NORTHSTAR CONSULTING GROUP

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May 30, 2012

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

Re: Long Island Power Authority Management Audit, Matter No. 12-00314

Dear Ms. Brilling:

NorthStar Consulting Group (NorthStar) is pleased to provide our proposal to the New York State Department of Public Service (Department) to perform a Comprehensive Management and Operations Audit of the Long Island Power Authority.

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

We have responded to your Request for Proposal (RFP) in all respects and our proposal is detailed as to the scope and approach to be employed during this engagement. As requested, NorthStar has provided our proposal in PDF to the Department of Public Service's Records Access Officer at recordsaccessofficer@dps.ny.gov. In addition, we have provided an electronic copy of the cover letter *only* to the Project Manager and the Secretary of the Commission at secretary@dps.ny.gov.

In the preparation of this proposal, we were guided by some key needs for this assignment. We briefly describe them to provide the underlying philosophy of our approach.

- We have taken particular care to assemble a senior team of professionals to conduct this audit. Our team has significant utility management audit experience.
- We have included minority and women's business enterprises (MBE/WBE) on our project team with expertise in utility operations and finance. The MBE/WBE participation level is 21 percent of the total project cost.
- The approach, methodology and work plan is comprehensive, and designed to address the areas of work outlined in the RFP.
- We understand the Department's objectives and needs for this audit. We plan to keep the Department informed of our findings as we proceed.

- We are aware of and can meet the critical milestone dates and deliverables.

As evidenced by my signature below, I certify that:

- All the information in the proposal is accurate;
- NorthStar is committed and able to perform all the work contained in the proposal;
- NorthStar is in compliance with all RFP requirements; and
- The proposal is valid for 180 days from this date.

I will act as the primary contact for this proposal if you have any questions. My contact information is as follows:

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The NorthStar project team is available to meet with the evaluation committee to elaborate on this proposal and to give you a better basis on which to judge our capabilities.

Yours truly,

Douglas A. Bennett

Managing Director

A PROPOSAL
TO PERFORM A COMPREHENSIVE MANAGEMENT AND OPERATIONS AUDIT OF LONG ISLAND POWER AUTHORITY

MATTER NO. 12-00314

SUBMITTED TO THE:

NEW YORK PUBLIC SERVICE COMMISSION
DEPARTMENT OF PUBLIC SERVICE

THREE EMPIRE STATE PLAZA
ALBANY, NY 12223-1350

MAY 30, 2012

NORTHSTAR CONSULTING GROUP

MANAGEMENT CONSULTANTS

NEW LONDON, NH • LAS VEGAS, NV • SANTA MARIA, CA

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I. INTRODUCTION

NorthStar Consulting Group (NorthStar) is pleased to respond to the April 24, 2012 Request for Proposal (RFP) from the New York Public Service Commission (PSC or Commission) to perform a Comprehensive Management and Operations Audit of the Long Island Power Authority (LIPA or the Authority).[1] Our proposal takes into account the specific requirements of the PSC, as expressed in the RFP, and our extensive knowledge of the electric utility industry. This section summarizes key aspects of our proposal to conduct the audit and provides the format for the remainder of our proposal.

A. PROPOSAL SUMMARY

The audit provides a unique opportunity for the PSC and the Department of Public Service (DPS) Staff to gain valuable insight about LIPA's operations and management from objective third-party experts. We believe that the audit should be conducted in a constructive manner, characterized by frank and open discussion of findings, conclusions and recommendations. NorthStar's final report will provide an independent and objective evaluation of current performance, specifically with respect to LIPA's construction program planning, system operations, fuel and purchased power, and debt service obligations. Our report will detail our findings, provide recommendations for performance improvements, and quantify the expected costs and benefits of such recommendations.

Scope and Objectives

As indicated in the RFP, the audit scope is comprehensive, focusing on LIPA's operations and management, including the Authority's duty to set rates at the lowest level consistent with standards and procedures provided in Public Authorities Law §*1020-f(u)*. As set forth in the establishing legislation,[2] the audit will address:

- The Authority's construction and capital program planning in relation to the needs of its customers for reliable service;
- The overall efficiency of the Authority's operations;
- The manner in which the Authority is meeting its debt service obligations;
- The Authority's Fuel and Purchased Power Cost Adjustment clause and recovery of costs associated with such clause;
- The Authority's annual budgeting procedures and process; and
- The Authority's compliance with debt covenants.

The audit is being undertaken as the management structure is in transition and will emphasize LIPA's efficiency and effectiveness in meeting its mission, particularly with respect to meeting its performance goals and the extent to which there are opportunities for improvement. This is

[1] Pursuant to the Long Island Power Authority Oversight and Accountability Act (the Act), February 1, 2012.
[2] The Act, Section 3, which amends the Public Authorities Law, Section 1020-f.

especially important in light of the transition to a new business model and new Operating Services Agreement (OSA).

The scope of work is described with greater specificity in **Chapter IV – Areas and Issues**. Within the context of each audit topic, NorthStar's preliminary work plan addresses the issues of:

- Purpose, mission, planning, goals and objectives, and strategies
- Functions, processes, practices, and systems
- Organizational design
- Staffing, responsibilities and accountabilities
- Cost control/cost oversight
- Efficiency and effectiveness
- Results and performance
- Opportunities for improvements, including "best practices" (based on past experience) that are appropriate to LIPA's operating environment.

NorthStar will address all of these areas and the associated evaluative criteria specified in the RFP, as well as some additional evaluative criteria NorthStar recommends based on our prior audit experience. We will examine operating conditions as they exist today, with significant focus on how LIPA is managing the change control process as it makes the transition to the new OSA with PSEG Long Island LLC. We will review what changes/improvements have been made to the existing Management Services Agreement (MSA) as it was changed to the OSA, and how that transition is being managed. The audit will identify and address gaps and recommend improvement opportunities that will benefit LIPA's ratepayers as this new management relationship develops. It will include the day-to-day and long-term oversight by LIPA employees over the National Grid/PSEG Long Island LLC as well as any other long-term contractors that assist LIPA in running the electric company.

Project Approach

Our approach is designed to help assure that LIPA is addressing strategic and operational concerns consistent with the needs of its New York State customers.

NorthStar will ensure that:

- All construction program planning issues which may affect LIPA operations are being addressed in an effective manner;

- LIPA's corporate mission(s), objectives, goals, planning and operations are consistent with customers' needs;

- Our final report provides detailed and practical recommendations that address strategic and operational issues facing LIPA; and

- Our final report defines and quantifies the expected recommendation implementation costs and benefits, as appropriate.

- Our final report is well-documented, easy to understand, and will withstand public scrutiny.

Project Team

NorthStar is highly qualified to perform the management audit of LIPA. Our Engagement Director and our Project Manager have a proven track record of delivering excellent results in other similar studies within the utility industry. They have managed numerous management reviews for various regulatory agencies throughout the country.

Our project team consists of experts in utility corporate governance, public utility finance, strategic and operational issues, debt planning and management, performance management, system planning, construction program/project management, and electric utility operations and reliability, who have substantial management audit experience. Three of the members of our team had major roles on our audit of Niagara Mohawk's (NMPC) electric operations for the PSC and four members had major roles on our more recent audit of Central Hudson Gas & Electric Company (Central Hudson) for the PSC.

Additionally, our team includes three CPAs from TCBA Watson-Rice, a Minority Business Enterprise (MBE) Certified Public Accounting (CPA) firm with extensive public utility accounting expertise, and Elizabeth Lemkul, owner of EAL Consulting, a certified Women-Owned Business Enterprise (WBE). TCBA Watson-Rice is certified in New York. EAL Consulting is certified in California and has applied for authority to do business in New York. The MBE/WBE participation level is 21 percent of the total project cost.

Budget and Schedule

NorthStar is proposing a work plan requiring an estimated 5,185 professional staff hours to complete this project, at least seventy-five percent of which would be spent on site.

We are proud of our reputation for completing our projects within budget. In addition, we make every effort to complete our projects ahead of the client's requested schedule. We believe that we have assembled the right team with the appropriate expertise and experience to perform the highest quality job in the proscribed time frame. Our anticipated start date, based on dates in the RFP, would be October 8, 2012. However, **NorthStar is prepared to begin the audit immediately following all contract approvals.** Based on the October start date, we are prepared to submit our draft report to the DPS on or before July 5, 2013 and our final report by August 2, 2013.

B. ORGANIZATION OF THE PROPOSAL

This chapter has presented a brief summary of our proposal. The remaining sections of our proposal describe our preliminary work plan, firm and individual consultant experience, and our schedule and budget estimates. These chapters are organized as follows:

- **Chapter II – Scope and Objectives**, provides our understanding of the scope and objectives for this audit.

- **Chapter III – Approach, Methods, and Project Management**, describes our approach and project management processes, and provides a discussion of project deliverables.

- **Chapter IV – Areas and Issues for Review**, provides our preliminary work plan which includes a list of areas to be reviewed including evaluative criteria and work tasks to be performed for each area.

- **Chapter V – Project Team and Responsibilities**, provides the structure of the consulting team assignments and background of personnel proposed for the assignment.

- **Chapter VI – Schedules and Budgets**, itemizes professional staff fees and out-of pocket expenses, and provides our total not-to exceed cost to perform the audit. It also provides the elapsed time estimate for each task in the work plan and a complete project schedule.

