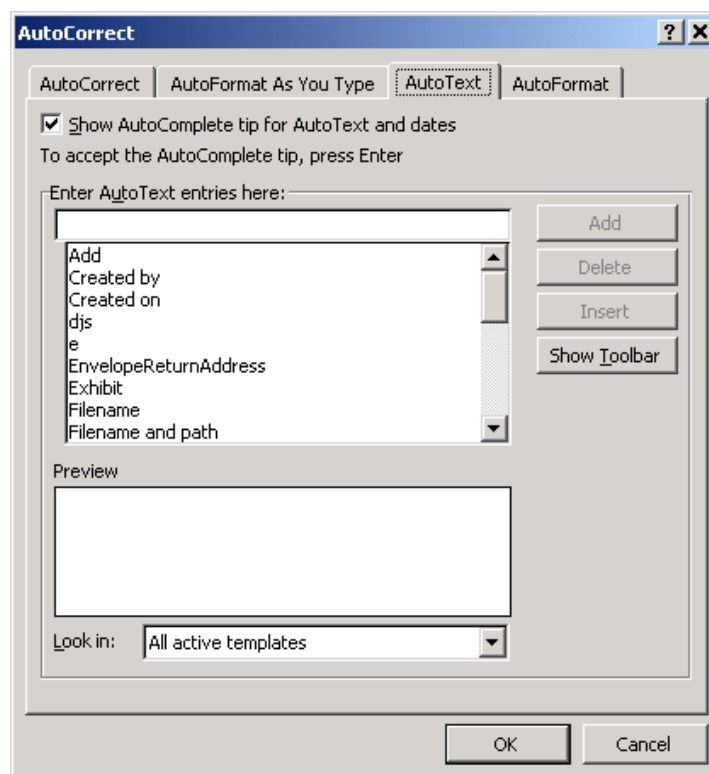
and store the selection “Schumaker & Company” as an AutoText entry called “s.” AutoText entries allow you to let s = Schumaker & Company (i.e., one or two keystrokes equal several keystrokes).

AutoText terms can be activated in one of two ways.

The first way is to type the code, <s> in the above example, followed by <F3>, which inserts the glossary item – in this case “Schumaker & Company.”

Alternatively, you could choose INSERT/AUTOTEXT, click on the AUTOTEXT tab, select “s,” and then INSERT to insert Schumaker & Company into the document, as shown in *Exhibit IV-4*.

Exhibit IV-4
AutoText - AutoText



Macros (Visual Basic Programming)

A macro is a series of commands, keystrokes, and other actions – except mouse actions on a document – that are collected and combined under a single name to automate a series of actions. Macros can make the mechanical parts of document processing flow more easily and quickly, allowing more time for creative thought. To create and use macros in Word, you need to know only how to use the keyboard to choose commands, how to position the insertion point, and how to select text.

For example, Schumaker & Company has recorded commands and keystrokes to create a macro called `FIXSTYLES`, which replaces the document's styles with the current styles located in `NORMAL.DOT`. When you find yourself using the same series of commands and keystrokes for a repetitive task, you have a candidate for a macro.

Key Concept – Many of the tools that are discussed in the remainder of this document are macros that have been created for specific purposes by Schumaker & Company.

D. Word Setup

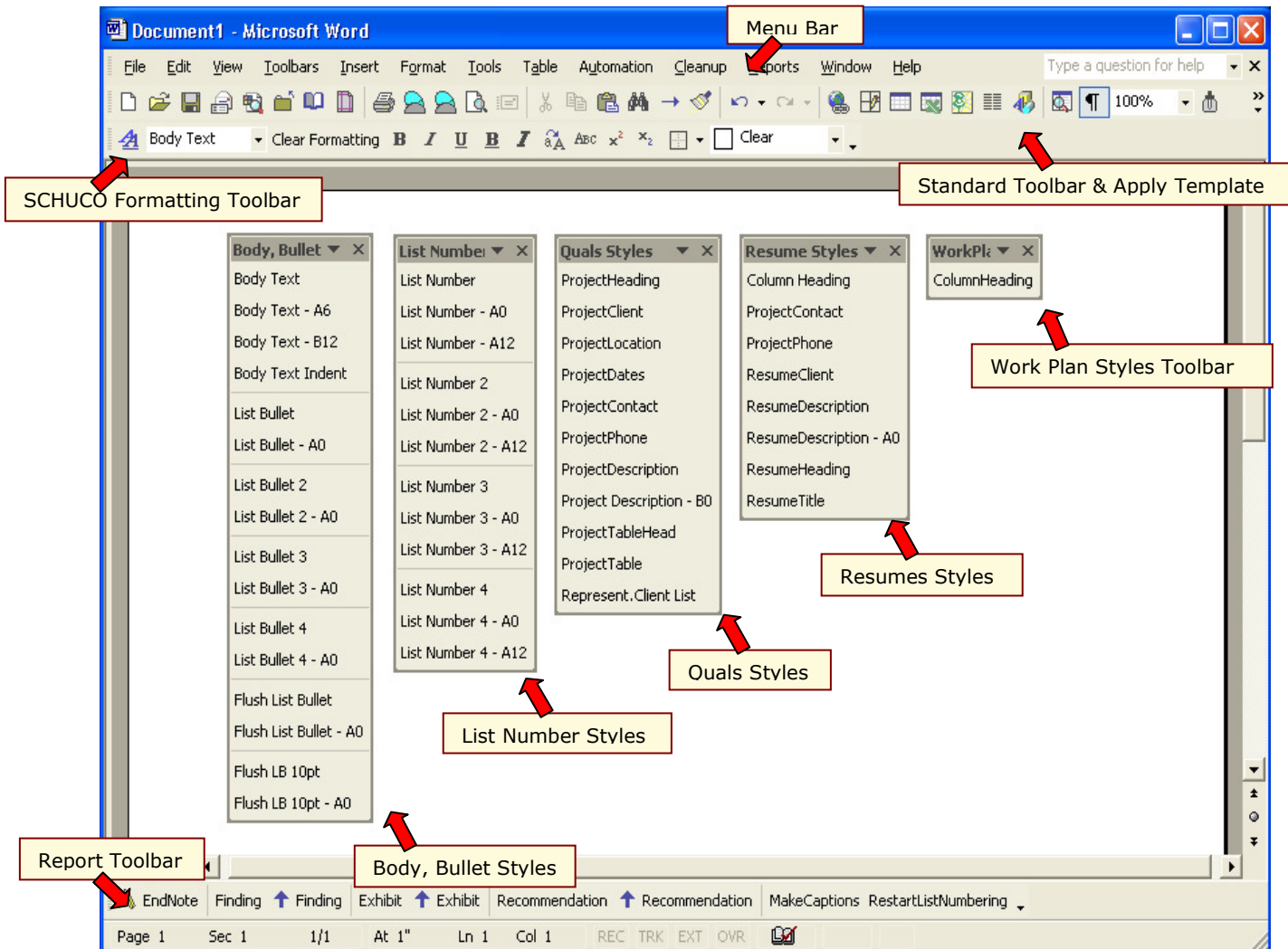
Because Word's menus, commands, and key assignments can be customized, Schumaker & Company has been able to create its own personalized word processor. You may be surprised to know that when you click on the menu, or use a shortcut key assignment, or click on a toolbar icon, you are running a macro! Built-in macros are called "commands," but do not let that confuse you. Execute the `FILE\NEW` command, and you will run the `FILENEW` macro. Click on `WINDOW`, then `ARRANGE ALL`, and you will run the `WINDOWARRANGEALL` macro. Key assignments and toolbar icons have already been or can be assigned to run a predefined macro.

Schumaker & Company has customized some of Word's commands by changing their names, the actions they perform, their locations on menus, or their key assignments. For example, Schumaker & Company has modified Word's standard `MENU BAR` by adding the `AUTOMATION` and `CLEANUP` drop-down menus, and to Word's `STANDARD TOOLBAR` (but not commonly used anymore) is Schumaker & Company's `APPLY TEMPLATE`.

Schumaker & Company has used toolbars to group various macros with related functions, which can be viewed by selecting them individually from `VIEW|TOOLBARS` or `TOOLBARS` on the `MENU BAR`. Schumaker & Company has developed several toolbars that assist in our document production process including:

- ◆ Body, bullet styles
- ◆ List number styles
- ◆ Quils styles
- ◆ Report styles
- ◆ Resume styles
- ◆ SCHUCO formatting
- ◆ Work plan styles

**Exhibit IV-5
Customized Toolbars**



A description of the key features of each of these toolbars is contained in the rest of this document.

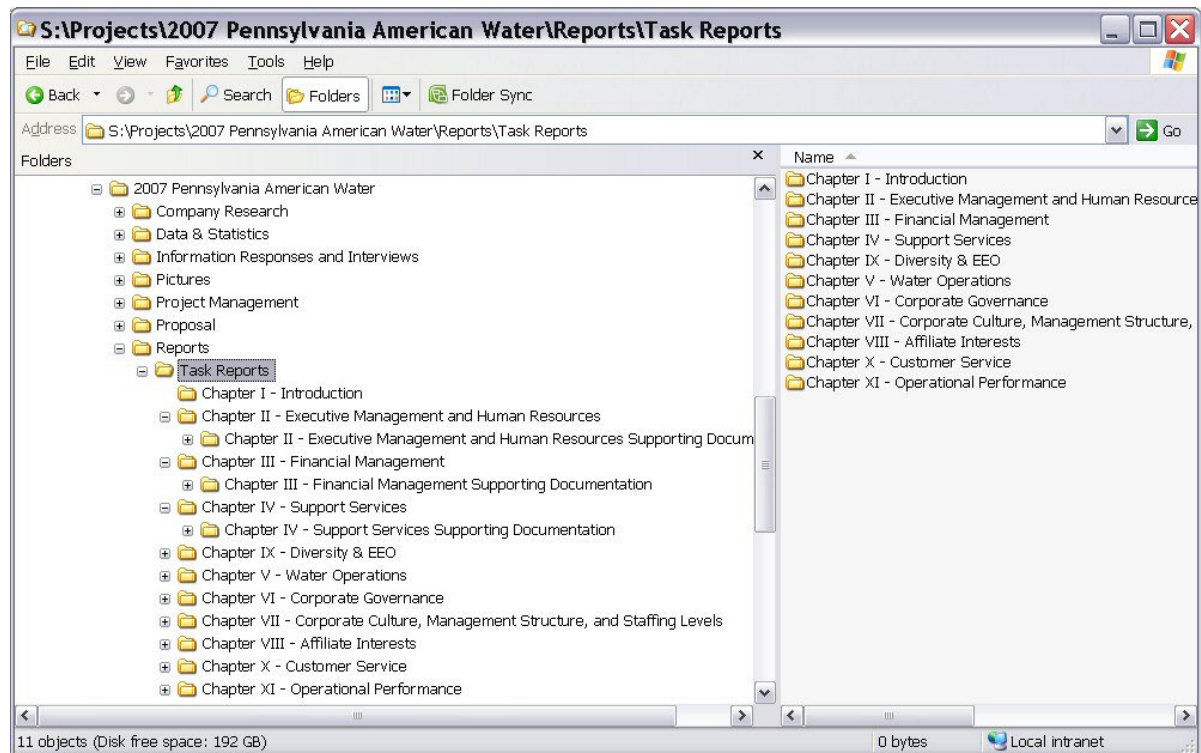
E. File Control

The task, draft, and final reports will be organized as individual Word documents that are contained in a subdirectory on the Schumaker & Company network. Each task report will be an individual file. In most cases, the individual file will comprise the whole chapter; however, in the case of some chapters that address several different topics – such as Executive Management and Human Resources and Support Services – each topic will be an individual file. These individual files will not be combined until the draft report stage of the project.

Each individual file will be located in its own subdirectory as it is being developed. This subdirectory will also contain a subdirectory called <Chapter Name> Supporting Documentation. All Excel spreadsheets, Visio chapters, or the results of any analysis will be located in this subdirectory for the individual chapter.

This directory structure is shown in *Exhibit IV-6*.

Exhibit IV-6
Report Development Directory Structure



A copy of the most recent version of your report chapter (and all associated graphics files) should be stored in the S:\Walnut_Ridge\projects\2007 CECONY\Reports\Task Reports directory in Ann Arbor for nightly backup. Each report chapter has its own sub-directory. Once the task report files have been transferred to the project editor for editing purposes, the document's original author must send hard copies to Schumaker & Company denoting any additional changes as long as it is still under her control. The consultant will then once again receive control of the electronic file to review all edits and/or commission or company comments.

Furthermore all graphics files (charts, graphs, organization charts, etc.) that get inserted into a report should be named using the information response or interview request number followed by the exhibit title. For example, a file could be named something like "IR1 Organization Chart.vsd" or "TV1 Staffing Levels.xls" and submitted with Word report file.

When the file is transferred back to the consultant, the author should address all comments contained in boxed paragraphs. Boxed paragraphs can be handled in one of two ways:

- ◆ Make associated changes to the document's electronic version and delete boxed paragraphs where the consultant has addressed the comments contained within.
- ◆ Make further comments or inquiries in boxed paragraphs, especially if he or she is unable to address the project editor's comments. All consultants should be sure their initials precede these comments or inquiries. An example follows:

The company would like to see the following sentence read: The XYZ organization was able to reduce their inventory by 40% in just six months.

The XYZ organization was able to reduce their inventory by 25% in just six months.

PHS: I need to know how the company arrived at this percentage as it doesn't agree with my notes. I cannot change until further support is provided.

F. Chapter Structure

The precise structure for the CECONY task, draft, and final reports will be similar to that used on other Schumaker & Company utility reports. *Section M of Chapter III –CECONY Report Standards* contains a generalized outline for each task area. Each chapter should be organized as described and depicted in *Exhibit IV-7* and on the following pages.

**Exhibit IV-7
Report Structure**

Level	Style	Description
1	Heading 1	Chapter title, with only one Heading 1 style per chapter
2	Heading 2	Major functional areas divided within chapter
3	Heading 3	Three report sections, specifically Background & Perspective, Findings & Conclusions, and Recommendations
4	Various	<i>Within the Background & Perspective report sections</i>, use Heading 4-5 styles, Body Text, bullets, and others, as needed <i>Within the: Findings & Conclusions and Recommendations sections</i>, use finding and recommendations buttons for setting styles

All CECONY report documents will be based on the TEMPLATE.dot template provided. All project consultants should place TEMPLATE.dot in their C:\PROGRAM FILES\MICROSOFT OFFICE\TEMPLATES\SCHUCO directory on their computer's local hard drive.

Chapter Header

The chapter title is entered using the Heading 1 style without numbering. Subsequently, during the Schumaker & Company production process, a roman numeral will be added.

Introduction

These introductory statements – typically limited to one or two paragraphs – describe the chapter's topic and its sections. These paragraphs are not set off with "Introduction" as a heading, but immediately follow the chapter Heading 1 style using the Body Text style. The following text provides an example:

This chapter reviews and assesses XYZ's installation and maintenance, network construction, network design and outside plant engineering, central office, and work force management functions.