- **Chapter VII – Experience and Qualifications**, describes NorthStar's history and provides a list of relevant projects with client names and references.

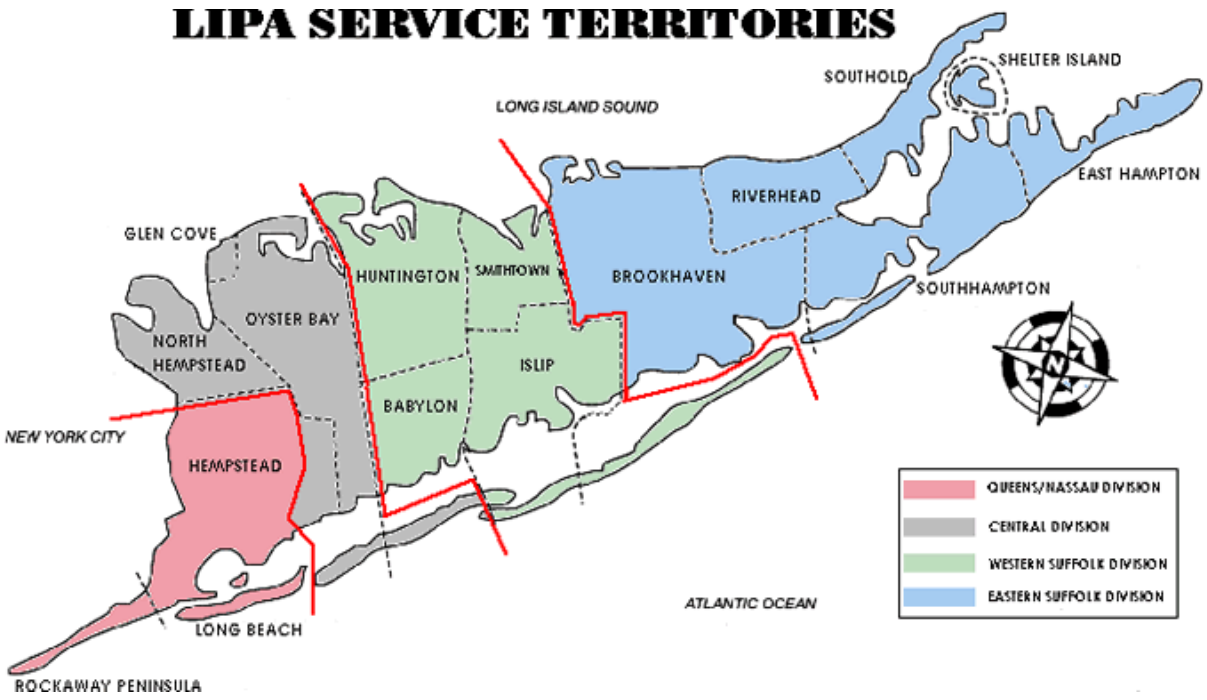
II. SCOPE AND OBJECTIVES

In this section, NorthStar provides background on LIPA and confirms the scope and objectives of the management audit as noted in the RFP and the LIPA Audit Guide.

A. LIPA OVERVIEW

LIPA is a non-profit municipal electric utility, providing service to over 1.1 million customers in Nassau and Suffolk counties and the Rockaway Peninsula in Queens, New York (see **Exhibit II-1**).[1] Approximately 54 percent of LIPA's revenue comes from residential sales, 44 percent from commercial customers, and the balance from sales to public authorities and municipalities.[2]

Exhibit II-1



LIPA assumed the assets and liabilities of the former Long Island Lighting Company (LILCO) in May 1998 as part of the resolution of the LILCO bankruptcy proceedings. At the same time, the LILCO generation assets were acquired by KeySpan Energy, which was later acquired by National Grid plc, a British corporation that owns electric and gas utility operations in several Northeastern states. LIPA retained LILCO's 18 percent ownership in

[1] LIPA website, http://www.lipower.org/images/about/service_map.gif, accessed May 21, 2012
[2] Financial Statement, 2011, p. 24.

the Nine Mile Point Nuclear Plant. LIPA purchases the bulk of the capacity and energy required to serve its customers under a Power Supply Agreement (PSA) and other related agreements with National Grid. Additionally, LIPA contracted with KeySpan/National Grid to acquire the bulk of the services required to operate and maintain the system and provide customer service under a Management Services Agreement (MSA). The National Grid MSA expires in December 2013 and will be replaced by an Operating Service Agreement (OSA) with PSEG Long Island, LLC a subsidiary of Public Service Electric and Gas (PSEG) which provides utility services to parts of New Jersey. LIPA and PSEG have announced plans to establish a "ServCo" operating model to facilitate coordination under the new OSA. LIPA has indicated it is actively managing the transition from National Grid to PSEG, and the effectiveness of this transition is a key factor underlying the scope of this management audit.

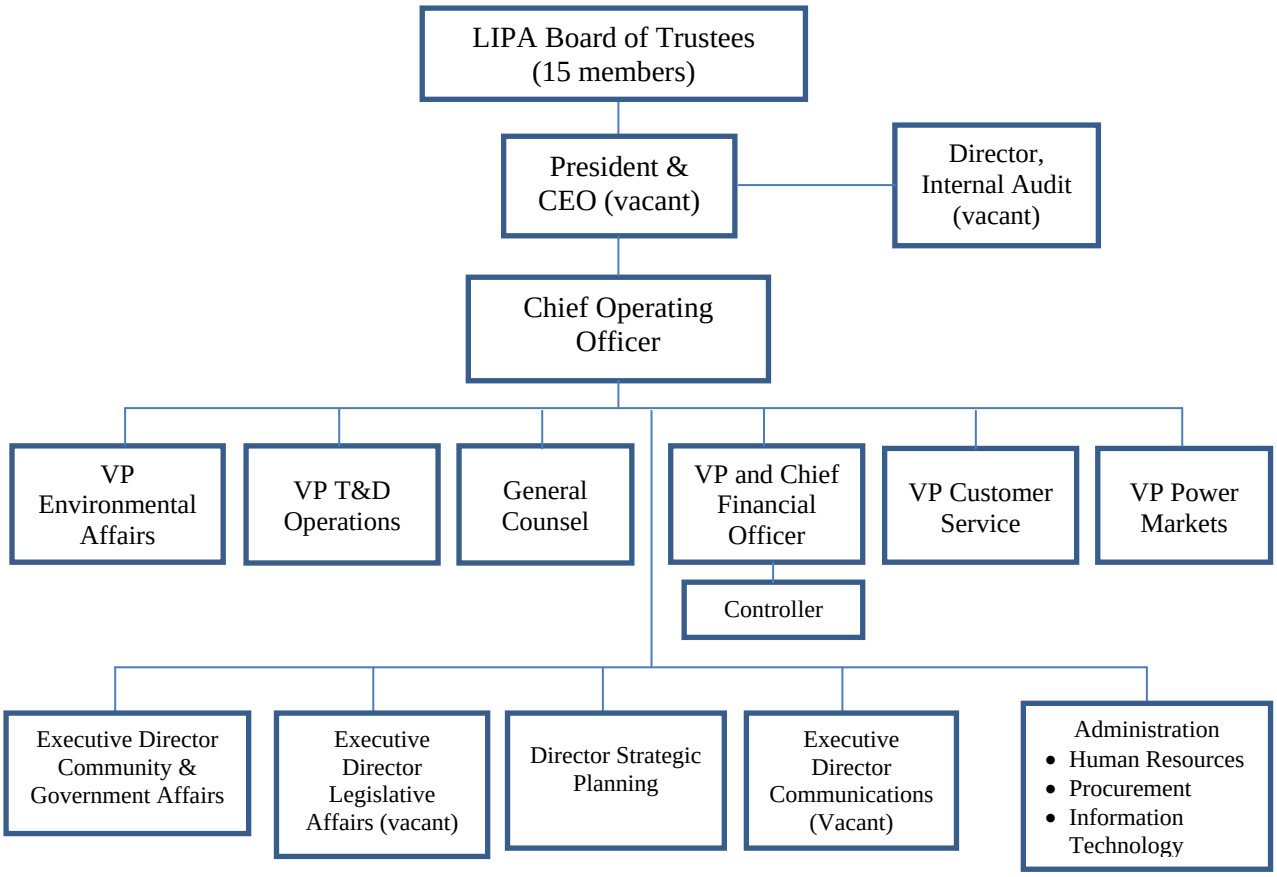
LIPA is governed by a 15 member Board of Trustees appointed by the Governor, Senate Majority Leader, and Speaker of the Assembly.[3] Under current law, the LIPA Board of Trustees is empowered to set rates without the approval of the New York State Public Service Commission (PSC). However, the Authority agreed as part of the approvals of the 1998 LIPA/LILCO merger to not raise rates by more than 2.5 percent over a 12 month period, without full review and approval by the PSC. Several bills have been introduced, but not enacted, in the past several legislative sessions that would seek to modify this limitation in various ways. The Act that initiated this audit was related to these prior initiatives.

As part of the Authority's 2012 budget proposal, the Authority proposed an increase in its rates of approximately 1.5 percent, principally to cover increases in operating expenses and property taxes. The Board of Trustees, in accordance with their rate making authority and following public hearings, approved the rate increase on March 1, 2012, effective March 5, 2012.