Functional Area

This section's heading reads "**Installation & Maintenance**" (or whatever the function is called) using the Heading 2 style without lettering. Subsequently, during the Schumaker & Company production process, a capital letter will be added. Each consultant tailors and fine tunes the work plan area for which they are responsible based on early interviews and data requests. Work plan areas represent areas or specific concerns of the commission or company for a project. They have been organized according to related subject matter. One chapter in the task, draft, and final reports will be devoted to each work plan area, and will be further sub-divided into functional areas, which will present background information and any resultant findings, conclusions, and recommendations emanating from the consultant's investigations. Because the work plan area (chapter) may be sub-divided into separate functions, such as the five listed previously for our example, the following three sub-sections will be used for each functional area:

- ◆ Background & Perspective
- ◆ Findings & Conclusions
- ◆ Recommendations

Each of these three sections is described on the following pages.

Background & Perspective

This section's heading reads "**Background & Perspective**" using the Heading 3 style without lettering. Subsequently, during the Schumaker & Company production process, a capital letter will be added. The narrative that follows this header presents general information about the chapter's topic (as determined by the work plan) to help readers gain a better understanding of the area under review. Significant, relevant historical or current company/departments data should be included in this section. As a minimum, consultants typically provide the following:

- ◆ Organization
- ◆ Staffing levels
- ◆ Major business processes
- ◆ Performance metrics

Schumaker & Company's *Project Manager* will inform consultants if additional information is required.

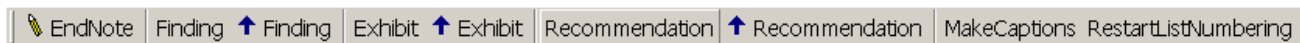
Findings & Conclusions

This section begins with "**Findings & Conclusions**" as a heading using the Heading 3 style without lettering. Typically, findings are conclusionary (not simply factual) statements describing behaviors or practices that negatively impact good management practices or cost-effective operation, thereby negatively impacting CECONY stakeholders. Positive findings are only allowed for exceptionally positive situations. All finding statements must be limited to one complete sentence with a straightforward noun and verb sentence structure. They must clearly and concisely state the negative or positive fact. Examples of appropriate finding statements are provided as follows:

Finding IV-1 The current method of meter reading is slow, leads to inaccuracies, requires excessive manual input, promotes curbing, and allows no productivity monitoring.

Finding IV-2 The amount of write-offs for uncollectible charges over the past three years has been minimal and far exceeds acceptable standards.

To add a finding to your report chapter, please use the finding button on the reports toolbar shown below. By doing so, your finding statements will be automatically inserted and appropriately numbered.



Do not use words in finding statements that hedge or serve to soft-pedal the issue, such as:

- ◆ Appears, seems
- ◆ However, but
- ◆ May, might

Each finding statement should be followed by an in-depth explanation of the finding in which the finding statement is fully supported. Do not include background information in this explanation, as all such material should be presented in the Background and Perspective section of the chapter.

Recommendations

As with finding statements, recommendation statements should be one sentence. Recommendations, however, must be written as a directive in the imperative mood and the active voice. In other words, recommendations must begin with an action verb. The sentence commands the reader (or intended audience) to do something. Each recommendation statement must clearly present the consultant's recommended action to CECONY and must reference the number of the applicable finding statement, as shown in the following example:

Recommendation IV-1 Formalize more thorough cash forecasting procedures. (Refer to Finding I-3).

Following the recommendation statement, consultants should provide a detailed explanation of and justification for the statement, including any specific suggestions for implementing the recommendation. It is very important to quantify associated costs and potential cost savings whenever possible. Include the following information when possible:

- ◆ Operating costs incurred before implementation of the recommendation
- ◆ Operating costs to be incurred after implementation of the recommendation
- ◆ Costs of implementing the recommendation
- ◆ Savings after consideration of implementation costs

To add a recommendation to your report chapter, please use the recommendation button on the Schumaker & Company report toolbar. By doing so, your recommendation statements will be automatically inserted and appropriately numbered.

Use the finding cross reference button (not the recommendation cross reference button) to insert the appropriate finding or findings to which the recommendation refers.

Please remember that a single recommendation may satisfy several findings; however, a single finding can have no more than one recommendation.

G. Exhibits

An exhibit should immediately follow the paragraph in which it is referenced. If the paragraph is very short, please make sure it has “Keep with Next” formatting so it is not separated from the exhibit. An example of a CECONY project exhibit is provided *Exhibit IV-8*. **To add an exhibit to your report chapter, please use exhibit button on the Schumaker & Company report toolbar.**

Exhibit IV-8
Exhibit Title
as of December 31, 2007
2003 to 2007

Source:

It is important to use the exhibit button for inserting all exhibits created for the CECONY report. As shown, the exhibit caption (Exhibit #-#) and exhibit title are centered on the page in boldfaced, title case, Garamond, 10-point. The exhibit itself is bordered on the top and bottom by two ¾-point, light gray lines. A paragraph using the Exhibit Body style (single spacing, centered, Garamond, 10-point) is put in between. If the exhibit is inserted via this button, this formatting occurs automatically.

The exhibit numbering is part of a caption Microsoft Word automatically numbers and re-numbers. Each exhibit must have applicable dates immediately under the exhibit title. Please select the appropriate one shown in *Exhibit IV-8* and delete the one not used. Just above the bottom exhibit line are the words “Source”. Include the appropriate source information for the exhibit.

Tables, charts, or graphs can be inserted within an exhibit, as discussed on the following pages. **Furthermore all graphics files (charts, graphs, organization charts, etc.) that get inserted into a report should be named using the information response or interview request number followed by the exhibit title.** For example, a file could be named something like “IR1 Organization Chart.vsd” or “TV1 Staffing Levels.xls” and submitted with Word report file.

Tables

Schumaker & Company has developed standards for two different types of tables, one for Microsoft Word tables exhibiting data in numbers and the other for textual data. To automate formatting, these standards have been incorporated into two AutoText terms. **Use the table + <F3> AutoText term to incorporate a table containing text only.** **Use the tablen + <F3> AutoText term to incorporate a table containing numbers only.** The appearance of each table is very similar, but the cell formatting of each is different. These AutoText terms will automatically boldface the total row (the last row), the

heading row (the first row), and the left-most column. The table AutoText will align the decimals, while the table AutoText will left-align the text within the body of the table. Displayed in *Exhibit IV-9* is a Microsoft Word table, incorporated by AutoText, which automates the CECONY Report formatting standards (Garamond, 10-point) for tables. By using the appropriate AutoText term to add a table to a report chapter, time-consuming, manual formatting of cells is eliminated.

Exhibit IV-9
Sample Table within Word Table for Text Only
Date(s)

Total	

Source:

 Please note that all paragraphs within an exhibit except for the Exhibit Bottom Line style must have “keep with next” formatting to prohibit exhibits from splitting across pages. If you add information to the body of an exhibit, please make sure you include proper formatting.

Imported Objects

Because Microsoft Word enables users to directly import graphics created in other applications (e.g., Visio, Excel, OrgPlus, Project, etc.), we must standardize their appearance when imported. When creating a chart or diagram in another application, do not create an exhibit heading or title within the graphics application because it has been automatically included in the exhibit by using the exhibit button. If your exhibit is other than a Microsoft Word table, please be sure to use the following standards:

- ◆ Bring all imported graphics or charts into Microsoft Word from other applications by using the edit\copy, edit\paste special – picture commands. Please do not use “paste link” when importing graphics.
- ◆ Be sure to store copies of any files that graphics were originally created in, along with the Microsoft Word file, in the same report chapter directory.

Spreadsheets

Use S-C Excel Template.xlt, the Schumaker & Company Excel template, to create Excel spreadsheet exhibits in a Garamond, 10-point font to coordinate with the report's body as illustrated in *Exhibit IV-10*.

Exhibit IV-10
Example Exhibit with Spreadsheet
2003 to 2007

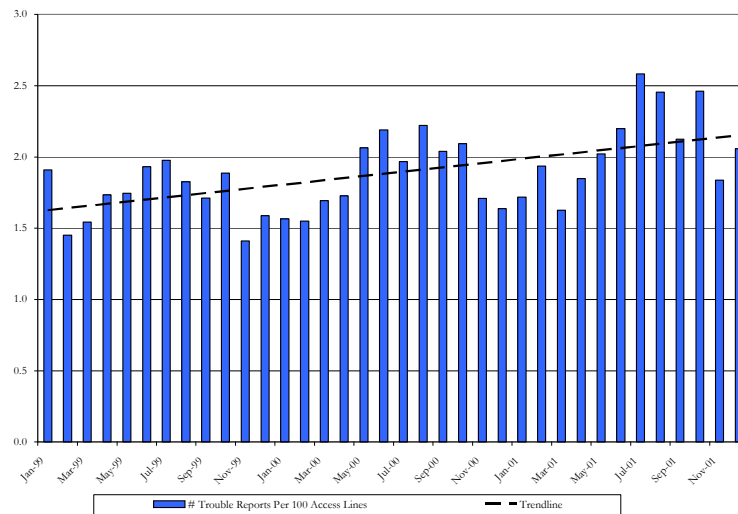
	1992	1993	1994	1995	1996
RH1	\$11	\$12	\$13	\$14	\$15
RH2	21	22	23	24	25
RH3	31	32	33	34	35
RH4	41	42	43	44	45
Total	\$324	\$336	\$348	\$236	\$120

Source: Information Response 22 XYZ Document Page 1

Data Charts and Graphs

Use Microsoft Excel for all data oriented charts and graphics. Backgrounds must be clear, not gray as defaulted by Microsoft, and Garamond font must be used. *Exhibit IV-11* illustrates an example graph.

Exhibit IV-11
Example Exhibit with Excel Graph
2003 to 2007

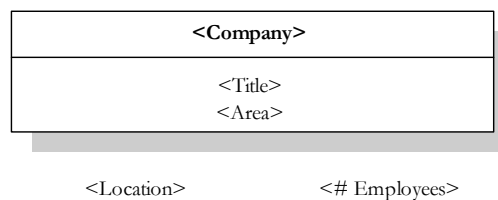


Source: Information Response 22 XYZ Document Page 1

Organization Charts and Diagrams

Use S-C VISIO TEMPLATE.VST, the Schumaker & Company Visio template, to create organization charts. *Exhibit IV-12* illustrates a typical box within an organization chart. Within the box, “Company” is the appropriate CECONY organization, “Title” is the person’s title, and “Area” is the functional organization. Outside the box, “Location” is the city and state (city, state) where the organization is located. “# Employees” is the number of employees reporting to the box, but does not include the person within the box. **An individual’s name is NEVER put into an organization chart.**

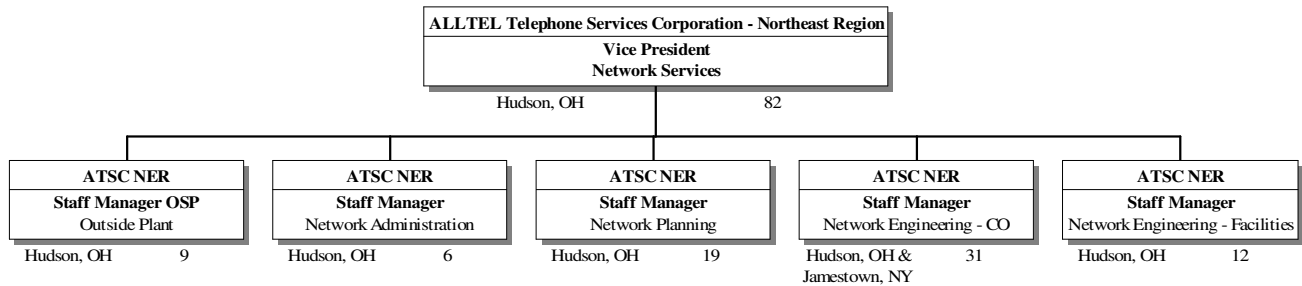
Exhibit IV-12
Visio Organization Chart Template



Source:

The final product will look much like the example in *Exhibit IV-13*.

Exhibit IV-13
Sample Complete Exhibit
as of 2007



Source: Information Response 22 XYZ Document Page 1

Captions and Cross-references

Italicized cross-references must be inserted to refer to a recommendation, finding, or exhibit. The only time that cross-references are not italicized is when the reference is included as part of the “Refer to” statement at the end of a recommendation. Microsoft Word automatically rennumbers captions and cross-references that have been appropriately inserted. Its caption/cross-reference mechanism ensures findings, recommendations, and exhibits – and those references to them – are sequentially re-numbered if one is deleted, added, or moved within the document.

Cross-references are incorporated in a document by completing the following steps:

- ◆ Select the appropriate cross-reference command on the report toolbar, which opens an associated dialog box.
- ◆ Select the appropriate item under the for which caption section.
- ◆ Then click on the insert button to place a cross-reference in the document’s text.

In a typical report, only the exhibit and finding cross-reference buttons are used.

H. Endnotes

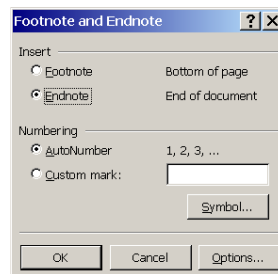
Consultants are expected to cite the source of all materials using endnotes (not footnotes). The endnote number for narrative text should immediately follow the period ending a quote, paraphrase, or referenced information. When typing an endnote for an exhibit, the endnote number should appear directly after the first reference to that exhibit. *Exhibit IV-14* summarizes the guidelines for placing endnotes.

Exhibit IV-14
Guidelines for Placing Endnotes

Reference Type	Endnote Placement
Narrative text	Immediately after the period ending a quote, paraphrase, or referenced information
Exhibit	After first reference (i.e., cross-reference) to exhibit

Exhibit IV-15 depicts the dialogue box Microsoft Word displays to insert endnotes.

Exhibit IV-15
Word Endnote Dialog Box



 A quicker and much easier way to add endnotes is to use the endnote button on the Report toolbar. By hitting this button, Microsoft automatically adds an endnote at the cursor's insertion point and types “/ ” in the endnote window for you. All the consultant must do is type which interview or information response is referenced.

Do not insert the “#” character before numbers or a period at the end of endnotes. Endnotes should be worded similar to one of the following examples:

- 1/ Interview 9
- 2/ Interviews 1, 2, and 3
- 3/ Information Response 100
- 4/ Information Responses 100, 102, and 202
- 5/ Interviews 4, 5, and 6 and Information Responses 78, 79, and 80

Please note use of “Response” wording when citing a response from an information request to CECONY.

Please remember to document all sources used throughout your chapter(s). As a minimum, every exhibit reference and every paragraph must have an endnote attached. If necessary, include multiple endnotes within paragraphs, as illustrated in the sample text that follows.

In the third quarter of 1993, ALLTEL reorganized its telephone headquarters staff and consolidated its Northeast and Midwest Region operations. Reorganization costs totaled approximately \$17.8 million, approximately \$4.2 million of which was allocated to ALLTEL Pennsylvania.¹ Until recently, the Northeast Region in Hudson, Ohio performed the accounting functions for ALLTEL Pennsylvania. In April 1995, the Accounting functions at the three ALLTEL Telephone Operations regions (Northeast, Southwest, and Southern) were combined into one in Little Rock, Arkansas, as shown in Exhibit X-#.² The current organization under the Vice President (VP), Accounting (reporting to the VP, Accounting Operations-Telephone) is composed of approximately 125 to 130 people, about 40% of whom were hired during the accounting reorganization in 1995.³ ATSC management believes that, in spite of the myriad of changes caused by the reorganization, it was completed smoothly, which management attributes to the quality of ATSC employees. The reorganization is seen by management as bringing “new blood, new ideas, and stronger qualifications” to the centralized group as compared to the regional accounting organizations.⁴ The reorganization mainly impacted the Accounting functions but also Treasury and State and Regulatory Access Matters departments. The reorganization allowed ALLTEL to reduce Accounting staff by 94 people, Treasury by 10, and State and Regulatory Access Matters by 17 for a total reduction of 121 people (as of a staffing count in June 1996). Reorganizing functions from the states and regions to Little Rock, Arkansas, cost approximately \$5.1 million in severance pay and relocation costs, but it saved roughly \$5.6 million in payroll plus benefits and reduced the outside auditor’s fee on an annual basis.⁵

Please remember to incorporate endnotes as you initially write text for task reports. You will find it extremely difficult, time consuming, and unreliable to do so at a later time.