LIPA employs approximately 100 individuals, in executive and management roles with responsibility for oversight and coordination with National Grid, whose employees have day-to-day responsibility over the operation of the system. **Exhibit II-2** shows the current organizational structure of LIPA.[4]

[3] Currently three seats on the Board of Trustees are vacant.
[4] From materials provided by NYPSC DPS staff to all bidders.

Exhibit II-2
LIPA Organization



The current MSA with National Grid and the future OSA with PSEG Long Island, LLC provide a very broad range of utility operating services on behalf of LIPA, including:

- Operation and maintenance of the T&D system,
- T&D construction work,
- Budgeting (both capital and O&M),
- System planning,
- Energy efficiency program development and implementation,
- Representation of LIPA with reliability and operating groups
- All aspects of customer services, including meter reading, billing and collections,
- Revenue requirements and rate design,
- Policies and emergency preparedness,
- Procurement and contracting,
- Fleet maintenance,
- Information systems and services, and
- Many financial and reporting activities.[5]

[5] Under the OSA, Financial and Accounting services are specifically identified in Article 4, Section 4.2(A)(3). In the MSA, selected financial and accounting services are specified Article 4, Section 4.2 (Operation and

Under the MSA, a T&D System Supervisor is designated to have responsibility for the day-to-day operation of the electric system. Additional "Senior Executives" and "Manager Representatives" are designated to "act for and on behalf of the Manager." LIPA's organization charts do not identify any of the relationships between LIPA's personnel and any of the MSA's designated personnel. Given the extensive scope of services provided to LIPA by the MSA, it can be expected that members of the Manager's staff with LIPA responsibilities will need to be interviewed and involved in responses to data requests.

As a non-profit entity, LIPA follows guidelines for financial reporting for enterprise funds, following the accrual basis for accounting. Under these guidelines, all revenues and expenses are recognized in the period in which they are earned and incurred. **Exhibit II-3** summarizes key financial metrics for LIPA.[6] Certain funds received by the Authority are recorded as grants in the year they are received, regardless of when they may be used. In particular, LIPA has received reimbursements from the Federal Energy Management Agency (FEMA) to pay for storm restoration work in 2010 and 2011, and a $6 million grant from the New York State Energy Research Development Authority (NYSERDA) for a greenhouse gas emissions program, all of which have been recorded as grants in the year received.

Exhibit II-3
LIPA Income Statement Summary
(Dollars in thousands)

	2011	2010	2009
Electric Revenues	**$ 3,684,596**	**$ 3,853,052**	**$ 3,312,160**
Operating Expenses			
Fuel & Purchased Power	$ 1,743,533	$ 1,879,839	$ 1,566,005
Operations and Maintenance	$ 1,149,248	$ 1,123,434	$ 864,576
General and Administrative	$ 42,537	$ 41,852	$ 40,153
Depreciation/Amortization	$ 267,845	$ 251,117	$ 254,944
Payments in lieu of taxes	$ 301,284	$ 281,609	$ 249,652
Total Operating Expenses	**$ 3,504,447**	**$ 3,577,851**	**$ 2,975,330**
Operating Income	**$ 180,149**	**$ 275,201**	**$ 336,830**
Other income, net	$ 35,389	$ 46,445	$ 33,519
Grant income	$ 134,656	$ 33,294	
Interest charges	$ (331,393)	$ (330,491)	$ (331,899)
Change in net assets	**$ 18,801**	**$ 24,449**	**$ 38,450**

Fuel and Purchased Power costs are recovered from customers through the Fuel and Purchased Power Cost Adjustment (FPPCA) provision of the Authority's tariff. Changes in these costs are the result of changes in the price of fuel and purchased power in the national

Maintenance), and additional financial and accounting services are indicated by Section 4.16 (Fiscal Affairs, Accounting, and Record Keeping).

[6] NorthStar consulting from Financial Statements, 2011, p. 4 and discussion and footnotes following.

market, and changes in consumption, which is turn is the result of weather, demographic changes, and economic effects.

Operations and Maintenance (O&M) costs encompass fees paid to National Grid under the MSA and PSA, as well as expenses directly to the operation of the system and costs incurred directly by the Authority, such as salaries and rent. In 2011, LIPA incurred higher O&M expenses as a result of storm restoration costs, and increased energy efficiency and renewable program costs.

In total the Authority paid National Grid approximately $2 Billion per year in 2010 and 2011 under all of its agreements with Grid. These payments include all fees under the agreement, reimbursement for taxes and Payments in Lieu of Taxes (PILOTs), fuel and purchase power costs, capital projects, conservation services, research and development projects, and other expenditures incurred by National Grid on behalf of LIPA and eligible for reimbursement.[7]

The MSA provides for compensation to the Manager (National Grid) in two parts -- Minimum Compensation and Variable Compensation. The Minimum Compensation was set at $224 Million in the "Amended and Restated MSA" effective January 2006, concurrent with the acquisition of KeySpan by National Grid. After three years, the Minimum Compensation is adjusted based on changes in the consumer Price Index. The Variable portion of the compensation was set in the Amended and Restated MSA based on actual kWh sales relative to a baseline sales number, and pre-established rate per kWh, which declines approximately 4 percent per year for the first three years, and then tracks the CPI.[8]

Exhibit II-4 summarizes the compensation paid to National Grid under the Amended and Restated MSA.[9]

Exhibit II-4
Compensation Under the MSA (in thousands)

Compensation Components	2006	2007	2008	2009
Minimum Compensation (Fixed)	$224,000	$224,000	$224,000	$239,563
Variable Compensation	42,740	43,925	37,826	25,353
Pass-Through Expenditures				
Capital Costs	$298,256	$279,525	$273,407	$234,189
Storm Costs	36,350	34,490	36,586	39,225
Other Allowable Costs	50,838	49,912	48,886	60,168
Total Pass-Through Expenditures	$385,444	$363,928	$358,879	$333,583
Performance Metrics/Penalities	(1,000)	(1,000)	(1,000)	0
TOTAL COMPENSATION	$651,184	$630,853	$619,705	$598,497

The fee and cost structure of the OSA is not directly comparable to the existing MSA, due to the establishment of the ServCo joint operating model. The fixed portion of the

[7] Financial Statements, 2011
[8] Amended and Restated Management Service Agreement, Dated January 26, 2006, p. 35.
[9] Request for Proposals to Provide Utility Services Management to the Long Island Power Authority, June 3, 2010, p. 8-13.

Management Services Compensation is reportedly $36.3 million annually (compared to the $224 million Minimum Compensation paid to National Grid). The OSA includes an Incentive Compensation component to be earned by PSEG Long Island, LLC based on performance relative to specific performance metrics, designed to incentivize PSEG Long Island, LLC to maintain strong performance levels and to improve performance in areas where LIPA is not achieving its goals. The incentive compensation pool is reportedly as much as $5.4 million annually.[10]

Exhibit II-5 summarizes LIPA's balance sheet as of December 31, for each of the past three years.[11]

Exhibit II-5
LIPA Balance Sheet Summary
(Dollars in Thousands)

	2011	2010	2009
Assets			
Current Assets	$ 1,430,880	$ 1,406,983	$ 1,178,130
Regulatory Assets	$ 713,663	$ 756,125	$ 789,279
Utility plant (net)	$ 6,624,802	$ 6,431,896	$ 6,459,718
Acquisition adjustment (net)	$ 2,375,991	$ 2,487,366	$ 2,629,216
Other non-current assets	$ 660,024	$ 521,768	$ 521,624
Total Assets	**$ 11,805,360**	**$ 11,604,138**	**$ 11,577,967**
Liabilities			
Regulatory Liabilities	$ 137,693	$ 277,308	$ 164,520
Other current liabilities	$ 1,367,921	$ 1,213,524	$ 1,168,720
Long term debt	$ 6,379,609	$ 6,363,244	$ 6,394,949
Capital lease obligations	$ 2,883,321	$ 2,834,416	$ 2,970,126
Other noncurrent liabilities	$ 640,846	$ 538,477	$ 559,932
Total Liabilities	**$ 11,409,390**	**$ 11,226,969**	**$ 11,258,247**
Net Assets (total)	**$ 395,970**	**$ 377,169**	**$ 319,720**
Total Liabilities and Net Assets	**$ 11,805,360**	**$ 11,604,138**	**$ 11,577,967**

LIPA's utility plant consists primarily of its transmission and distribution (T&D) system assets, plus its 18 percent share of Nine Mile Point 2 Nuclear Plant. Its annual capital investments are made to upgrade these assets, to manage reliability, and enhance capacity needed to meet anticipated customer demands. During 2011, LIPA invested approximately $233 million in improvements to the T&D system for interconnection equipment, replacement or upgrade of transformers and circuit breakers, new substations, enhanced transmission lines, and upgraded command and control equipment. An addition $26 million

[10] Proposed OSA attached to the RFP and memorandum from Michael D. Hervey to The Trustees, requesting "Authority to select Vendor in response to USM RFP and to Execute Related Agreements," dated December 15, 2011, retrieved from http://www.lipower.org/pdfs/company/papers/board/121511-usm.pdf
[11] NorthStar Consulting from Financial Statements, 2011, p. 3, and discussion and footnotes following.

was invested at Nine Mile Point 2, as LIPA's share of a power uprate and other capital projects at that plant. LIPA also spent $7 million for IT systems improvements in 2011.