Do not use endnotes in finding or recommendation statements.

I. Bulleted Lists

Do not include punctuation (i.e., periods, commas, or semicolons), unless the bulleted items are full sentences. Do not use conjunctions (“and” or “or”) at the end of each item in a bulleted list. Full sentences require a period at the end of each item.

Bullets are incorporated in a document by applying the List Bullet (or List Bullet 2, 3, 4, or 5) styles to a paragraph. List Bullet is applied for the first level of bullets. List Bullet 2 is applied for the second level of bullets, etc., as can be seen throughout this memo. The last item in a bulleted list must be manually formatted with 12-point spacing (i.e. leading), rather than the 6 points defined in the List Bullet style, to separate the List Bullet paragraph and the Body Text paragraph that follows. **Or alternately you may use the Set Spacing Between Styles when you are done report writing to have Word automatically add 12 points after the last item.** Also, “Keep with Next” formatting is automatically included as to not split list between pages. You may wish to remove “Keep with Next” formatting for last bulleted item.

Although bullets are typically shown with 6-point spacing (except for last bullet in list with 12-point spacing), bullets should be shown with 0-point spacing (except for last bullet in list with 12-point spacing) when all bulleted items are only one line long.

J. Acronyms/Abbreviations

Prior to using an acronym **for the first time only** within a chapter, the words for which it stands should be fully spelled out and followed by the acronym in parentheses. This standard clarifies the meaning for the general public who may be reading the final report. Please see the example below:

“All working papers will be maintained in the Interview and Information Management System (I2MS). Both working papers and I2MS will be provided...”

Organizational References

The first time an organization is referred to in a chapter, its full name should be used. If there is an abbreviated version, it should follow in parentheses, similar to acronyms.

Please refer to the organization initially as Consolidated Edison Company of New York, Inc. (CECONY). Do NOT refer to CECONY as “Company.”

The New York Public Service Commission (NYPSC) is our client. When referring to the commission, use NYPSC, which is preferable to “Commission,” so as to distinguish it from commissions in other states. The Staff from the New York State Department of Public Service is our contact for this project.

Examples of appropriate references to the organizations are provided below in *Exhibit IV-16*.

**Exhibit IV-16
Project Acronyms**

Organization’s Full Name	Appropriate Abbreviation*
Consolidated Edison Company of New York, Inc.	CECONY
New York State Department of Public Service	NYSDPS
New York Public Service Commission	NYPSC

*Appropriate only after using full name and introducing abbreviation in parentheses.

Other References

The consultant will incorporate other pre-defined acronyms, as necessary, within each report chapter. The first time the acronym is referred to in a chapter; its full name should be used. The abbreviated version should follow in parentheses. **It is important to note that the acronym's full name does not need to be capitalized unless it is a title of a specific item or entity.** For example, the following are all correct:

- ◆ request for proposal (RFP)
- ◆ New York State Department of Public Service (NYSDPS)
- ◆ customer care index (CCI)
- ◆ Consolidated Edison Company of New York, Inc. (CECONY)
- ◆ average speed of answer (ASA)

AutoText

 AutoText terms are activated by typing the term (either upper or lower case) + F3 key.

The AutoText terms listed in *Exhibit IV-17* are available for use on this project. AutoText terms are used so the project report can have standard language when referring to items such as organizations or jargon terms.

Exhibit IV-17
Project AutoText Terms

Term*	Result
s	Schumaker & Company
c	CECONY
CECONY	Consolidated Edison Company of New York, Inc.
NYSDPS	New York State Department of Public Service
NYPSC	New York Public Service Commission
table	CECONY report table standard for depicting textual information
tablen	CECONY report table standard for depicting numerical data
ny	New York

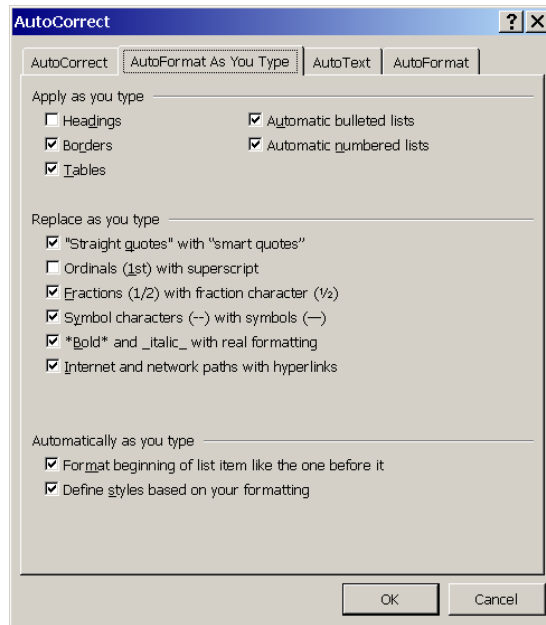
* AutoText terms can be typed in as upper or lower caps

K. Grammar Usage

- ◆ Do not use a semi-colon to introduce a bulleted list.
- ◆ Use a comma after each item in a sequence, including the item that precedes “and” or “or.”
- ◆ Put all punctuation **inside, not outside**, quotation marks.
- ◆ Eliminate wordy phrases such as:
 - the fact that
 - it has been shown that
 - it is recognized that
 - it has been demonstrated that
 - it must be remembered that
 - it may be seen that
 - what is known as
 - it is worthy of note
 - it will be appreciated that
 - it is found that
 - it may be mentioned that
 - deemed it necessary to
- ◆ Do not start sentences with “however,” “but,” or “therefore.”
- ◆ Do not use “since” when “as” or “because” should be used; “since” should only be used to indicate a lapse in time.
 - Since 1986, Schumaker & Company has ...
 - Because Schumaker & Company is a management consulting firm, we can ...
- ◆ Do not use contractions.
- ◆ Do not italicize commas or parentheses when nearby words are italicized.
- ◆ Do not start parenthetical phrases contained within a sentence with a capital letter, or end them with a period.
- ◆ Do not use “based upon” when “based on” is more appropriate.
- ◆ Do not confuse “that” and “which” wording. “That” is defining and “which” is nondefining.
 - The lawn mower that is broken is in the garage. (Tells which one.)
 - That lawn mower, which is broken, is in the garage. (Add a fact about the only mower in question.)
- ◆ Avoid “consultantese” words such as “utilize;” replace with alternatives as “use,” “employ,” “operate,” etc. Be as specific as possible.
- ◆ Avoid “in order to” when “to” is sufficient.

- ◆ All quotation and double quotation marks should be “curly” not “straight” marks. Make sure the autocorrect tab under the tools options menu has the appropriate line (“straight quotes” with “smart quotes”) checked, as illustrated in *Exhibit IV-18*. If you receive old documents that still have “straight” marks, simply use the find and replace commands to correct.

Exhibit IV-18
AutoFormat as You Type



L. CECONY Report – Table of Contents

Updated after contract award

I. INTRODUCTION AND REPORT SUMMARY

- A. Objectives and Scope of the Review
- B. Functional Evaluation Summary
- C. Summary of Estimated Benefits
- D. Summary of Recommendations

II. EXECUTIVE MANAGEMENT AND HUMAN RESOURCES

- A. Executive Management
 - Background & Perspective
 - Findings & Conclusions
 - Recommendations
- B. External Relations
 - Background & Perspective
 - Findings & Conclusions
 - Recommendations
- C. Human Resources
 - Background & Perspective
 - Findings & Conclusions
 - Recommendations

III. SUPPORT SERVICES

- A. Information Technology and Systems
 - Background & Perspective
 - Findings & Conclusions
 - Recommendations
- B. Transportation and Fleet Management
 - Background & Perspective
 - Findings & Conclusions
 - Recommendations
- C. Facilities and Property Management
 - Background & Perspective
 - Findings & Conclusions
 - Recommendations
- D. Procurement Services and Materials Management
 - Background & Perspective
 - Findings & Conclusions

	Recommendations	
E. Risk Management		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	
F. Legal Services		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	

IV. CORPORATE GOVERNANCE.....

A. Board of Directors, Oversight Authorities, and Committees		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	
B. Audit Committee		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	
C. External Audit		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	
D. Internal Audit		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	

V. FINANCIAL MANAGEMENT

A. Financing		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	
B. Cash Management		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	
C. Accounting and Property Records		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	
D. Budget Management, Reporting, and Controls		
	Background & Perspective	
	Findings & Conclusions.....	
	Recommendations	

- E. Internal Auditing
 - Background & Perspective
 - Findings & Conclusions.....
 - Recommendations

VI. DIVERSITY & EEO.....

- A. Background & Perspective.....
- B. Findings & Conclusions
- C. Recommendations

VII. SYSTEM RELIABILITY PERFORMANCE AND RELATED OPERATIONS.....

- A. Gas Operations
 - Background & Perspective
 - Findings & Conclusions.....
 - Recommendations
- B. Gas Supply
 - Background & Perspective
 - Findings & Conclusions.....
 - Recommendations

VIII. CUSTOMER SERVICE.....

- A. Customer Service, Complaints, and Inquiries
 - Background & Perspective
 - Findings & Conclusions.....
 - Recommendations
- B. Customer Accounting and Billing
 - Background & Perspective
 - Findings & Conclusions.....
 - Recommendations
- C. Credit and Collections
 - Background & Perspective
 - Findings & Conclusions.....
 - Recommendations
- D. Meter Management
 - Background & Perspective
 - Findings & Conclusions.....
 - Recommendations
- E. Theft of Service Prevention
 - Background & Perspective
 - Findings & Conclusions.....
 - Recommendations

APPENDIX A DATA & STATISTICS.....

APPENDIX B GLOSSARY

M. Generalized Outline for Function within Typical Task Area

BACKGROUND & PERSPECTIVE

Organization	
High Level Organization Chart (tie to Consolidated Edison Company of New York, Inc.)	
Lower Level Charts (CECONY)	
Organizational Changes (last five years)	
Staffing Levels	
Staffing Level Last Five Years (Management and Nonmanagement)	
Lower Level Charts (CECONY)	
Staffing Level Changes Discussion	
Workforce Management	
Major Business Processes	
Performance Metrics	
Performance Metric Objectives (Timeframes)	
Performance Metric Trends (Last Five Years)	

FINDINGS AND CONCLUSIONS

RECOMMENDATIONS (IN SAME ORDER AS REFERENCES TO FINDINGS)

V. CECONY Editorial Style Sheet

ABCD	EFGH
ad hoc—two words, no hyphen as—Exhibit headers—do not capitalize Board of Directors—leading caps business planning process—lowercase committees—leading caps for name of specific committee, but not “the committee,” which should be lowercase (different than PECO project) departments—leading caps, but not “the department,” which should be lowercase (different than PECO project)	e-mail—hyphenated fieldwork—one word functional areas—lowercase unless name of specific group, then leading caps (different than PECO project) groups—leading caps health care—two words
IJKL	MNOP
in-house—hyphenate lifecycle—one word	M—use million not M when referring to million onsite—one word organizations—leading caps for name of a specific organization, but not “the organization,” which should be lowercase parentheses within parentheses—allowed Consolidated Edison Company of New York, Inc. (CECONY)
QRST	UVWXYZ
. (Refer to Finding...).(different than PECO project) Serial comma—YES! spaces—two spaces after period at end of sentence	voicemail—one word web—lower case website—one word

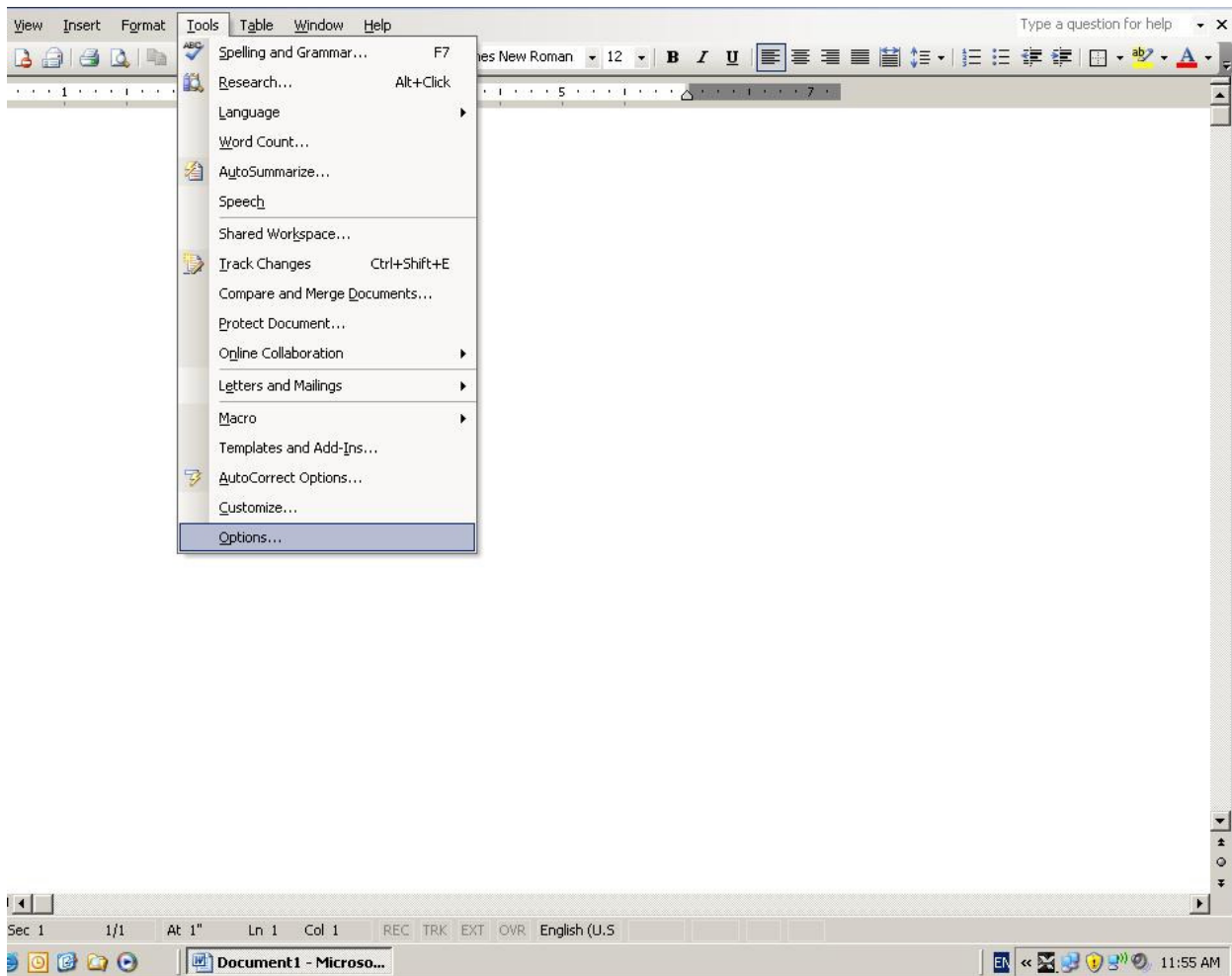
- ◆ All exhibits must have dates of “as of December 31, 2007” or “2003 – 2007” or similar use
- ◆ X% to Y%, not X to Y%
- ◆ \$X million to \$Y million, not \$X to \$Y million
- ◆ Do not use K, KK, M, MM, or other indicators for thousands and millions
- ◆ Use of “the company” or “the Company” is essentially prohibited; must use company’s specific name or “the organization” instead