The acquisition adjustment shown on the balance sheet represents the difference between the purchase price paid by LIPA for LILCO and the net assets acquired from LILCO. This intangible asset is recovered through rates over 35 years (through 2033) on a straight-line basis.

The capital lease obligations shown on the balance sheet represent the net present value of various contracts for capacity and/or energy of certain generation and transmission facilities, including purchased power agreements (PPAs) with Independent Power Producers and the New York Power Authority (NYPA) for generating capacity. To comply with accounting standards, these and other similar obligations are reported as capital leases on the Authority's balance sheet.

LIPA holds $6.4 billion of long term debt, principally in the form of revenue bonds. The initial acquisition of the LILCO assets was financed by $6.7 billion of such bonds. As of the end of 2011, only $143 million of these Series 1998 A and B bonds remained on the Authority's books. In 2011 LIPA issued $250 million in new bonds to fund capital projects and refinance maturating debt.

B. Scope and Objectives

NorthStar's management audit will be comprehensive and thorough, and in accordance with the scope of work, will focus on LIPA's overall operations and management, including LIPA's operations and management in the context of its duty to set rates at the lowest level consistent with PAL Section1020-f(u). Generally, the objectives of management audits are established by the principle that process improvements lead to performance improvements. As identified in the LIPA Audit Guide, the objectives for this audit include:

- Identify specific opportunities for improving planning, business processes and management practices, organizational design, staffing, operations and performance management.

- Identify specific opportunities to improve performance, including operational efficiency and productivity, operational reliability, organizational effectiveness, cost savings, work quality, customer service, safety and other measurable elements.

- Develop recommendations, as appropriate, for implementing changes or undertaking the studies necessary to achieve performance improvements.

- Develop cost-benefit analyses or other applicable guidance for the implementation of improvement opportunities and recommendations.

The results of the audit will be documented in a written report that meets the scope and objectives of the RFP, including factual findings, conclusions, recommendations, and cost-

benefit and other guidance for implementation. In addition, an overall assessment of the Authority will be developed and discussed in the Executive Summary of the report.

The Act initiating this audit established seven major topic areas to be addressed in the audit. Attachment E to the RFP identified specific elements within each of the seven areas that were to be addressed, as follow:

E1. The Authority's Construction and Capital Program Planning in Relation to the Needs of its Customers for Reliable Service.

- E1.1 Corporate Governance, Including Mission, Objectives, Goals, and Planning, including: Executive Management; Current and Future Organizational Structure; Board of Trustees; Communications and Control; Strategic Planning; Outside Services; and Enterprise Risk Management
- E1.2 System Planning
- E1.3 Program and Project Planning and Management
- E1.4 Performance and Results Management
- E1.5 Efficiency of the Authority's Operations, including: Work Management; Customer Services; Transmission and Distribution (Reliability, Preventive Maintenance, and Repair/Replace and Reactive/Corrective Maintenance)

E2. The Manner in Which the Authority is Meeting its Debt Service Obligations

- E2.1 Application of Industry Standards to Manage Debt
- E2.2 Receipt of Necessary Approvals for Debt Management
- E2.3 Audit of Debt Management Practices
- E2.4 Effectiveness of Risk Management Techniques
- E2.5 Effectiveness of the Ratemaking Model Relative to Meeting the Authority's Debt Obligations
- E2.6 Background Events that led to the Establishment of the Shoreham Acquisition Adjustment and Subsequent Charges to the Adjustment
- E2.7 Cash Reserve Policy

E3. The Authority's Fuel and Purchased Power Cost Adjustment Clause and Recovery of Costs Associated with Such Clause

- E3.1 LIPA's Active and Effective Involvement in New York Independent System Operator (NYISO) Issues and Operation as well as Other Regional Entities
- E3.2 LIPA's Fuel and Purchased Power Contract Management, including PSA, Fuel Management and Bidding Services Agreement (FMBSA), and EMA
- E3.3 LIPA's Supply Procurement
- E3.4 LIPA's Fuel and Purchase Power Cost Adjustment Clause Tariff Leaf 166
- E3.5 LIPA's Fuel and Purchased Power Cost Recovery
- E3.6 Load Forecasting

E4. The Authority's Annual Budgeting Procedures and Process

- E4.1 Capital and O&M Budgeting
- E4.2 Program/Project Planning and Management

E5. The Authority's Compliance with Debt Covenants

E5.1 Compliance with all Debt Covenants

E5.2 Management of the Debt Covenant Requirements

The Management Audit of LIPA differs from recent Management Audits conducted by the NYPSC in several important respects:

- The audit is more compressive in scope than recent audits. In addition to the eight elements of the utility program planning feedback loop that have comprised NYPSC's recent management audits, this audit includes extensive analysis of the Authority's debt management and compliance practices, examination of the Power Purchase Cost Adjustment Clause and related cost recovery, review of customer service and transmission and distribution, and specific elements related to the Authority's overall efficiency, contract oversight, and coordination NYISO and other regional entities.

- The audit is being conducted in the midst of a critical transition period for the Authority. The pending end of the MSA with National Grid, the active transition to the OSA with PSEG Long Island, LLC, and establishment of a new business model means that the Authority and its processes will be changing even while the audit is taking place. As a result, the audit must address three separate organization/operational structures - current organization and operations, the management of the transition - by definition a constantly changing environment, and planned future organization and operations. It will be critical to examine how LIPA has incorporated lessons learned under the MSA into the OSA and ServCo model.

- LIPA is a public power authority and thus operates under a different governance/regulatory structure. LIPA is governed by a Board of Trustees appointed by the Governor and leaders of both legislative bodies. Actions and decisions of the Authority are known to and discussed by the public, and the Board receives input from citizens on a regular basis. The audit scope and timing has been set by the state legislature and will be managed by the DPS. The Audit Report will be provided to the Governor and legislative bodies, and to the public, and it can be expected to receive greater attention in the public media than the reports from other recent audits.

It is critical that the audit balance the impact of key differences with the core purpose of the audit – "to evaluate LIPA's overall operations and management… in the context of its duty to set rates at the lowest level consistent with the standards and procedures" set forth in its enabling legislation and related Acts and documents.[12]

In **Chapter IV – Audit Areas and Issues**, we provide our insights and initial scope of work for the seven major topics and the specific elements within each one of those topics. In addition to analysis specific to each topic and sub-element, we will address the following generic questions and issues as requested by the RFP and the LIPA Audit Manual:

- The purpose, mission, planning, goals and objectives, and strategies.

[12] RFP, Section 4.2.

- Functions, processes (including inputs and outputs), practices and systems.
- Organizational design.
- Staffing, responsibilities, and accountabilities.
- Cost control/cost oversight.
- Efficiency and effectiveness.
- Results and performance including how the results are used.
- Opportunities for improvements, including "best practices" (based on past experience) that are appropriate to LIPA's operating environment.

NorthStar and its subcontractors are experienced in addressing the range of challenges to be anticipated in this unique audit. We will remain vigilant to changing operating environment – identifying issues and gaps in the current operations under the MSA, how those have been addressed in the OSA, and how LIPA, PSEG and National Grid are addressing the transition – and to the more political and public nature of the study. Additionally, we have experience with the organization and operations of National Grid, and understand the expectations and areas of concern of the DPS Staff, as a result of our work on prior Commission audits.

III. APPROACH, METHODS, AND PROJECT MANAGEMENT

This section provides a discussion of NorthStar's general approach to management audits. Our approach is based on what we believe is the most efficient and effective means of completing the LIPA management and operations audit.

A. INTRODUCTION

NorthStar prides itself on performing independent and objective management audits for regulators. In this context, we plan and conduct our assignments to maximize client participation (the DPS Staff), and we will work closely with the DPS project manager throughout the engagement. We anticipate the Staff will participate in the orientation presentation and the interviews (either in-person of via teleconference), review and comment on the work plan, participate in routine telephone status updates, address and comment on any issues as they arise, participate in discussions regarding preliminary recommendations and cost-benefit analyses, and review and comment on the draft report.

To facilitate the interaction and dialogue among the audit team, the DPS Staff and LIPA, our project manager will work closely with both the DPS and the LIPA project managers to coordinate audit activities, and to schedule and conduct regular briefings and three-party meetings, as appropriate.

The RFP identified a time schedule for the consultant to issue a draft report in July, 2013. Our schedule presented in **Chapter VI – Schedules and Budgets** is designed to meet this deadline, assuming a start date of October 8, 2012. Additionally, NorthStar can begin the audit at an earlier date, immediately upon contract approval. Our project team has the availability and commitment to meet this target and we have a history of bringing projects in on-time and on-budget. Our experience indicates that an audit of this magnitude is best performed when a rigorous time schedule is established and adhered to. It enhances the sense of urgency that an undertaking as complex and important as this audit be performed in an expeditious and timely manner, so that recommendations and cost-benefit analyses can be thoroughly explored. Attaining our schedule will require the full cooperation of both LIPA and the DPS Staff.

To complete the work plan within that timeframe, we will develop an initial data request and interview request upon selection by the Commission that should be provided to LIPA in order that it can make the responses available to us prior to the audit "kick off" presentation.