VI. Template Install Procedure

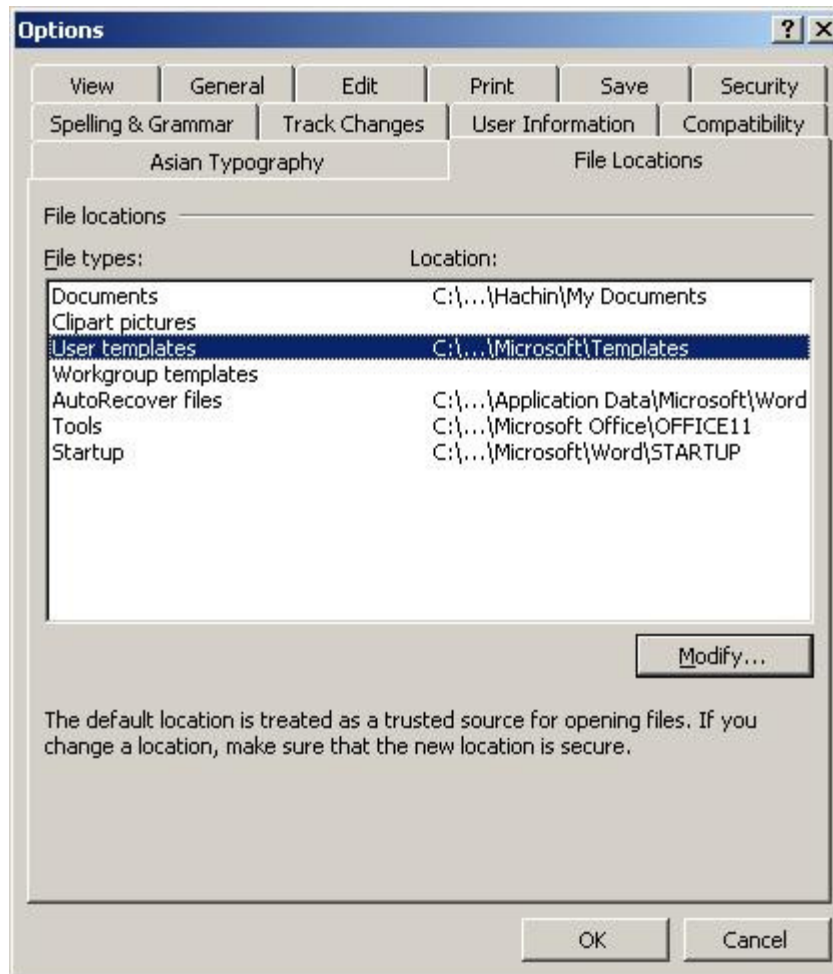
1. Run MS Word, from the menu click **Tools/Options** (as shown in *Exhibit VI-1*).

Exhibit VI-1
Options



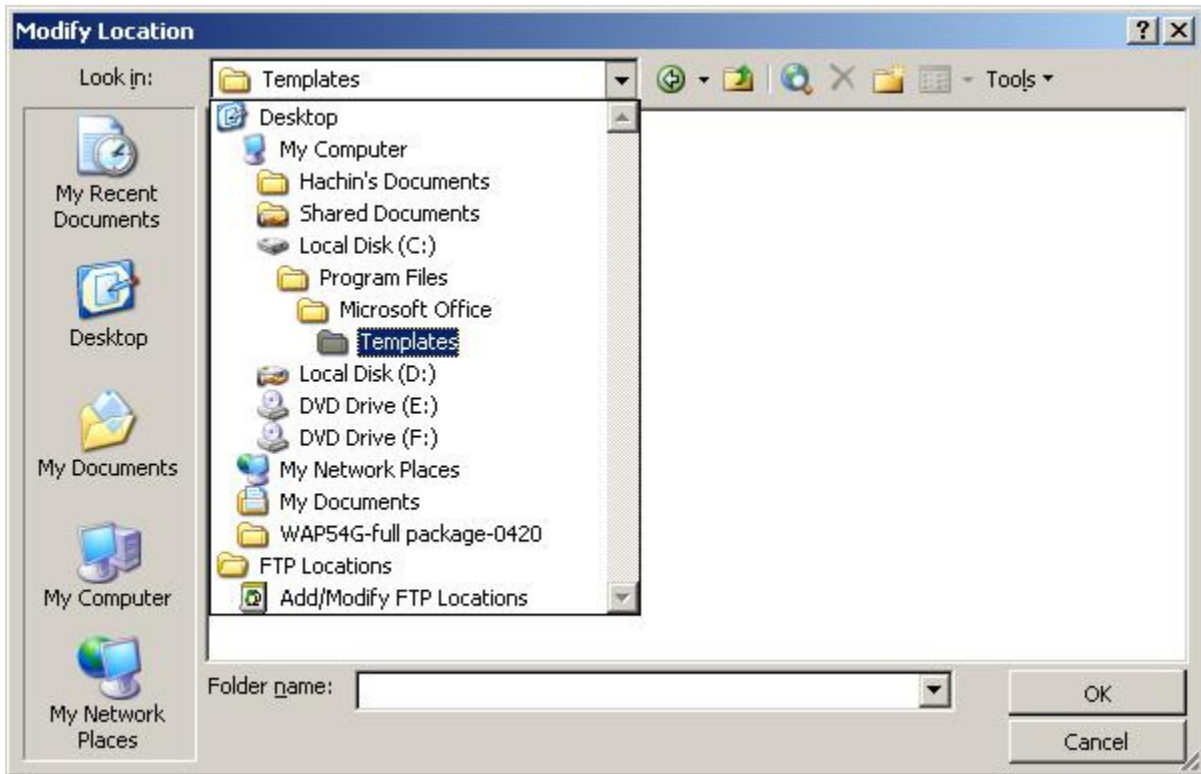
2. In the Options dialog box, click **File Location** tab. Under **File types** select **User templates** (as shown in *Exhibit VI-2*) and click the **Modify** button below the white box.

Exhibit VI-2
File Location



3. In the **Look in:** drop down list, navigate to c:\Program Files\Microsoft Office\Templates (as shown in *Exhibit VI-3*) and click OK, which will switch back to the **Options** dialog.

Exhibit VI-3
File Path

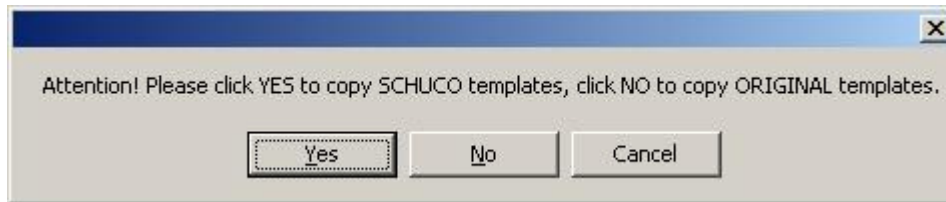


4. In the **Options** dialog box, select **Workgroup Templates** and repeat step 3. Restart word.
5. Make sure Word and Outlook are not running before proceeding to next step. Also, Access needs to be installed if have not done so.
6. From the provided CD, copy the file **TemplatesCopy.vbs** and folders **OriginalTemplate**, **SCHUCO** and **SchucoTemplates** to drive c:\. If you've received the templates via email in a single zip file named **Templates**, save the file to a desired location and modify the file name to **Templates.exe**. Execute the newly modified file and unzip file and folders to the default location when prompted.
7. Navigate to drive c:\ using My Computer , double click to execute the program named **TemplatesCopy.vbs** (it may only show the name as **TemplateCopy**).



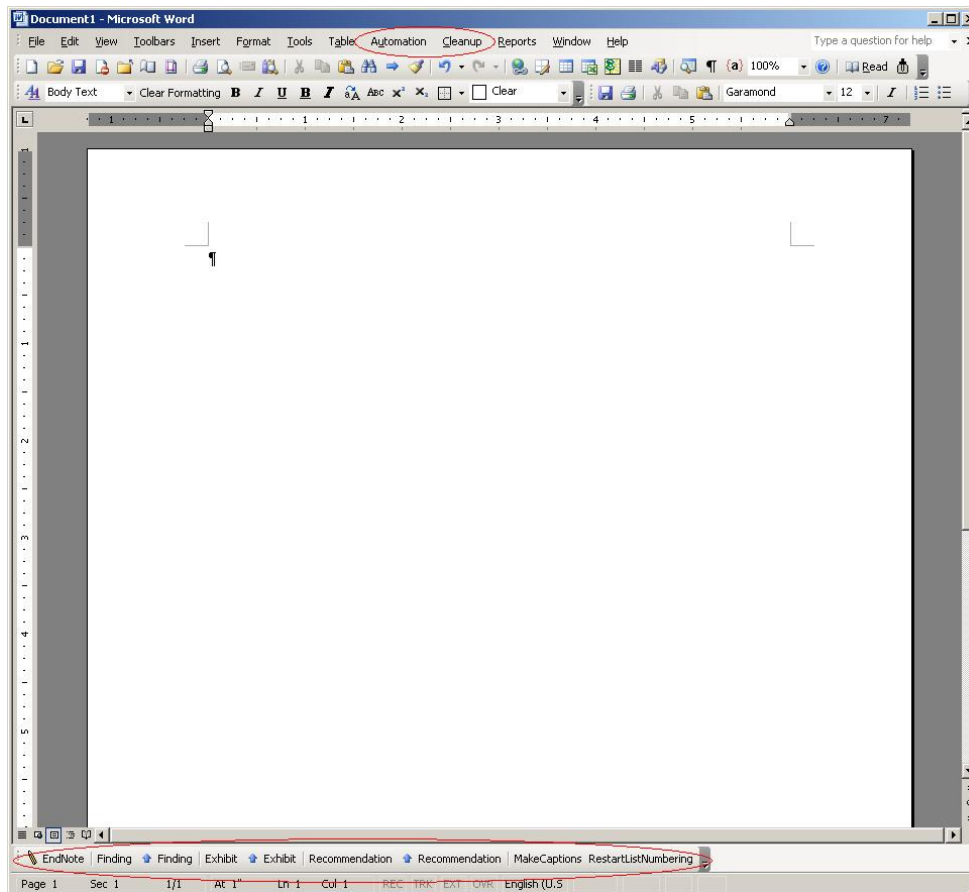
8. At the prompt (shown in *Exhibit VI-4*), click **Yes** to copy the Schuco templates to your system and click **No** to revert back to the original template.

Exhibit VI-4
Template Copy



9. If everything configured correctly, additional menu and toolbar should appear as shown *Exhibit VI-5*.

Exhibit VI-5
Menu and Toobars



VII. WEB TEIRS Consultant User Manual

A. Introduction

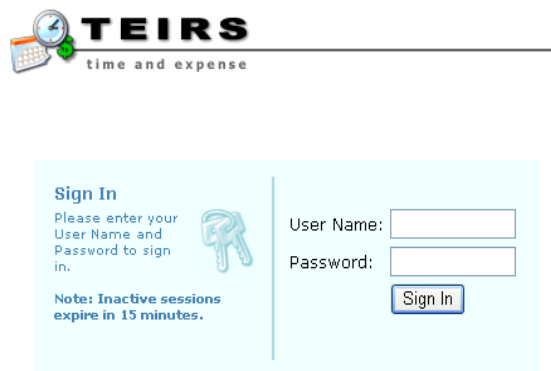
Who uses it? Anyone listed as a *Consultant* with Schumaker & Company, Inc.

Why do we have it? Schumaker & Company, Inc. hire *Consultants* for projects and they frequently work outside of the main office and need a way to enter time and expenses on a regular basis, not just at the end of the week or end of the time period where errors and forgetfulness could occur. All time and all expenses for all projects need to be entered into TEIRS. The *administrator* can then create invoices for the client. This is accomplished via TEIRS in the main office.

B. Sign In

How do I get there? Open up *Internet Explorer* then type in the URL <https://teirs.schuco.com>. It can be saved as a favorite for quicker access in the future. ***Note.** There is an “s” after the http. See *Exhibit VII-1* below.

Exhibit VII-1
Sign In Screen



TEIRS
time and expense

Sign In
Please enter your User Name and Password to sign in.

Note: Inactive sessions expire in 15 minutes.

User Name:

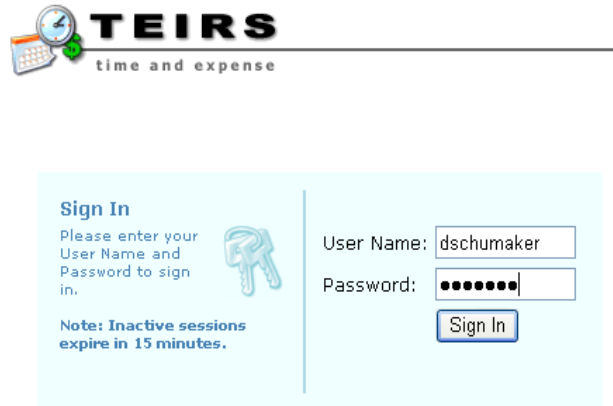
Password:

Who uses Web TEIRS? Anyone listed as a *Consultant* with Schumaker & Company, Inc.



How to sign in? After opening *Internet Explorer* and typing in the web site listed above, the web site pops up asking the user to enter the user name and password. Type in your **User Name** and **Password** to access Web TEIRS, as shown in *Exhibit VII-2*.

Exhibit VII-2
Password Sign In



If you do not have a **User Name** and **Password**, you need to have a password to enter time and expenses. Also note that if the session is inactive for 15 minutes or more the web site will lock up and ask the user to enter in a password to continue on to another session. Security procedures are built in to the system to protect the user's information.

C. User Profile

What determines whether I have access to User Profile? As a *Consultant* working on a project, you do not have access to your user profile or **My Preferences**. As an *Outside Consultant* working on only one project assignment then there is no reason for all available assignments to be shown in the users profile or even to have access to other assignments he/she is not working on. Therefore, the user profile has been hidden from the *Outside Consultants* view for secrecy reasons.

As a *Consultant* working on more than one project for Schumaker & Company, check with the *Project Administrator* or *Project Manager* to make sure your profile is up to date with all of your assignments you are eligible for. As a Consultant working on only one project then there will only be one assignment shown in your assignment listing. This is to avoid confusion with other projects and to reduce billing to other project assignments by mistake. Shown in *Exhibit VII-3* is an example, shown from the *Time and Expense* window, for consultants working on an assignment.

Exhibit VII-3 Project Assignments



Signed in as hbellinger ::

Time and Expense Entries

Your time and expense entries are listed here in three groups: Time, Travel Expenses, and Other Expenses.

Filter Results



Date From: 2/1/2004



Staff: Bellinger, W. Hagood

Date To: 2/11/2004



Assignment: -- All --

-- All --
10050024A (NYDPS) NY-Verizon NY ...

D. Time & Expenses

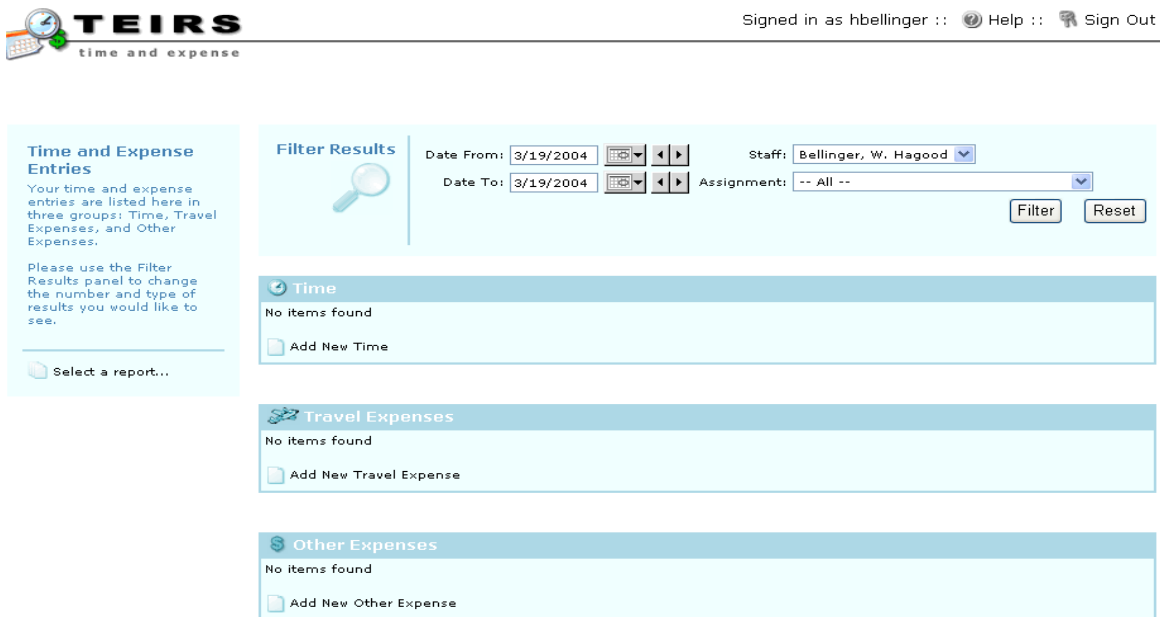
Time & Expense is the main section of all procedures in the TEIRS manual. It is the main artery, if you will, of this manual.



Time

What is Time? When a *Consultant* works on an assignment the time worked needs to be recorded in order for that a *Consultant* to get paid and also for Schumaker & Company to bill the client. Any amount of time worked on a project needs to be recorded into TEIRS. The main *Time and Expense* window is shown in *Exhibit VII-4*.

Exhibit VII-4
Time and Expense Entry Window



TEIRS
time and expense

Signed in as hbellinger :: Help :: Sign Out

Time and Expense Entries
Your time and expense entries are listed here in three groups: Time, Travel Expenses, and Other Expenses.
Please use the Filter Results panel to change the number and type of results you would like to see.
Select a report...

Filter Results

Date From: 3/19/2004 Date To: 3/19/2004 Staff: Bellinger, W. Hagood Assignment: -- All --
Filter Reset

Time
No items found
Add New Time

Travel Expenses
No items found
Add New Travel Expense

Other Expenses
No items found
Add New Other Expense

How do I get there? After signing in, the first window the user will see is the *Time and Expense* window. Click on the **Add New Time** button in *Time* section. This will take the user to the *Add Time* window. The *Time* section of the *Time and Expense* window is shown in *Exhibit VII-5*.

Exhibit VII-5
Time



Time
No items found
Add New Time

How to Add Time? After clicking on the **Add New Time** button, the *Add New Time* window appears. Defaulted values have been populated in some of the fields. Those fields are **Staff** (the user's name that is signed in, the **Date** (today's date) and the Assignment (for example CECONY). This is the only assignment in the user's profile so it is already populated in the field for that user. The user will fill in the remaining fields: **Work Package**, **Task Code** (if there is one available), **Hours**, **Description**, and **Work Location**. The **Task Code** is not used in some projects.

The **Cost Amount** field will be populated when the number of hours has been entered. Refer to *Exhibit VII-6* for adding time.

Exhibit VII-6 Adding Time



Signed in as hbellinger :: Help :: Sign Out

Add New Time

Please add your entry with this form, then click the Save button.

If you make a mistake, click Reset to try this entry again, or click Cancel to return to the previous screen.

Time Saving Tip:
Click on Save, Add Time to save this entry and enter a new time entry.

Staff:
Date:

Assignment:
Work Location:

Work Package:
Task Code:

Hours:
Cost Amount: \$0.00

Description:

How do I use the dates filter? The date filter has arrow buttons that allow the user to toggle between days and months. The buttons with the single arrow allows the user to toggle one day forward or backward. The button with the arrow and the calendar shape on it allows the user to see a whole month and can toggle months forward or backward. Practice with these in each section, to become familiar with for easier entry of time and expenses. The filter buttons are shown *Exhibit VII-7*.



Exhibit VII-7
Date Filter Buttons

What are the Calendar Buttons used for? When clicking on the arrow button with the calendar on it, it drops down a calendar. From here the user can also toggle by day, month and year. The buttons with the single arrow allow the user to toggle one day forward or backward. The buttons with the arrow and the month on it allow the user to move forward or backward a month. Today's date is highlighted in red on the calendar. Practice with these in each section to become familiar with for easier entry of time and expenses. The calendar filter buttons are shown in *Exhibit VII-8*.

Exhibit VII-8
Calendar Buttons

What do I do next? After filling in all of the required fields in the add time section, the user can do several things. The user can Save and Add more Time, Save and Add Travel expenses, Save and Add Other Expenses, save, cancel, and reset.

How to use the Save and Add Time button? If the user needs to add more time, then click on **Save and Add Time**. This will keep the user on the same window and clear out all values except the Hours field. The user will have to make changes to the fields if the entry is not the same.

How to use the Save and Add Travel button? If the user has completed entering time and needs to add travel expenses, then the user clicks on **Save and Add Travel**. This will keep the user on the same window and clear out all values except the *Quantity* field. The user will have to make changes to the fields if the entry is not the same.

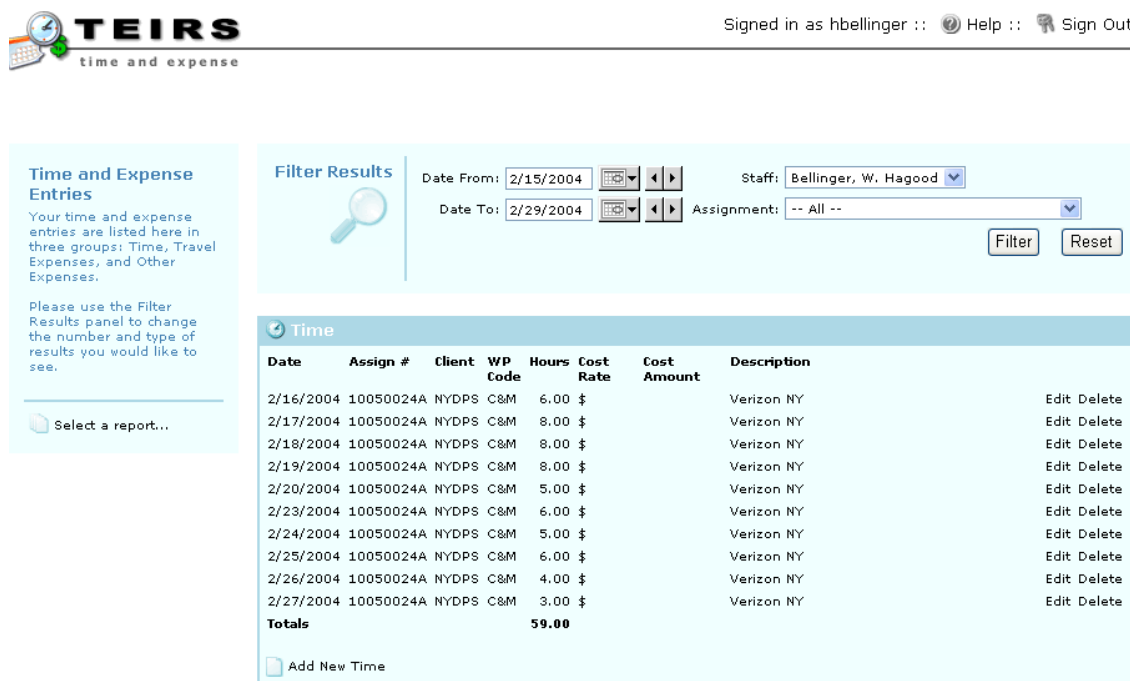
How to use the Save and Add Other button? If the user need to add Other Expenses, then the user clicks on **Save and Add Other**. This will keep the user on the same window and clear out all values except the *Quantity* field.

***Note.** After choosing an Assignment and then the **Work Plan**, the fields **Billable**, **Invoice Visible** and **Reimbursable** will automatically be updated or populated according to how the assignments was set up. As an *Outside Consultant* working on a project, then you will not see the **Billable**, **Invoice Visible** and **Reimbursable** boxes at the bottom of the window above the save area. If you feel something should not be billable or invoice visible or reimbursable, please talk with the *Project Manager*, then the *Project Administrator* can make the necessary changes from our end in TEIRS.

If the user has no more time, travel or other expenses, then the user clicks on the **Save** button.

What happens after adding time? Once all time has been added, and after clicking the **Save** button the user will be taken to the *Time and Expense* window showing the user the time and expenses that were entered, as shown in *Exhibit VII-9*.

Exhibit VII-9
After Adding Time



TEIRS
time and expense

Signed in as hbellinger :: Help :: Sign Out

Time and Expense Entries
Your time and expense entries are listed here in three groups: Time, Travel Expenses, and Other Expenses.
Please use the Filter Results panel to change the number and type of results you would like to see.
Select a report...

Filter Results

Date From: 2/15/2004 Date To: 2/29/2004 Staff: Bellinger, W. Hagood Assignment: -- All --
Filter Reset

Time

Date	Assign #	Client	WP Code	Hours	Cost Rate	Cost Amount	Description	
2/16/2004	10050024A	NYDPS	C&M	6.00	\$		Verizon NY	Edit Delete
2/17/2004	10050024A	NYDPS	C&M	8.00	\$		Verizon NY	Edit Delete
2/18/2004	10050024A	NYDPS	C&M	8.00	\$		Verizon NY	Edit Delete
2/19/2004	10050024A	NYDPS	C&M	8.00	\$		Verizon NY	Edit Delete
2/20/2004	10050024A	NYDPS	C&M	5.00	\$		Verizon NY	Edit Delete
2/23/2004	10050024A	NYDPS	C&M	6.00	\$		Verizon NY	Edit Delete
2/24/2004	10050024A	NYDPS	C&M	5.00	\$		Verizon NY	Edit Delete
2/25/2004	10050024A	NYDPS	C&M	6.00	\$		Verizon NY	Edit Delete
2/26/2004	10050024A	NYDPS	C&M	4.00	\$		Verizon NY	Edit Delete
2/27/2004	10050024A	NYDPS	C&M	3.00	\$		Verizon NY	Edit Delete
Totals				59.00				

Add New Time

If the filter is set to a particular set of dates then the user will be shown the filtered time and expenses for that time period. If the filter is not set, which means it is using the defaulted dates, which is today's date. Then the user will see all time and expenses entered today. Normally the cost rates and amount are shown, but to respect the privacy of the consultant they have been removed from the above exhibit.



Travel Expense

What are Travel Expenses? *Travel Expenses* are expenses incurred while working, especially on a project. The expenses will be billed to the client. All travel expenses must have a receipt verifying the expense. The receipt(s) should be stapled to the timesheet.

An Outside Consultant working in or out of the office needs to get their receipts to the office. They can send them in a PDF, fax or mail. If the receipts are for a project, then the receipts need to be kept together with all of the same type of receipts on the same page. For example, if you have taxi receipts, fax or PDF all taxi receipts on the same sheet of paper. The same goes for parking, commercial air, food, etc. Please do not inter-mix the receipts on the same piece of paper unless they are for the same category. For example, do not inter-mix a hotel and transportation receipt on the same sheet of paper.

***Note.** For example, when the *administrator* submits the invoice to CECONY, the above process for receipts, are how the receipts are to be sent as well. It makes less work on the *administrator* who will have to sort, and copy the receipts onto the same sheet of paper before sending the invoice. This process of keeping the invoices together reduces the amount of time spent on preparing the invoice and in turn, the amount of billing required on the *administrator's* part of invoicing the time to prepare the invoice.

How do I get there? After signing in, the first window the user will see is the *Time and Expense* window. The **Travel Expenses** section is in the middle of the window as shown in *Exhibit VII-10*.

Exhibit VII-10
Travel Expense



How to Add Travel? After clicking on the **Add New Travel Expense** button, the *Add New Travel Expense* window appears as shown in *Exhibit VII-11*.

Exhibit VII-11 Adding Travel Expense



Signed in as hbellinger :: Help :: Sign Out

Add New Travel Expense

Please add your entry with this form, then click the Save button.

If you make a mistake, click Reset to try this entry again, or click Cancel to return to the previous screen.

Time Saving Tip: Click on Save, Add Time to save this entry and enter a new time entry.

Staff: Bellinger, W. Hagood ▼ Date: 3/1/2004 ▼

Assignment: 10050024A (NYDPS) NY-Verizon NY ... ▼ Work Location: -- Select Item -- ▼

Work Package: -- Select Item -- ▼

Task Code: -- None -- ▼

Expense Type: -- Select Item -- ▼

Description:

Save and Add Time Save and Add Travel Save and Add Other

Save Cancel Reset

Defaulted value fields are **Staff**, **Date** (today's date), and the **Assignment** field.

What do I do next? After filling in all of the required fields, the user can do several things. The user can Save and Add more Travel, Save and Add Time expenses, Save and Add Other Expenses, save, cancel, reset.

How to use the Save and Add Travel button? If the user needs to add more travel, then click on **Save and Add Travel**. This will keep the user on the same window and clear out all values except the *Quantity* field. The user will have to make changes to the fields if the entry is not the same.

How to use the Save and Add Other button? If the user needs to add Other Expenses, then the user clicks on **Save and Add Other**. This will keep the user on the same window and clear out all values except the *Quantity* field.

***Note.** As an *Outside Consultant* working on a project you will not see the **Billable**, **Invoice Visible** and **Reimbursable** boxes at the bottom of the window above the save area. If you feel something should not be billable or invoice visible or reimbursable please talk with the *project manager* and then the *PM* or *administrator* can make the necessary changes from their end in TEIRS.



If the user has no more travel, time or other expenses, then the user clicks on the **Save** button. This will take the user back to the *Time and Expense* window main screen.

What happens after adding Travel expenses? After adding all of the expenses the user will be taken to the *Time and Expense* window. The **Travel Expenses** section of the *Time and Expense* window is shown in *Exhibit VII-12*.