NorthStar will use a time-proven approach to perform this audit that will ensure the delivery of a high quality product in a cost-effective and timely manner. Our approach is designed to: promote a focus on the specific needs of the DPS Staff; rely on quantitative data to support findings; have open communication among the parties; adhere to generally accepted auditing standards; and, thoroughly document our report findings in our work papers.

Our approach has the following characteristics:

- It will be performed by experienced consultants who have the appropriate combination of utility management audit, electric industry, and functional expertise and who have worked together on numerous previous assignments of a similar magnitude and complexity.

- It will maximize the value of input from the DPS Staff and LIPA while minimizing the disruption of regular operations through our practice of scheduling interviews and other activities well in advance.

- It will eliminate surprises by keeping the DPS Staff and LIPA informed of our activities, findings, and conclusions throughout the audit.

- It will base evaluations on demonstrated performance, and, when appropriate, qualitative and quantitative metrics.

Our approach has four phases:

- Phase I. Orientation and Planning
- Phase II. Technical Review
- Phase III: Cost-Benefit Analyses
- Phase IV. Report Development

Phase I. Orientation and Planning

The objectives in the first phase of the audit are as to confirm our understanding of the audit objectives and scope and the DPS' expectations from the audit; finalize contractual, project management and other administrative matters; perform preliminary data collection; and develop and obtain approval of our detailed work plan which will guide our activities during the remainder of the audit. We will also prepare follow-up data requests and request additional interviews as may be required. Work activities included in this phase are listed below.

- Complete logistical and contractual arrangements. The NorthStar project manager will meet with DPS Staff and the LIPA project manager to complete logistical and contractual arrangements. Specifics regarding project logistics, key contacts, interfaces, schedules and communications will be established. We will also reach agreement on protocols for the audit, including, at a minimum, the following:

  - Procedures for requesting and tracking interviews and documents.
  - Working paper and documentation requirements.
  - Procedures for adhering to auditing standards.
  - Policies and procedures for treating confidential information.
  - Quality control and reporting procedures.

- Meet with Staff to discuss any concerns regarding LIPA and any additional issues or areas to be considered, and further explore the DPS Staff's objectives for the audit.

- Review responses to our initial document requests developed after selection by the commission and submitted to LIPA well in advance of the project kickoff. To facilitate the start of the review, we would expect LIPA to have a complete set of all requested documents available and initial interviews scheduled prior to the kick-off meeting.

- Attend a LIPA orientation presentation. To ensure that we have a detailed understanding of LIPA's organization and operations we would ask that the appropriate LIPA/National Grid personnel make a presentation to our consulting team addressing the areas within the scope of the audit. The presentation should provide an overview of the organization, describe the relationships between the relevant MSA/OSA entities, introduce LIPA management, and discuss each of the key areas covered by the audit. We expect the orientation presentation to summarize key practices, systems, functions and results.

- Conduct initial interviews. Following the orientation presentation, we will initiate our interviews of key personnel. A list of initial interviews we would expect to conduct during the orientation will be developed with DPS staff upon selection by the Commission and submitted to LIPA well in advance of the project kickoff. While this represents an initial request, it is likely that NorthStar will interview some individuals more than once regarding different topics and in order to obtain follow-up information and confirm our understanding of information provided during the audit. Interview personnel will be identified upon receipt of LIPA/National Grid organization charts.

- Schedule and conduct additional interviews and request and review additional documents.

- Analyze the information received obtained from our interviews and our document reviews. Issue additional data and interview requests required for Phase II.

- Prioritize audit requirements. We will assess audit risk exposures to prioritize our work and to determine areas in which sampling techniques will be employed. The risk assessment will be used to focus our activities on those activities most likely to result in reduced costs or improved performance.

- Prepare our draft work plan and obtain DPS Staff's approval of it. The work plan will include the results of the risk assessment; evaluative criteria; tasks, activities and other audit activities; consultant assignments and hours; and the schedule for each audit area. It will also identify any preliminary issues identified during Orientation, interviews to be conducted and documents to be reviewed. The work plan will be developed in conformance with the contract agreement and submitted to the DPS project manager for approval prior to commencement of Phase II.

Phase II. Technical Review

In this phase, the audit team will perform its principal investigation, data collection and other technical review activities for each of the audit elements. Evaluative criteria and work activities which we would expect to perform in the technical review are provided in **Chapter IV – Areas and Issues for Review** for each element. These will be updated in the final

work plan. Wherever possible, the audit team will seek to employ quantitative measures for evaluation. LIPA's organization, operations management and financial management will be evaluated against industry "best practices." **Exhibit III-1** provides an example of a preferred practices checklist against which we would evaluate LIPA management practices.

Exhibit III-1
Preferred Practices Checklist: Corporate Planning

No.	NorthStar Preferred Practices	Yes	No
1	Directed by the Executive Team and the CEO.		
2	Has significant senior management involvement.		
3	Reviewed and approved by the Board of Directors.		
4	Aligned with corporate vision/mission.		
5	Processes and responsibilities in the process are well-understood by key management personnel.		
6	Process assures appropriate bottom-up input.		
7	Addresses an appropriate and wide range of issues.		
8	Is responsive to dynamic changes in the operating environment.		
9	Includes detailed functional and departmental performance goals.		
10	Links goal attainment to incentive compensation.		

Our audit team will integrate and summarize information gained during this phase, confirm and validate information, and develop preliminary findings, conclusions and recommendations to be included in our task reports and our draft report. In general, our work activities will include the following:

- Review and analysis of documents and other data to be requested from LIPA.
- Interviews with LIPA, National Grid and other appropriate personnel operating on behalf of LIPA.
- Testing compliance with company, industry and other standards.

In formulating conclusions, the audit team will focus on substantive issues. LIPA management practices will be evaluated against existing rules and regulations as well as sound, generally accepted business practices. We will apply a standard of reasonableness which regulators and courts have accepted in a wide range of evaluations of management performance, that is, one that does not require perfection, is not based on outcomes, and does not rely on hindsight. The conclusions will reflect areas where LIPA is appropriately managing as well as areas where improvement may be required. During this phase we will also begin collecting data to be used in quantifying the costs, benefits and potential savings or efficiency gains from our recommendations. Recommendations will be considered in terms of the relative implementation benefits.

Sampling Techniques

During the course of our work, we will select transactions, data, documents and other information for review. We expect that in some cases we will utilize sampling techniques to examine this data. When we use sampling techniques, our goal will be to select a sample of the population and make inferences from that sample. The two general approaches to audit sampling are statistical and non-statistical. Each of these approaches has the same basic requirements:

- Planning: When planning the audit sample, the relationship of the sample to the audit objective should be considered.

- Selection: Items should be selected so that the sample can be expected to be representative of the population and all items in the population have an opportunity to be selected.

- Evaluation: The results of the audit sample should be projected to the population from which the sample was selected.

No single audit sampling technique can be predicted, or is likely to be used, in all sampling situations for the audit. The specific sampling techniques we use will be based on the audit objective for each sample selected and the nature and availability of data for a population. During the audit, NorthStar will develop specific sample methodologies for our testing as appropriate.

Our selection of a representative sample of construction programs and projects that are completed and/or in progress will be based on the aforementioned approach to sampling. First, we will develop a profile of recently completed, in progress, and planned construction projects. From this profile, we will select projects that, at a minimum, have the following characteristics:

- Provide significant overall dollar coverage.
- Reflect different types of projects.
- Reflect different-sized projects by dollar amount.
- Are performed in varying geographical locations by different organization groups.
- Provide a valid sample.

The sample of projects will be used to determine whether oversight and project management controls and processes are adequate and appropriate procedures are being followed.

Phase III. Cost-Benefit Analysis

During this phase we will work with LIPA and the staff in the development of costs and savings projections. At about 75 percent completion of the audit, the audit team will develop its preliminary findings, conclusions and recommendations. Preliminary recommendations will be provided to the DPS staff and LIPA for discussion of general merit and applicability,

the cost-benefit analysis approach, the various costs involved in implementation (one-time and recurring), anticipated benefits, potential impediments to implementation, and quantification data requirements. The recommendations may take a variety of forms. For example, they may identify specific accounting adjustments or changes in organizational structure, policies, processes, information systems and operating practices. Preliminary recommendations may be refined at this point, while other recommendations may require additional studies in some areas to identify more specific opportunities and still some may identify policy considerations for LIPA and/or the DPS. Recommendations will address major performance improvement opportunities. Upon completion of the preliminary recommendations, NorthStar will prepare cost/customer-benefit analyses for each of the proposed recommendations. This provides the requisite process structure and allows us to ensure recommendation are fully defined, realistic and can be implemented. Based on the results of the cost-benefit analyses, recommendations may be modified as appropriate to maximize benefits while providing adequate consideration of initial and ongoing implementation costs.

For those recommendations where the expected costs or benefits are difficult to quantify we will provide qualitative measures and expected benefits. In other areas the costs of implementation may be *de minimus* and therefore do not warrant a detailed cost-benefit analysis. Our cost-benefit analyses will include estimated implementation durations (months or years) and quantified dollar benefit and cost streams. The specific format for the cost-benefit analysis is detailed in **Chapter IV – Areas and Issues**.