Exhibit VII-12
After Adding Travel Expense

Travel Expenses								
Date	Assign #	Client	WP Code	Type	Quantity	Cost Rate	Cost Amt.	Description
11/17/2003	10050024A	NYDPS	OPP	Commercial Air	1.00		\$125.75	Airfare
11/17/2003	10050024A	NYDPS	OPP	Lodging	1.00		\$220.75	Hotel
11/17/2003	10050024A	NYDPS	OPP	Dinner/Per Diem	1.00	\$30.00	\$30.00	Dinner
11/17/2003	10050024A	NYDPS	OPP	Mileage	19.00	\$0.25	\$4.75	Mileage
11/18/2003	10050024A	NYDPS	OPP	Breakfast/Per Diem	1.00	\$7.00	\$7.00	Breakfast
11/18/2003	10050024A	NYDPS	OPP	Lunch/Per Diem	1.00	\$8.00	\$8.00	Lunch
11/18/2003	10050024A	NYDPS	OPP	Transportation	1.00		\$7.10	Taxi
11/18/2003	10050024A	NYDPS	OPP	Lodging	1.00		\$220.75	Hotel
Totals					26.00		\$624.10	
Add New Travel Expense								

If the filter is set to a particular set of dates then the user will be shown the filtered time and expenses for that time period. If the filter is not set, which means it is using the defaulted dates, which is today's date, then the user will see all time and expenses entered today.

Other Expenses

What is Other Expenses? *Other expense* is an expense other than travel and does not include time. *Other expenses* usually occur when working on a project and an item purchased is for the project and the *Outside Consultant* purchases the item out of their own pocket. The project would have to be billed for that item. An example of this expense would be shipping packages to a client, or purchasing equipment to install at the client's site. Outside consultants should not use this feature without the *Project Manager's* prior approval.

Therefore, Schumaker & Company needed to have a system to keep track of the expenses. Entering the expenses into TEIRS, tallies the total and attaches it to the project to be billed. It also attaches it to the *Outside Consultant* for reimbursement if the expense is reimbursable. Most *Other Expenses* are defaulted as *Billable* to the project.

How do I get there? After signing in, the first window the user will see is the *Time and Expense* window. Click on the **Add New Other Expense** button in *Other Expense* section. This will take the user to the *Add Other Expense* window as shown in *Exhibit VII-13*.

Exhibit VII-13
Other Expense

How to Add Other? After clicking on the **Add New Other Expense** button, the *Add New Other Expense* window appears. Defaulted value fields are **Staff**, **Date** (today's date) and the **Assignment** field. The *Other Expense* window is shown in *Exhibit VII-14*.

Exhibit VII-14
Adding Other Expense Window

What do I do next? After filling in all of the required fields, the user can do several things. The user can Save and Add more Other Expense, Save and Add Time expenses, Save and Add Travel expenses, save, cancel, reset. An example of all of the fields filled in is shown in *Exhibit VII-15*.



Exhibit VII-15 Adding Other Expense

Add New Other Expense

Please add your entry with this form, then click the Save button.

If you make a mistake, click Reset to try this entry again, or click Cancel to return to the previous screen.

Time Saving Tip: Click on Save, Add Time to save this entry and enter a new time entry.

Staff: Bellinger, W. Hagood

Assignment: 10050024A (NYDPS) NY-Verizon NY ...

Client: New York Department of Public Service

Work Package: Organization and management (OEM)

Task Code: -- None --

Expense Type: Fax

Quantity: 1

Cost Amount: \$2.00

Description: Fax

Date: 3/24/2004

Work Location: New York City, NY

Save and Add Time
Save and Add Travel
Save and Add Other

Save
Cancel
Reset

What do I do next? If the user needs to add more *Other Expense*, then click on **Save and Add Other**. This will keep the user on the same window and clear out all values except the *Quantity* field. The user will have to make changes to the fields if the entry is not the same.

How to use the Save and Add Travel button? If the user needs to add Travel expenses, then the user clicks on **Save and Add Travel**. This will keep the user on the same window and clear out all values except the *Quantity* field.

***Note.** After choosing an assignment and then the expense, the fields **Billable**, **Invoice Visible** and **Reimbursable** will automatically be updated or populated according to how the assignments was set up. As an *Outside Consultant* working on a project then you will not see the **Billable**, **Invoice Visible** and **Reimbursable** boxes at the bottom of the window above the save area. If you feel something should not be billable or invoice visible or reimbursable, please talk with the *Project Manager*, then the *Project Administrator* can make the necessary changes from our end in TEIRS.

If the user has no more time, travel, or other expenses, then the user clicks on the **Save** button. This will take the user to the *Time and Expense* window.

What happens after adding Other Expenses? After adding all of the expenses the user will be taken to the *Time and Expense* window. If the filter is set to a particular set of dates then the user will be shown the filtered time and expenses for that time period. If the filter is not set, which means it is using the defaulted dates, which is today's date, then the user will see all time and expenses entered today. Please see *Exhibit VII-16* to see what the entry looks like for *Other Expense*.

Exhibit VII-16
After Adding Other Expense

Other Expenses									
Date	Assign #	Client	WP Code	Type	Quantity	Cost Rate	Cost Amount	Description	
2/13/2004	10050024A	NYDPS	C&M	Fax	1.00	\$2.00	\$2.00	Fax	Edit Delete
Totals					1.00		\$2.00		
Add New Other Expense									

E. Reports

Why do we have this feature? Reports are a daily part of life and give valuable information in today's society. Reports tell us something about everything and help to make decisions. This feature allows *staff, consultants* and *Project managers* the ability to generate reports and to get paid from them. It also allows the *Project Manager* the ability to review the reports and make accurate decisions and also bill the client.

Who uses this feature? Different reports are needed by everyone. *Staff members, Outside Consultants, managers, presidents, CEOs,* and *Accountants* use the report feature. Everyone needs a timesheet.

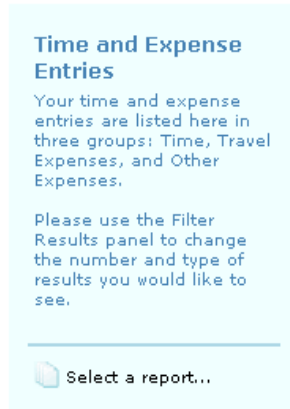
***Note.** At anytime, the *Project Administrator* can generate timesheets for any *consultant*.

Selecting a Report

How do I get there? After signing in, the first window the *Outside Consultant* will see is the *Time and Expense* window. On the left hand side of the window, click on **Select a Report...** as shown in *Exhibit VII-17*. This will take the user to the *Report Window*.



Exhibit VII-17 Select a Report



What will I see in my report Window? Depending on which user is signed on and what that user wants to do. Different users will see different windows. The dates are defaulted to the last billing period. You will have to change these according to the current time period. As a *Consultant* then that user will see the **Report Criteria** window as shown in *Exhibit VII-18*.

Exhibit VII-18 Outside Consultant Report Window



Signed in as hbellinger :: Help :: Sign Out

The difference between what the Consultant sees versus others is that only one assignment is in the assignment listing and there are two reports from which to choose for an Outside Consultant. They are the *Timesheet – Consultant* and *Invoice – Consultant*.

***Note.** The Schumaker and Company logo will not show on the timesheet or the invoice for that consultant.

Timesheet – Consultant

Who uses it? The *Project Manager* and *Consultants* will use the *Consultant Timesheet* report.

What is it? A *Consultant Timesheet* is a concentrated report with time and expense totals on it. It is also broken down by the assignment and then listed by date and yet further by work plan. Everything the consultant had entered into the TEIRS system to log their time and expenses are located on this report.

What do I do? A Consultant working on an assignment will print a *Consultant Timesheet* Report. The consultant only needs to filter the dates to the current time period in the **Date From** field (which starts on the 1st or the 15th of the month) and the **Date To** field will automatically be populated as shown in *Exhibit VII-19*. If the user has only one assignment within his/her assignment listing then the user does not need to select an assignment and can leave that field as **All**, for **All** assignments. The consultant can also select the assignment number.

Exhibit VII-19
Timesheet Consultant

Select a Report
Please specify criteria for the report you want, then click the Print Preview button.

[View Time and Expenses...](#)

Report Criteria

Report Category: Timesheet

Report: Timesheet - Consultant

Staff: Bellinger, W. Hagood

Assignment: 10050024A (NYDPS) NY-Verizon NY ...

Date From: 12/1/2003

Date To: 12/15/2003

[Print Preview](#)

Then click on the **Print Preview** button to view. View the report before printing to make sure there are no errors, expenses, amounts, descriptions or dates incorrectly entered. The consultant will print out this time sheet. An example of the *Consultant Timesheet* PDF report is shown in *Exhibit VII-20*.



Exhibit VII-20 Consultant Timesheet

New York Department of Public Service
10050024A NY-Verizon NY Retail Service Quality
Consultant Timesheet: Actual Cost Charges
W. Hagood Bellinger
From 12/1/2003 to 12/15/2003

Description		Time	Travel Expenses	Other Expenses
Regular Time	Verizon NY	1.00		
Total for 12/4/03		1.00		
Regular Time	Verizon NY	2.00		
Total for 12/5/03		2.00		
Regular Time	Verizon NY	4.00		
Commercial Air	Commercial Air		\$150.75	
Lodging	Eastgate Tower		\$218.75	
Mileage	Mileage		\$4.75	
Dinner/Per Diem	Dinner		\$30.00	
Total for 12/8/03		4.00	\$404.25	
Regular Time	Verizon NY	8.00		
Lodging	Eastgate Tower		\$218.75	
Breakfast/Per Diem	Breakfast		\$7.00	
Lunch/Per Diem	Lunch		\$8.00	
Dinner/Per Diem	Dinner		\$30.00	
Total for 12/9/03		8.00	\$263.75	

***Note.** Be sure to sign on all sheets where you are required to place a signature.

Why would I get an error message? If you were selecting reports to print and the filter dates were set to a time period with no time or expenses during that period, then an error message shown in *Exhibit VII-21* would appear.

Exhibit VII-21 Report Error Message

Error: (Reporter.GetTimesheetConsultantReport) I'm sorry. There is no data that fits the report's criteria.

The consultant needs to filter the dates to a time period in which there is time and/or expense to report so as not to produce an error message.

Invoice – Consultant

Who uses it? The *Project Manager* and *Consultants* will use the *Consultant Invoice* report.

What is it? This is an invoice used to pay the consultant. It shows the total cost amount for the hours worked and the total travel expenses broken down by day and then totaled for each project the consultant worked on.

What do I do? To get to the *Consultant Invoice*, go to the report section from the *Timesheet* main window (unless the user is already in the report window), then select **Consultant Invoice** from the report field drop down box. Once the user has selected all of the necessary fields then press the **Print Preview** button.

The **Consultant Invoice** report viewed in a PDF without the costs showing to respect the privacy of the consultant, but normally would be showing on the report, is shown in *Exhibit VII-22*.

Exhibit VII-22
Consultant Invoice

New York Department of Public Service
10050024A NY-Verizon NY Retail Service Quality
Consultant Invoice: Actual Cost Charges
W. Hagood Bellinger
From 12/1/2003 to 12/15/2003

Description		Time		Travel Expenses	Other Expenses
		Hours	Amount	Amount	Amount
Regular Time	Verizon NY	1.00			
Total for 12/4/03		1.00			
Regular Time	Verizon NY	2.00			
Total for 12/5/03		2.00			
Regular Time	Verizon NY	4.00			
Commercial Air	Commercial Air			\$150.75	
Lodging	Eastgate Tower			\$218.75	
Mileage	Mileage			\$4.75	
Dinner/Per Diem	Dinner			\$30.00	
Total for 12/8/03		4.00		\$404.25	
Regular Time	Verizon NY	8.00			
Lodging	Eastgate Tower			\$218.75	
Breakfast/Per Diem	Breakfast			\$7.00	
Lunch/Per Diem	Lunch			\$8.00	
Dinner/Per Diem	Dinner			\$30.00	
Total for 12/9/03		8.00		\$263.75	

***Note.** Be sure to sign on all sheets where you are required to place a signature.

What is the difference between the two reports? The *Consultant Invoice* and the *Consultant Timesheet* are very similar at first glance, but the *Consultant Invoice* has cost amounts shown for the hours worked were as the *Consultant Timesheet* does not show these amounts. The *Consultant Timesheet* does however, have a place at the end of the report for the consultant's signature. The consultant signature verifies that the line items that were entered into TEIRS are correct. Therefore, upon inspecting the totals columns at



the end of the report, you will notice there is a grand total line added and no place for the consultant's signature.

F. Help

What is Help? At this time, there is no help available from **Help**.

How do I get there? At anytime, whether you are in time & expense, travel, other or reports you can go to the top of the web site and click on **Help**. Please see *Exhibit VII-23*.

Exhibit VII-23 Help & Sign Out

Signed in as ::  [Help](#) ::  [Sign Out](#)

***Note.** Normally, the signed in user's name would appear at the top next to **Signed in as**, but has been left out in the exhibits.

G. Sign Out

Why do we need to be able to sign out? This allows another user to sign in and enter time and expense without reentering the TEIRS web site address again. Also if the user inadvertently clicked on **Sign Out** instead of clicking on **Help**, the user can sign back in and finish entering time & expenses.

How do I get there? At anytime, whether you are in *Time & Expense*, *Travel*, *Other* or *Reports* you can go to the top of the web site and click on **Sign out**. Please see *Exhibit VII-24*. This will take the user to the *Sign In* window.

Exhibit VII-24 Sign Out & Help

Signed in as ::  [Help](#) ::  [Sign Out](#)

***Note.** Normally, the signed in user's name would appear at the top next to **Signed in as**, but has been left out in the exhibits.

VIII. Lessons Learned from Past Projects

1. Adopt a common sequential numbering scheme for information and interview requests
2. Have information requested in native format, that is Excel in Excel, Word in Word, Visio in Visio, with PDF only as a record copy (unless only available in paper); be sure to specify format for responses, if known
3. Scheduling of interviews and meetings using PMIA, with use of Outlook if Schumaker & Company, client, and company is on same platform; Jaye is doing all coordination of information and interviews for Schumaker & Company consultants
4. Have weekly conference calls with Schumaker & Company, client, and company
5. Use face-to-face explanation of information requests, especially if complicated
6. Request data for organization charts in final format
7. All consultant team will have @schuco addresses; can forward to other mailboxes
8. Use public folders for information responses, task report, draft reports, etc.
9. Forwarding of all information responses to consultants directly from the public folders, if possible
10. Automatic upload of information responses to the PMIA site
11. Garamond standard should be used in all Excel spreadsheets, charts, and graphs and Visio diagrams
12. Have meeting up front on footnotes and endnote usage
13. Exhibit formatting must include as of dates or date range, plus reference sourcing in Exhibit Comment line
14. Client and company comments in task report files sometimes bring mass deletion issues



IX. Miscellaneous Items

A. Dual Monitor Setup for Laptops

This article demonstrates the procedure on how to setup an additional monitor to work as extended desktop for a laptop. Aside from the monitor, VGA cable is the only hardware needed. As *Exhibit IX-1* below shows that the cable has two connectors, a male and a female, and they are usually blue.

Exhibit IX-1
VGA Cable



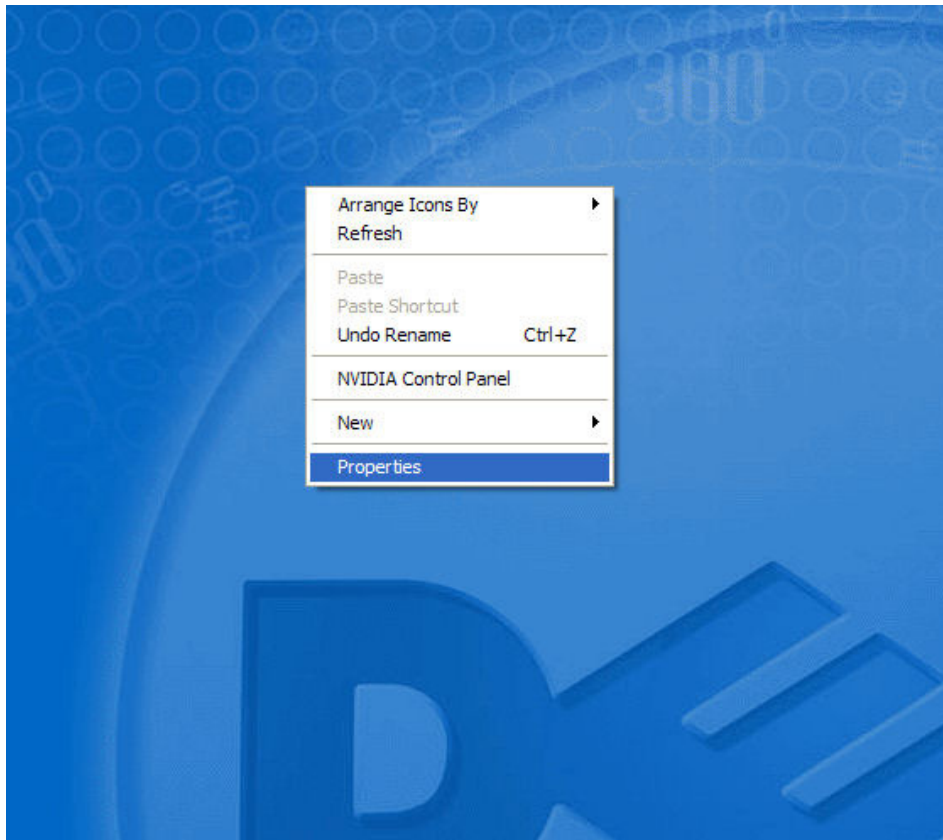
Exhibit IX-2 shows the physical connection between the laptop and the monitor. Plug the male connector to the VGA connector on the back of the laptop, and the female connector goes to the connector on the back of the monitor.

Exhibit IX-2
Physical Connection



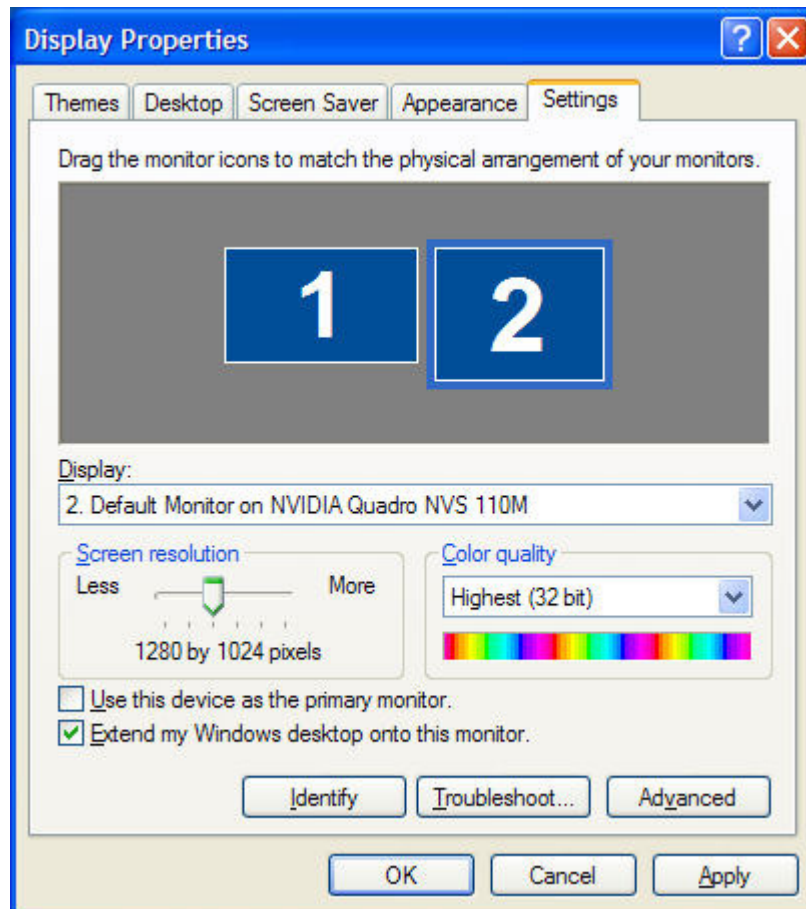
After connections are made, turn on the laptop and the external monitor, boot into Windows XP. Right click anywhere on the desktop and click Properties, as shown in *Exhibit IX-3*.

Exhibit IX-3
Desktop Properties



Click on the big white “2” with blue back ground under Settings tab. Check the box for **Extend my windows desktop onto this monitor**, and then change the resolution to the appropriate setting by sliding the tab left or right under **Screen Resolution**. The Color **Quality** should be set to 32bit. Click **OK** to apply settings, as shown in *Exhibit IX-4*.

Exhibit IX-4
Display Properties



The external monitor should now have the same desktop background as the laptop screen with nothing on it. If nothing at all shows, make sure the monitor is set to analog mode. Most dual mode (digital and analog) monitors has a button for switching between modes. Most of us use the same monitor shown in *Exhibit IX-5*. To change the mode on it, simply push the button next to the numbers. It is analog mode when '1' is lit, which is what's needed for the laptop setup.

Exhibit IX-5
Typical Monitor



When not using the external monitor, make sure uncheck **Extend my Windows desktop onto this monitor** and apply settings, as some windows left open in the external monitor would not automatically shift to the laptop monitor when settings are no reversed.

¹/ Information Response 168

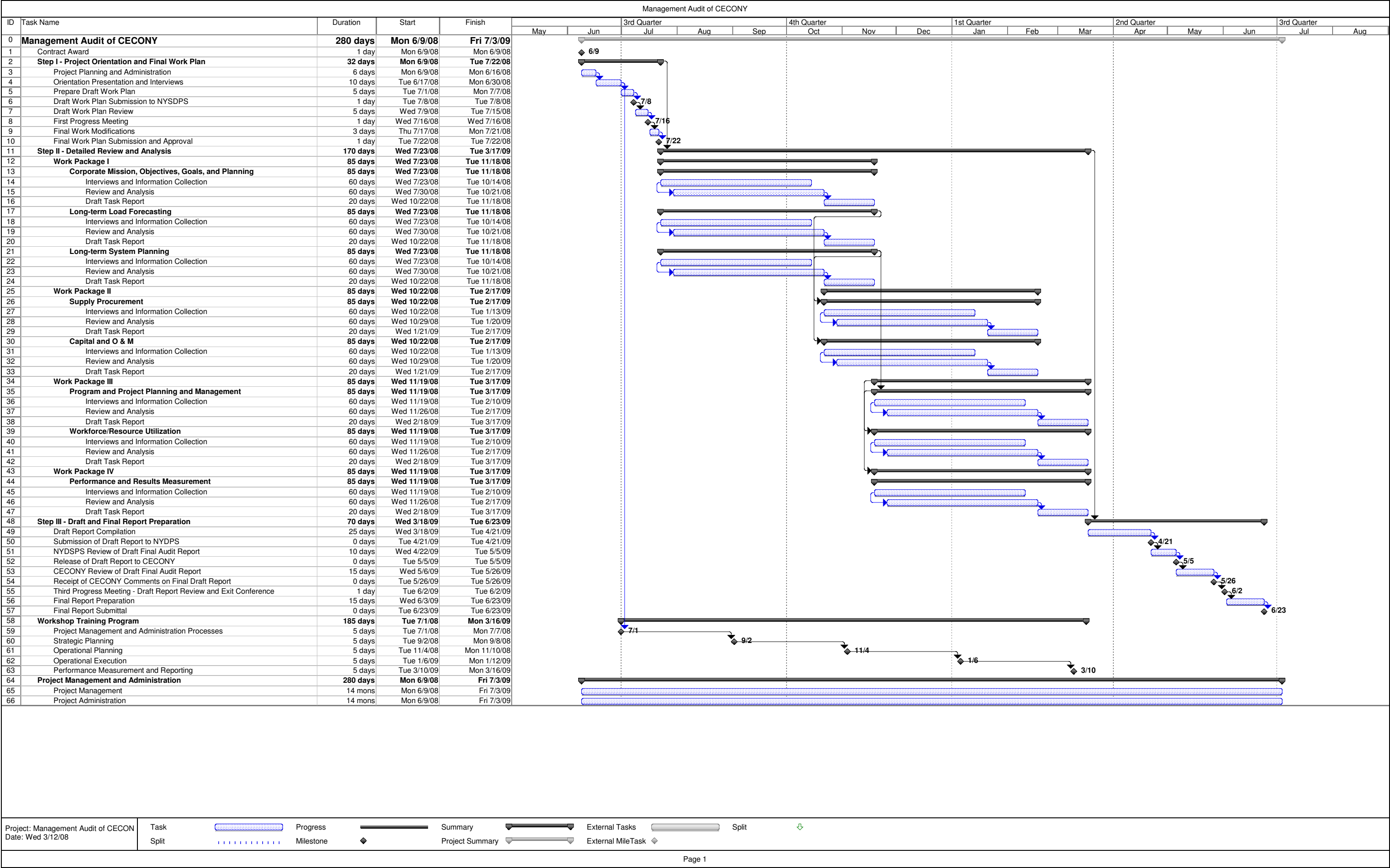
²/ Interview 36

³/ Interview 47

⁴/ Interview 47

⁵/ Information Response 438





Management Audit of CECONY																						
ID	WBS	Task Name	Duration	Work	Cost	Details	2nd Half						1st Half						2nd Half			
							Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
0		0 Management Audit of CECONY	280 days	5,776 hrs	\$1,132,080.00	Work	389.72h	402.07h	349.07h	405.68h	453.83h	580.9h	696.18h	697.92h	533.85h	528.5h	394.85h	102h	226.85h	14.57h		
1	1	Contract Award	1 day	0 hrs	\$0.00	Work																
2	2	Step I - Project Orientation and Final Work Plan	32 days	472 hrs	\$97,480.00	Work	312h	160h														
3	2.1	Project Planning and Administration	6 days	48 hrs	\$11,760.00	Work	48h															
		Schumaker Patricia H.		24 hrs	\$5,880.00	Work	24h															
		Schumaker Dennis J.		24 hrs	\$5,880.00	Work	24h															
4	2.2	Orientation Presentation and Interviews	10 days	264 hrs	\$51,480.00	Work	264h															
		Schumaker Patricia H.		24 hrs	\$5,880.00	Work	24h															
		Schumaker Dennis J.		24 hrs	\$5,880.00	Work	24h															
		Bodamer Juilia		24 hrs	\$5,400.00	Work	24h															
		Burgess Lee		24 hrs	\$5,400.00	Work	24h															
		Laycock D Kerry		24 hrs	\$5,400.00	Work	24h															
		Murphy Martin J.		24 hrs	\$5,400.00	Work	24h															
		Skeer Martin		24 hrs	\$5,400.00	Work	24h															
		Rosenkoetter Robert		24 hrs	\$5,400.00	Work	24h															
		Stopar Gail E.		24 hrs	\$3,000.00	Work	24h															
		Kain Jaye		24 hrs	\$1,320.00	Work	24h															
		Sunid Hachin		24 hrs	\$3,000.00	Work	24h															
5	2.3	Prepare Draft Work Plan	5 days	144 hrs	\$30,320.00	Work		144h														
		Schumaker Patricia H.		16 hrs	\$3,920.00	Work		16h														
		Schumaker Dennis J.		16 hrs	\$3,920.00	Work		16h														
		Bodamer Juilia		16 hrs	\$3,600.00	Work		16h														
		Burgess Lee		16 hrs	\$3,600.00	Work		16h														
		Laycock D Kerry		16 hrs	\$3,600.00	Work		16h														
		Murphy Martin J.		16 hrs	\$3,600.00	Work		16h														
		Skeer Martin		16 hrs	\$3,600.00	Work		16h														
		Rosenkoetter Robert		16 hrs	\$3,600.00	Work		16h														
		Kain Jaye		16 hrs	\$880.00	Work		16h														
6	2.4	Draft Work Plan Submission to NYSDPS	1 day	0 hrs	\$0.00	Work																
7	2.5	Draft Work Plan Review	5 days	0 hrs	\$0.00	Work																
8	2.6	First Progress Meeting	1 day	16 hrs	\$3,920.00	Work		16h														
		Schumaker Patricia H.		8 hrs	\$1,960.00	Work		8h														
		Schumaker Dennis J.		8 hrs	\$1,960.00	Work		8h														
9	2.7	Final Work Modifications	3 days	0 hrs	\$0.00	Work																
10	2.8	Final Work Plan Submission and Approval	1 day	0 hrs	\$0.00	Work																
11	3	Step II - Detailed Review and Analysis	170 days	3,160 hrs	\$730,200.00	Work		82.35h	247.07h	258.82h	342.12h	451.77h	584.47h	559.07h	436.7h	197.65h						
12	3.1	Work Package I	85 days	1,000 hrs	\$232,200.00	Work		82.35h	247.07h	258.82h	270.58h	141.18h										
13	3.1.1	Corporate Mission, Objectives, Goals, and PI	85 days	320 hrs	\$75,200.00	Work		26.35h	79.07h	82.82h	86.58h	45.18h										
		Schumaker Patricia H.		80 hrs	\$19,600.00	Work		6.58h	19.77h	20.7h	21.65h	11.3h										
		Schumaker Dennis J.		80 hrs	\$19,600.00	Work		6.58h	19.77h	20.7h	21.65h	11.3h										
		Burgess Lee		160 hrs	\$36,000.00	Work		13.18h	39.53h	41.42h	43.3h	22.58h										
14	3.1.1.1	Interviews and Information Collection	60 days	0 hrs	\$0.00	Work																
15	3.1.1.2	Review and Analysis	60 days	0 hrs	\$0.00	Work																
16	3.1.1.3	Draft Task Report	20 days	0 hrs	\$0.00	Work																
17	3.1.2	Long-term Load Forecasting	85 days	320 hrs	\$73,600.00	Work		26.35h	79.07h	82.82h	86.58h	45.18h										
		Schumaker Dennis J.		80 hrs	\$19,600.00	Work		6.58h	19.77h	20.7h	21.65h	11.3h										
		Bodamer Juilia		120 hrs	\$27,000.00	Work		9.88h	29.65h	31.07h	32.47h	16.93h										
		Skeer Martin		120 hrs	\$27,000.00	Work		9.88h	29.65h	31.07h	32.47h	16.93h										
18	3.1.2.1	Interviews and Information Collection	60 days	0 hrs	\$0.00	Work																
19	3.1.2.2	Review and Analysis	60 days	0 hrs	\$0.00	Work																
20	3.1.2.3	Draft Task Report	20 days	0 hrs	\$0.00	Work																
21	3.1.3	Long-term System Planning	85 days	360 hrs	\$83,400.00	Work		29.65h	88.93h	93.18h	97.42h	50.82h										
		Schumaker Dennis J.		120 hrs	\$29,400.00	Work		9.88h	29.65h	31.07h	32.47h	16.93h										
		Murphy Martin J.		120 hrs	\$27,000.00	Work		9.88h	29.65h	31.07h	32.47h	16.93h										
		Rosenkoetter Robert		120 hrs	\$27,000.00	Work		9.88h	29.65h	31.07h	32.47h	16.93h										
22	3.1.3.1	Interviews and Information Collection	60 days	0 hrs	\$0.00	Work																
23	3.1.3.2	Review and Analysis	60 days	0 hrs	\$0.00	Work																
24	3.1.3.3	Draft Task Report	20 days	0 hrs	\$0.00	Work																
25	3.2	Work Package II	85 days	760 hrs	\$176,600.00	Work					71.53h	178.82h	205.65h	196.7h	107.3h							
26	3.2.1	Supply Procurement	85 days	320 hrs	\$73,600.00	Work					30.12h	75.3h	86.58h	82.82h	45.18h							
		Schumaker Dennis J.		80 hrs	\$19,600.00	Work					7.53h	18.82h	21.65h	20.7h	11.3h							
		Bodamer Juilia		120 hrs	\$27,000.00	Work					11.3h	28.23h	32.47h	31.07h	16.93h							
		Skeer Martin		120 hrs	\$27,000.00	Work					11.3h	28.23h	32.47h	31.07h	16.93h							
27	3.2.1.1	Interviews and Information Collection	60 days	0 hrs	\$0.00	Work																
28	3.2.1.2	Review and Analysis	60 days	0 hrs	\$0.00	Work																
29	3.2.1.3	Draft Task Report	20 days	0 hrs	\$0.00	Work																
30	3.2.2	Capital and O & M	85 days	440 hrs	\$103,000.00	Work					41.42h	103.53h	119.07h	113.88h	62.12h							
		Schumaker Patricia H.		120 hrs	\$29,400.00	Work					11.3h	28.23h	32.47h	31.07h	16.93h							
		Schumaker Dennis J.		80 hrs	\$19,600.00	Work					7.53h	18.82h	21.65h	20.7h	11.3h							
		Murphy Martin J.		120 hrs	\$27,000.00	Work					11.3h	28.23h	32.47h	31.07h	16.93h							
		Rosenkoetter Robert																				