Phase IV. Report Development

Upon completion of the cost-benefit analyses, NorthStar will prepare draft and final reports. A preliminary draft report will be prepared and submitted to the DPS project manager for review and comment. The report will include an executive summary, a description of the audit process, and completed chapters that address each of the audit topic areas. Each of these focused chapters will include an overview, evaluative criteria, findings, conclusions and recommendations, implementation quantification (cost-benefit analysis) and timeline, and a detailed narrative describing the applicable policies and management processes in sufficient detail to allow the reader to understand the reasoning behind each finding and conclusion. Assuming work begins on or before October 8, 2012, we will provide the draft report to the DPS Staff by July 5, 2013 unless other arrangements are made with the DPS project manager. Based on feedback from the DPS Staff, NorthStar will then prepare a revised draft report which will be submitted to the DPS project manager.

Upon authorization of the DPS project manager, NorthStar will submit the revised draft report to LIPA for review of factual accuracy. We will work with the DPS Staff and LIPA to ensure the factual accuracy of the information contained in our report, and audit conclusions will be supported and tied to specific facts and analyses. After consultation with Staff, NorthStar will make modifications to address specific comments as necessary. The audit team may verify the facts in our revised draft report in three-party meetings with LIPA and the DPS Staff to ensure accuracy and confirm that we have appropriately addressed major issues.

Upon completion of the fact verification, we will prepare a complete annotated copy of the final report containing all of the information supporting our recommendations. The final report will be written using terminology that will be meaningful to LIPA management, DPS Staff and others generally familiar with the subject area. The report will be objective, comprehensive and conclusive. At a minimum, the report will address all of the audit elements identified in the RFP and present our investigation, and recommendations relating to the subject matter.

B. AUDIT MANAGEMENT

Cost, Schedule and Quality Control

Effective project management requires the development of a logical and efficient work plan that is clearly understood by the project team and the DPS Staff. The NorthStar project manager will closely manage the cost and schedule of this audit through careful planning and the use of proven project controls. The project manager will also coordinate activities among the project team to ensure interfaces between the various areas have been addressed, potential issues are surfaced and discussed, and that the final audit work product addresses the audit areas and evaluative criteria specified in the detailed work plan and meets the needs of the DPS Staff and the Commission. Project management activities will include:

- Establishing a workable set of administrative procedures covering:
  - Requesting, storing, and returning documentation and other information.
  - Scheduling interviews and documenting results.
  - Reporting project hours and expenses.
  - Reporting progress and dealing with exceptions.
- Defining tasks to investigate thoroughly all audit areas.
- Specifying task dependencies so that interdependent tasks will be completed in the appropriate sequence to ensure that the flow of work builds to a cumulative body of knowledge rather than clusters of data with possible contrasting conclusions. Since several of the work activities in different task areas are related, work will be planned and scheduled to avoid duplication of effort.
- Defining protocols for interfacing with external parties, if any.
- Estimating staff hours and preparing schedules to complete each task.
- Facilitating discussions among the project team members and with the DPS Staff to ensure potential findings and conclusions are thoroughly explored.
- Monitoring work progress. To ensure that the audit is managed at all times, the project manager will carefully:

- Review the work in progress including performing such quality control activities as attending interviews, reviewing analytical processes, testing conclusions, and checking the clarity and completeness of all written materials. This review will prove useful in helping the audit team place appropriate emphasis on issues important to the DPS.

- Compare actual versus estimated hours and expenses by staff for each task defined in the work plan. Monthly progress reports will describe the audit's status relative to the budget and schedule in each audit area. Any deviations from plan will be immediately identified and remediation activities will be defined. Careful monitoring of the costs and schedule is critical to ensuring delivery of projects on-time and within budget.

- Make project plan adjustments based on the project progress to date, changes in project scope, or changes in priorities.

- Establish and enforce documentation standards for audit work papers to ensure confidentiality, accuracy, completeness, and consistency.

- Reporting on project status. The project manager will provide monthly written reports, coordinate routine telephone status updates, and provide other informal updates as issues arise.

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

- The project manager and lead consultants are experienced utility management audit professionals.

- The NorthStar audit team will perform all work in a professional manner in accordance with *Government Auditing Standards July 2007 revision GAO-07 731G* (also known as the Yellow Book). NorthStar will also adhere to the American Institute of Certified Public Accountants' (AICPA) Code of Professional Conduct; the National Association of Regulatory Commissioners' *Consultant Standards and Ethics for the Performance of Management Analysis*; and "The Guide - A Guide for Consultants Submitting Proposals Management and Operations Audits" issued by the State of New York Department of Public Service on April 11, 2012. Adherence to these standards will provide the project controls and reporting standards necessary to perform the audit effectively and provide sufficient justification for all recommendations.

- The NorthStar project team has a demonstrated track record for producing quality products within schedule and budget limits. Members of the proposed audit team have successfully performed audits or similar projects in many states.

Communication

We believe that the audit should be a positive experience for LIPA and the DPS Staff. In conducting the audit we will ensure that a spirit of cooperation is maintained among the three key parties involved – the DPS Staff, LIPA, and our audit team. We will maintain a professional relationship with LIPA personnel and DPS Staff. Our consulting team members are experienced in conducting studies on client premises and know how to minimize disruption to the client's normal operations. We plan interviews ahead of time, maintain our appointment schedules, and are sensitive to the normal demands placed on a manager's time during the business day. We expect that the project managers designated by the DPS and LIPA will be the sole points of contact for NorthStar in any discussion with the DPS or LIPA personnel regarding the audit process.

Team Meetings

Our audit team will meet internally on a periodic basis to discuss progress, address and challenges or issues that have been encountered during the course of the audit, exchange ideas, collaborate on areas or issues that touch multiple elements of the feedback loop, and to test and validate preliminary findings and recommendations. These meetings may be conducted in-person or via teleconference. In addition, to the extent practical, the NorthStar engagement director, project manager and consultants attempt to schedule their site visits concurrently to facilitate communication. Staff personnel are invited to participate in these discussions.

Client Communication

NorthStar expects that the DPS Staff will be active participants in the review, and we look forward to working with them throughout the course of the audit. In this connection, we expect that Staff will likely wish to participate in interviews via conference call and we will facilitate that process. NorthStar expects that DPS Staff will attend selected interviews; review analytical procedures; discuss conclusions, recommendations and cost-benefit analyses; and will monitor the audit's progress as to scope, budget, work plans, and time. NorthStar will keep the Staff apprised of interview requests and scheduled dates, site visits and team meetings. We will also provide the DPS Project Manager with weekly interview and data request logs, access to all data responses, and written summaries of interviews as they are completed.

Monthly (or more frequent) briefings in person or by teleconference will be provided to the DPS project manager and DPS subject matter experts. At a minimum, these briefings will address the following:

- Summary of progress towards the objectives and schedules of the audit.
- Discussion of emerging issues, preliminary findings and likely conclusions.
- Review of challenges encountered to date.
- Discussion of open data or interview requests.

- Discussion of any modifications to the work plan or schedule which may be appropriate as a result of the challenges and/or preliminary findings and conclusions.

- Cost-benefit analyses and approach.

The briefing for each area will be provided by the lead consultant for that area, similar to the method we successfully employed on our audit of Central Hudson. NorthStar expects that each consultant assigned to a task area will frequently discuss his/her progress informally and directly with the DPS project manager or his designee. Issues will also be brought to the attention of the DPS project manager as they are identified.

On a monthly basis, NorthStar will provide the DPS Project Manager with a written progress report detailing activities performed, any issues identified and audit cost and schedule progress as described in Section C of this Chapter.

As indicated in our project schedule in **Chapter VI – Schedule and Budgets**, we will have a mid-point status meeting with DPS Staff the week of March 4-8, 2013 (mid-point of the audit), to discuss emerging issues.

Work Papers

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

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

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

C. DELIVERABLES

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

- **Interview Documentation.** The project team will use a formal interview request form that will be provided as a record of our request and the topics to be covered in interviews. All interview requests will be assigned a unique number that will allow us to reference the interview in the final report. When possible, interviews with personnel will be requested at least ten working days in advance. Upon completion of each interview, we will prepare a formal interview summary including participants, conclusions and observations, data requests generated, issues identified, and follow-up required. The interview summaries will become part of our audit work papers.

- **Data Requests.** Throughout the audit, we will provide written requests for documents and other information. These document requests will clearly specify the information or documents needed and, if possible, the person most likely to have access to the document or information. All data requests will be assigned a unique number that will allow us to track the status of responses and reference the specific document in the final report.

- **Progress Reports.** To keep the DPS Staff apprised of audit progress, we expect to have frequent contacts and will provide periodic oral and written reports as requested by the DPS project manager. All such contacts will be documented and become part of the project work papers.

- **Emerging Issues/Conclusions Summaries.** Prior to the submission of our initial draft audit report for review by the PSC Staff, we will prepare written summaries of emerging issues. These summaries will be prepared at the mid-point of the audit.

- **Cost-Benefit Analyses.** NorthStar will prepare detailed cost-benefit analyses for its audit recommendations. The cost-benefit analyses will be initiated at 75 percent audit completion. We anticipate DPS and LIPA personnel will be involved in this process.