Management Audit of CECONY																					
ID	WBS	Task Name	Duration	Work	Cost	Details	2nd Half						1st Half						2nd Half		
							Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
32	3.2.2.2	Review and Analysis	60 days	0 hrs	\$0.00	Work															
33	3.2.2.3	Draft Task Report	20 days	0 hrs	\$0.00	Work															
34	3.3	Work Package III	85 days	760 hrs	\$174,200.00	Work						71.53h	205.65h	196.7h	178.82h	107.3h					
35	3.3.1	Program and Project Planning and Managem	85 days	400 hrs	\$93,200.00	Work						37.65h	108.23h	103.53h	94.12h	56.47h					
		Schumaker Patricia H.		80 hrs	\$19,600.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Schumaker Dennis J.		80 hrs	\$19,600.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Murphy Martin J.		120 hrs	\$27,000.00	Work						11.3h	32.47h	31.07h	28.23h	16.93h					
		Rosenkoetter Robert		120 hrs	\$27,000.00	Work						11.3h	32.47h	31.07h	28.23h	16.93h					
36	3.3.1.1	Interviews and Information Collection	60 days	0 hrs	\$0.00	Work															
37	3.3.1.2	Review and Analysis	60 days	0 hrs	\$0.00	Work															
38	3.3.1.3	Draft Task Report	20 days	0 hrs	\$0.00	Work															
39	3.3.2	Workforce/Resource Utilization	85 days	360 hrs	\$81,000.00	Work						33.88h	97.42h	93.18h	84.7h	50.82h					
		Laycock D Kerry		120 hrs	\$27,000.00	Work						11.3h	32.47h	31.07h	28.23h	16.93h					
		Murphy Martin J.		120 hrs	\$27,000.00	Work						11.3h	32.47h	31.07h	28.23h	16.93h					
		Rosenkoetter Robert		120 hrs	\$27,000.00	Work						11.3h	32.47h	31.07h	28.23h	16.93h					
40	3.3.2.1	Interviews and Information Collection	60 days	0 hrs	\$0.00	Work															
41	3.3.2.2	Review and Analysis	60 days	0 hrs	\$0.00	Work															
42	3.3.2.3	Draft Task Report	20 days	0 hrs	\$0.00	Work															
43	3.4	Work Package IV	85 days	640 hrs	\$147,200.00	Work						60.23h	173.18h	165.65h	150.58h	90.35h					
44	3.4.1	Performance and Results Measurement	85 days	640 hrs	\$147,200.00	Work						60.23h	173.18h	165.65h	150.58h	90.35h					
		Schumaker Patricia H.		80 hrs	\$19,600.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Schumaker Dennis J.		80 hrs	\$19,600.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Bodamer Juilia		80 hrs	\$18,000.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Burgess Lee		80 hrs	\$18,000.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Laycock D Kerry		80 hrs	\$18,000.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Murphy Martin J.		80 hrs	\$18,000.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Skeer Martin		80 hrs	\$18,000.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
		Rosenkoetter Robert		80 hrs	\$18,000.00	Work						7.53h	21.65h	20.7h	18.82h	11.3h					
45	3.4.1.1	Interviews and Information Collection	60 days	0 hrs	\$0.00	Work															
46	3.4.1.2	Review and Analysis	60 days	0 hrs	\$0.00	Work															
47	3.4.1.3	Draft Task Report	20 days	0 hrs	\$0.00	Work															
48	4	Step III - Draft and Final Report Preparation	70 days	600 hrs	\$125,400.00	Work										192h	288h		120h		
49	4.1	Draft Report Compilation	25 days	480 hrs	\$100,800.00	Work										192h	288h				
		Schumaker Patricia H.		120 hrs	\$29,400.00	Work										48h	72h				
		Schumaker Dennis J.		120 hrs	\$29,400.00	Work										48h	72h				
		Murphy Martin J.		120 hrs	\$27,000.00	Work										48h	72h				
		Stopar Gail E.		120 hrs	\$15,000.00	Work										48h	72h				
50	4.2	Submission of Draft Report to NYDPS	0 days	0 hrs	\$0.00	Work															
51	4.3	NYDPS Review of Draft Final Audit Report	10 days	0 hrs	\$0.00	Work															
52	4.4	Release of Draft Report to CECONY	0 days	0 hrs	\$0.00	Work															
53	4.5	CECONY Review of Draft Final Audit Report	15 days	0 hrs	\$0.00	Work															
54	4.6	Receipt of CECONY Comments on Final Draft Report	0 days	0 hrs	\$0.00	Work															
55	4.7	Third Progress Meeting - Draft Report Review and Ex	1 day	0 hrs	\$0.00	Work															
56	4.8	Final Report Preparation	15 days	120 hrs	\$24,600.00	Work													120h		
		Schumaker Patricia H.		40 hrs	\$9,800.00	Work													40h		
		Schumaker Dennis J.		40 hrs	\$9,800.00	Work													40h		
		Stopar Gail E.		40 hrs	\$5,000.00	Work													40h		
57	4.9	Final Report Submittal	0 days	0 hrs	\$0.00	Work															
58	5	Workshop Training Program	185 days	184 hrs	\$40,600.00	Work		48h		40h		32h		32h		32h					
59	5.1	Project Management and Administration Processes	5 days	48 hrs	\$8,720.00	Work		48h													
		Schumaker Patricia H.		16 hrs	\$3,920.00	Work		16h													
		Schumaker Dennis J.		16 hrs	\$3,920.00	Work		16h													
		Kain Jaye		16 hrs	\$880.00	Work		16h													
60	5.2	Strategic Planning	5 days	40 hrs	\$9,320.00	Work				40h											
		Schumaker Patricia H.		8 hrs	\$1,960.00	Work				8h											
		Schumaker Dennis J.		8 hrs	\$1,960.00	Work				8h											
		Bodamer Juilia		8 hrs	\$1,800.00	Work				8h											
		Burgess Lee		8 hrs	\$1,800.00	Work				8h											
		Skeer Martin		8 hrs	\$1,800.00	Work				8h											
61	5.3	Operational Planning	5 days	32 hrs	\$7,520.00	Work						32h									
		Schumaker Patricia H.		8 hrs	\$1,960.00	Work						8h									
		Schumaker Dennis J.		8 hrs	\$1,960.00	Work						8h									
		Bodamer Juilia		8 hrs	\$1,800.00	Work						8h									
		Skeer Martin		8 hrs	\$1,800.00	Work						8h									
62	5.4	Operational Execution	5 days	32 hrs	\$7,520.00	Work								32h							
		Schumaker Patricia H.		8 hrs	\$1,960.00	Work								8h							
		Schumaker Dennis J.		8 hrs	\$1,960.00	Work								8h							
		Burgess Lee		8 hrs	\$1,800.00	Work								8h							
		Laycock D Kerry		8 hrs	\$1,800.00	Work								8h							
63	5.5	Performance Measurement and Reporting	5 days	32 hrs	\$7,520.00	Work										32h					
		Schumaker Patricia H.		8 hrs	\$1,960.00	Work										8h					
		Schumaker Dennis J.		8 hrs	\$1,960.00	Work										8h					
		Laycock D Kerry		8 hrs	\$1,800.00	Work										8h					

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Management Audit of CECONY																						
ID	WBS	Task Name	Duration	Work	Cost	Details								1st Half							2nd Half	
							Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
		Rosenkoetter Robert		8 hrs	\$1,800.00	Work										8h						
64	6	Project Management and Administration	280 days	1,360 hrs	\$138,400.00	Work	77.72h	111.72h	102h	106.85h	111.72h	97.15h	111.72h	106.85h	97.15h	106.85h	106.85h	102h	106.85h	14.57h		
65	6.1	Project Management	14 mons	320 hrs	\$78,400.00	Work	18.28h	26.28h	24h	25.15h	26.28h	22.85h	26.28h	25.15h	22.85h	25.15h	25.15h	24h	25.15h	3.43h		
		Schumaker Patricia H.		160 hrs	\$39,200.00	Work	9.15h	13.15h	12h	12.57h	13.15h	11.43h	13.15h	12.57h	11.43h	12.57h	12.57h	12h	12.57h	1.72h		
		Schumaker Dennis J.		160 hrs	\$39,200.00	Work	9.15h	13.15h	12h	12.57h	13.15h	11.43h	13.15h	12.57h	11.43h	12.57h	12.57h	12h	12.57h	1.72h		
66	6.2	Project Administration	14 mons	1,040 hrs	\$60,000.00	Work	59.43h	85.43h	78h	81.72h	85.43h	74.28h	85.43h	81.72h	74.28h	81.72h	81.72h	78h	81.72h	11.15h		
		Kain Jaye		1,000 hrs	\$55,000.00	Work	57.15h	82.15h	75h	78.57h	82.15h	71.43h	82.15h	78.57h	71.43h	78.57h	78.57h	75h	78.57h	10.72h		
		Sunid Hachin		40 hrs	\$5,000.00	Work	2.28h	3.28h	3h	3.15h	3.28h	2.85h	3.28h	3.15h	2.85h	3.15h	3.15h	3h	3.15h	0.43h		

<i>Staff Member</i>	Category	Rate	Total Hours	Total Fees	Days On Site	AirFare Rate	AirFare	Trans	Hotel	Diem	Other	Travel Exp	Sup & Matls	Total Costs	Calculated Rates	Fully Absorbed Rates
Patricia Schumaker	Engagement Manager and Executive Consultant I	\$245	800	\$196,000	48.0	\$800	\$13,600	\$2,400	\$13,440	\$2,640	\$720	\$32,800	\$3,920	\$232,720	\$291	\$292
Dennis Schumaker	Project Manager and Executive Consultant I	\$245	1040	\$254,800	62.4	\$800	\$17,600	\$3,120	\$17,472	\$3,432	\$936	\$42,560	\$5,096	\$302,456	\$291	\$292
Julia Bodamer	Executive Consultant II	\$225	376	\$84,600	22.6	\$800	\$7,200	\$1,130	\$6,328	\$1,243	\$339	\$16,240	\$1,692	\$102,532	\$273	\$273
Lee Burgess	Executive Consultant II	\$225	296	\$66,600	17.8	\$800	\$5,600	\$890	\$4,984	\$979	\$267	\$12,720	\$1,332	\$80,652	\$272	\$273
D. Kerry Laycock	Executive Consultant II	\$225	256	\$57,600	15.4	\$800	\$4,800	\$770	\$4,312	\$847	\$231	\$10,960	\$1,152	\$69,712	\$272	\$273
Martin Murphy	Executive Consultant II	\$225	720	\$162,000	43.2	\$800	\$12,000	\$2,160	\$12,096	\$2,376	\$648	\$29,280	\$3,240	\$194,520	\$270	\$273
Martin Skeer	Executive Consultant II	\$225	376	\$84,600	22.6	\$800	\$7,200	\$1,130	\$6,328	\$1,243	\$339	\$16,240	\$1,692	\$102,532	\$273	\$273
Robert Rosenkoetter	Executive Consultant II	\$225	608	\$136,800	36.5	\$800	\$10,400	\$1,825	\$10,220	\$2,008	\$548	\$25,001	\$2,736	\$164,537	\$271	\$273
Gail Stopar	Support Consultant & Analyst	\$125	184	\$23,000	3.7	\$800	\$1,600	\$185	\$1,036	\$204	\$56	\$3,081	\$460	\$26,541	\$144	\$145
Jaye Kain	Project Administrator & Analyst	\$55	1056	\$58,080	21.1	\$800	\$6,400	\$1,055	\$5,908	\$1,161	\$317	\$14,841	\$1,162	\$74,083	\$70	\$70
Hachin Sunid	Technology Support Consultant	\$125	64	\$8,000	1.3	\$800	\$800	\$65	\$364	\$72	\$20	\$1,321	\$160	\$9,481	\$148	\$148
<i>Total Hours and Fees</i>			5712	\$1,124,080	293.3		\$86,400	\$14,665	\$82,124	\$16,133	\$4,401	\$203,723	\$22,482	\$1,350,285		

Staff Member	Postion	Hourly Billing Rate	% Time on Site	Days Per Trip	AirFare Rate	Ground Transportation	Hotel Rate	Meals and Per Diem	Other
Patricia Schumaker	Engagement Manager and Executive Consultant I	\$245	60%	3	\$800	\$50	\$350	\$55	\$15
Dennis Schumaker	Project Manager and Executive Consultant I	\$245	60%	3	\$800	\$50	\$350	\$55	\$15
Julia Bodamer	Executive Consultant II	\$225	60%	3	\$800	\$50	\$350	\$55	\$15
Lee Burgess	Executive Consultant II	\$225	60%	3	\$800	\$50	\$350	\$55	\$15
D. Kerry Laycock	Executive Consultant II	\$225	60%	3	\$800	\$50	\$350	\$55	\$15
Martin Murphy	Executive Consultant II	\$225	60%	3	\$800	\$50	\$350	\$55	\$15
Martin Skeer	Executive Consultant II	\$225	60%	3	\$800	\$50	\$350	\$55	\$15
Robert Rosenkoetter	Executive Consultant II	\$225	60%	3	\$800	\$50	\$350	\$55	\$15
Gail Stopar	Support Consultant & Analyst	\$125	20%	3	\$800	\$50	\$350	\$55	\$15
Jaye Kain	Project Administrator & Analyst	\$55	20%	3	\$800	\$50	\$350	\$55	\$15
Hachin Sunid	Technology Support Consultant	\$125	20%	3	\$800	\$50	\$350	\$55	\$15

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General Assumptions:	
Supplies and Materials Rate	2%