- **Preliminary Draft Report.** A preliminary draft report will be developed covering each of the audit focus areas and submitted electronically to the Staff for review and comment. The report will be reviewed by the DPS Staff for adherence to the scope of the RFP and the work plan.

- **Revised Draft.** After revising the draft as appropriate based on Staff comments, the revised draft report will be reviewed by Staff before being provided to LIPA for factual content and accuracy. LIPA will provide its comments to NorthStar and Staff. We will then hold one or more three party meetings with LIPA and Staff as necessary to discuss LIPA's comments.

- **Final Draft Report.** This draft will reflect any factual corrections that NorthStar chooses to make, and will be submitted to the Staff for final review. The full report will describe each audit task area, our evaluative criteria, audit tasks performed, findings, conclusions, recommendations and cost-benefit analyses. The report will be a complete description of the results of our audit of the respective task areas. In preparing the final report, the only changes NorthStar will make to the final draft report will be in response to specific comments from the DPS Staff and/or LIPA.

- **Final Report.** Upon release by the commission, generally following the Session at which it was considered, the final report will be a public document. Staff will determine when to release the final report. In accordance with the RFP, the report will be provided electronically.

- **Briefings.** Briefings to senior DPS staff and Commissioners and/or meetings with LIPA's Board of Trustees may be required upon submission of the final report.

- **Working Papers.** We will develop an organized set of work papers that will be the basis for our report. The report will be footnoted to these work papers as the source of its factual statements as well as the basis for its findings, conclusions and recommendations. If requested, we will provide a complete set of working papers, indexed and in orderly form upon completion of the audit. The working papers will include a copy of the work plan indicating the consultant that performed the work and date completed, and the documents, interview summaries and analysis supporting our findings and conclusions. All work papers, interview notes, statistical analyses, and other supporting documents developed or obtained during the course of the audit will be made available to Staff in an organized electronic format. We will maintain a data base of non-sensitive material received during the course of the audit to which DPS Staff will be given both on-site and off-site access.

- **Interviews and Site Visits Schedules.** A report of interviews and site visits scheduled for the following week will be issued weekly. At a minimum, this report will include the interviewee, interviewer, topic/area of focus, date, time and location. As this report is updated weekly, it will serve as a report on interviews conducted.

- **Person-Days Expended Report.** A monthly report of person-days expended by activity in each task area. This is a progress report relative to the calendar (time-line) schedule provided in **Chapter VI – Schedule and Budgets** and will show the original estimate, time spent during the current month and to-date, estimated time to complete, and percent completed.

- **Weekly Document Request Log.** This log will identify documents requested and date received.

D. TESTIMONY

At this point in time, it is uncertain whether testimony will need to be presented on the final report. Therefore, the not-to-exceed price outlined in **Chapter VI – Schedule and Budgets** does not include the activities associated with the preparation and presentation of testimony. However, NorthStar would prepare and present testimony on the final report, if requested. The project manager and/or lead consultants most familiar with the specific findings, conclusions and recommendations would prepare and provide the testimony. The number of witnesses would depend on the specific areas being addressed in testimony. Our billing rates would be the same as indicated in **Chapter VI – Schedule and Budgets**.

IV. AUDIT AREAS AND ISSUES

This chapter provides a detailed description of how the audit areas and issues will be examined by the NorthStar consulting team, and indicates the consultants assigned and our estimated level of effort for each audit area. The level of effort assigned to each audit area reflects NorthStar's assessment as to the complexity of the area and those areas which typically pose the greatest risk or provide the potential for significant improvements in performance or reductions in costs.

A. OVERVIEW AND AUDIT ELEMENTS

The audit will evaluate LIPA's overall operations and management, including LIPA's operations and maintenance in the context of its duty to set rates at the lowest level consistent with standards and procedures provided in PAL §1020-f(u). The audit will address the management and operational areas specified in the RFP and include:

- LIPA's construction and capital program planning in relation to the needs of its customers for reliable service (RFP Audit Topic E1).
- The overall efficiency of LIPA's operations (RFP Audit Topic E1).
- The manner in which LIPA is meeting its debt service obligations (RFP Audit Topic E2).
- LIPA's Fuel and Purchased Power Cost Adjustment clause and recovery of costs associated with such clause (RFP Audit Topic E3).
- LIPA's annual budgeting procedures and process (RFP Audit Topic E4).
- LIPA's compliance with debt covenants (RFP Audit Topic E5).

The audit will assess LIPA's efficiency and effectiveness in achieving its mission, particularly with respect to meeting its performance goals and the extent to which there are opportunities for improvement. This is especially important in light of the transition to a new business model and operating agreement. Within each audit element, the audit objective will address the following generic questions and issues:

- The purpose, mission, planning, goals and objectives, and strategies
- Functions, processes, practices and systems
- Organizational design
- Staffing, responsibilities, and accountabilities
- Cost control/cost oversight
- Efficiency and effectiveness
- Results and performance
- Opportunities for improvements, including "best practices" (based on NorthStar's past experience) that are appropriate to LIPA's operating environment.

The audit will review operating conditions as they exist today, with significant focus on how LIPA is managing the change control process as it makes the transition to the new agreement with PSEG Long Island LLC, and the associated ServCo business model. The audit will also include an assessment of the day-to-day and long-term oversight by LIPA employees over the National Grid/PSEG Long Island LLC as well as any other long-term contractors that assist LIPA in running the electric company. The audit will identify and address gaps and recommend improvement opportunities that will benefit LIPA's ratepayers as this new management relationship develops.

Our proposal assigns specific process areas to individual consultants, as outlined in **Chapter V – Project Team and Responsibilities,** based on the specific expertise of the consultants. An estimated breakdown of the hours required and personnel associated with each element are provided at the end of this Chapter. Our proposed project organization is shown in **Exhibit V–1** in **Chapter V.**

B. PRELIMINARY ELEMENT AREA WORK PLANS

In this section, we provide the following for each element area:

- Perspective
- Assigned Consultants
- Phase II – Technical Review Consultant Hours
- Evaluative Criteria as identified in the RFP
- Additional NorthStar Evaluative Criteria to supplement those provided in the RFP
- Work Tasks

Audit Area E1: The Authority's Construction and Capital Program Planning in Relation to the Needs of its Customers for Reliable Service and the Overall Efficiency of the Authority's Operations

Element No. E1.1: Corporate Mission, Objectives, Goals and Planning

Perspective

This element of the scope of work addresses LIPA's overall corporate governance and management. While there is a particular focus on the construction and capital program, the efforts in this element will also consider the overall organization, corporate planning and risk monitoring activities of the organization. As specified in the RFP, this element will address seven sub-areas:[1]

- E1.1a, Executive Management
- E1,1b, Current and Future Organizational Structure
- E1.1c, Board of Trustees
- E1.1d, Communications and Control
- E1.1d, Strategic Planning

[1] The evaluative criteria listed directly under the Corporate Mission area in the RFP have been grouped with the most relevant of the subareas and are identified as "from the general evaluative criteria" in our work plan.

- E1.1e, Outside Services
- E1.1f, Enterprise Risk Management

In several instances, the evaluative criteria in this element are closely related to criteria in other Elements and Work Areas, and the NorthStar project team will coordinate its assessments in these overlapping areas.

Corporate governance refers to the processes, systems and associated checks and balances by which a corporation is governed and controlled, and includes the relationships and potential conflicts in goals and activities between management and its varied stakeholders. Effective executive management and governance has the following attributes:

- An experienced and knowledgeable governance Board with appropriate committees to provide effective oversight and direction.
- Top management with the right number of people with the right skills.
- An executive compensation system with appropriate checks and balances.
- A proper organizational structure, focus, and direction supported by effective corporate oversight and planning.
- Effective communications among executives and the Board on important business, legal and regulatory issues and comprehensive reports on cost and performance results.
- A process for developing management talent and filling key positions with highly qualified individuals.

For a typical investor-owned utility, stakeholders include the Board of Directors, shareholders, regulators, customers, generators and other vendors, and the general public. As a not-for-profit municipal utility, LIPA faces additional considerations. The shareholder-elected Board of Directors is replaced by Board of Trustees appointed by political bodies, shareholders are replaced by the citizens of the state, and the state takes the role of the regulator, instead of the typical Public Service Commission. Additionally, LIPA outsources the bulk of its operational responsibilities and a portion of its management activities, rather than employing all staff on its own books. The LIPA governance structure, therefore, must navigate potentially competing interests of a variety of political bodies, along with a legacy of stranded costs and debt, and management of a variety of key vendors providing essential services to its customers.

While these differences are important and must be taken into consideration in the execution of this management audit, ultimately LIPA's objective is identical to that of any other utility: to deliver reliable electric service to its customers at a reasonable cost. Thus, while the methods and external stakeholders may be different, the end result is the same.

Element No. E1.1.a: Executive Management

Perspective

Executive Management typically includes officers of the organization: the Chief Executive Officer (CEO), Chief Operating Officer (COO), the Chief Financial Officer (CFO) and all the Vice Presidents, plus certain positions key to the management of the organization. Executive Management provides the connection between the Board of Trustees and the daily operations of the organization, and has the overall responsibility for the operations of the organization. An

effective management organization, oversight, and planning process are essential to a well-managed, efficient organization, meeting its goals in a cost-effective manner.

The LIPA CEO position has been vacant since September, 2010, with the COO acting as interim CEO until a new CEO is selected by the Board of Trustees and confirmed by the State Senate. A prolonged vacancy at the top of the executive management can be challenging for other members of the management team. This may be evidenced by three other vacancies in the executive team, including the Director of Internal Audit, and two Officers with less than one year with the organization, including the CFO.

Lead Consultant: **Carol Etter**
Consultants: **Angela Anderson, Robert Rozanski**

Phase II – Technical Review Consultant Hours: 90

RFP Evaluative Criteria:

- Are the governance, organizational structure, missions and relationships within LIPA appropriate, as they relate to the construction program planning process? (from the general governance criteria list)
- Does LIPA use measurable goals, metrics, and key performance indicators to monitor progress towards achieving the corporate mission and objectives? (from the general governance criteria list, see also E1.4, Performance Management)
- Is the performance improvement process at successive levels of LIPA and National Grid/PSEG Long Island LLC management appropriate? (from the general governance criteria list, see also E1.4, Performance Management)
- Is LIPA's corporate structure sufficiently robust to adequately oversee the provision of electric service to its 1.1 million ratepayers?
- Is the authority exercised by executive management over its service provider, National Grid appropriate?
- Are the formal and informal paths of communication among the executives at LIPA reasonable and effective? (See also E1.1.d, Communications and Control)
- Is management's involvement in the strategic and contingency planning processes appropriate? (See also E1.1.e, Strategic Planning)
- Is the working relationship between executive management and the Board of Trustees, including reports shared with the Board and Board committees, appropriate and effective?
- Are management performance and compensation programs suitably aligned with the corporate mission, objectives and goals at all organizational levels? (see also E1.4 Performance Management)

Additional NorthStar Evaluative Criteria

- Are the reports provided to executive management sufficiently useful in monitoring performance, proactively identifying problems and trends, and making defensible decisions? (See also E1.4, Performance Management)

- Have the impacts on the operations of the company, as they relate to key vacancies and turnover in the executive team been properly mitigated by the rest of the Executive Management team and the Board of Trustees?

Work Tasks:

1. Evaluate the governance, organizational structure, missions and relationships within LIPA, specifically as they relate to the construction program planning process, debt service management, fuel and purchased power management, annual budgeting process and other topics related to this management audit.

2. Determine if LIPA's corporate structure is sufficiently robust to serve the needs of its ratepayers.

3. Evaluate the use of measurable goals, metrics, key performance indicators to achieve LIPA's corporate mission and objectives, with the Performance measurement subarea.

4. Assess the extent to which LIPA executive management has addressed performance improvement opportunities within the LIPA organization. (See also E1.4, Performance Management)

5. Evaluate how vacancies and turnover at the executive level have impacted company operations, and the manner in which impacts have been mitigated by executives and staff.

6. Evaluate the type and level of authority and supervision exercised by LIPA executive management over National Grid and the personnel assigned to the LIPA MSA.

7. Assess the extent to which LIPA executive management has addressed performance improvement opportunities between LIPA and the National Grid personnel during the term of the MSA.

8. Assess the extent to which LIPA executive management has incorporated "lessons learned" from the National Grid MSA to address performance improvement opportunities in the transition to the PSEG OSA.

9. Review the types of communication among LIPA executive management, including frequency, formality, content, and effectiveness for raising and resolving issues in a timely manner.

10. In conjunction with the strategic planning evaluation (audit element E1.1.c), assess the role of the Executive management in LIPA's strategic and contingency planning processes.

11. Assess the overall working relationship between LIPA executive management and the Board of Trustees, its committees and individual Board members.

12. Determine what information is provided to the Board of Trustees and whether it is adequate to communicate issues, opportunities and needs of LIPA relative to its ratepayers.

13. Evaluate the reports provided by LIPA executive management to the Board, with a focus on issues related to this management audit.

14. Review LIPA's management performance and compensation programs at all levels for alignment with corporate mission, objectives and goals. (See E1.4, Performance Management)

15. Evaluate the reports provided to LIPA executive management by LIPA and National Grid personnel and assess their usefulness by executive management to monitor performance, identify and resolve issues and identifying trends and challenges impacting the organization.

16. Prepare a Task Report in this area.

Element No. E1.1.b: Current and Future Organization Structure

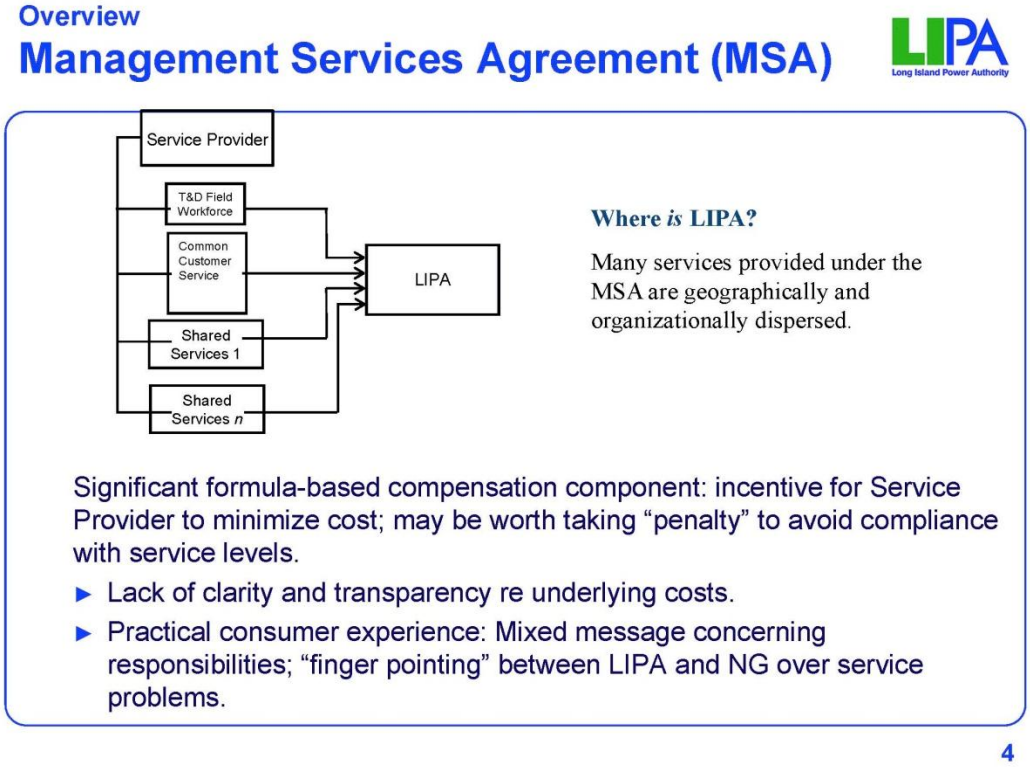
Perspective

LIPA's organization is particularly important since so many key elements of its operations are outsourced to external vendors. It is essential that oversight responsibilities and ultimate authority within LIPA are clear to LIPA staff, the outside service entity (National Grid and PSEG Long Island LLC), customers and stakeholders. Additionally, it is important that roles and responsibilities are clearly delineate between LIPA personnel and outside vendors so that duplication of effort is minimized, overlapping and related activities are clearly understood, and that there are no gaps in services.

Exhibit IV-1 reproduces a page from a presentation on Strategic Organizational Analysis by The Brattle Group, indicating recognition by LIPA of challenges with its current Service Provider interface. [2]

[2] http://www.lipower.org/pdfs/company/papers/strategic-presentation.pdf, accessed May 8, 2012

Exhibit IV-1
Strategic Organizational Analysis - Extract



It will be important to determine the extent to which LIPA's proposed ServCo operating model and the new OSA clarify roles and responsibilities between LIPA and PSEG, and assures strong oversight and management with minimal duplication of services.

Lead Consultant: **Doug Bennett**
Consultants: **Robert Rozanski**

Phase II – Technical Review Consultant Hours: 60

RFP Evaluative Criteria:

- Are the responsibilities for setting planning priorities and allocation of budgets properly placed within the organizational structure? (from the general governance criteria list)

- Are LIPA's major functions suitably grouped within the organization to provide quality service to customers and sufficient support to operations?

- Are the major functions in the new ServCo model properly staffed with personnel with sufficient utility experience to be able to assess the operational effectiveness of the outside service provider?

- Are the spans of control, lines of responsibility, number of management levels, and staffing levels consistent with good utility operations practices?

- Does the LIPA/service manager organization (currently with National Grid and in the future with ServCo/PSEG Long Island LLC) ensure that there is efficient utilization of resources, with no duplication of services?

- Was LIPA's recent reorganization well planned, and are there adequate plans to monitor organizational performance subsequent to implementation?

- Does the ServCo model represent appropriate spans of control and lines of responsibility, and does it represent lessons learned and improvements over the existing operating structure?

- Does the organizational structure of the ServCo provide clear authority, responsibilities and duties of the joint operating committee?

- Is the staffing of the ServCo by source: LIPA, PSEG Long Island LLC, Lockheed Martin, appropriate?

- Are the functions, roles, reporting relationships, and responsibilities of each party in the ServCo model: LIPA, PSEG Long Island LLC, and the ServCo itself clearly identified and proper for that party?

Additional NorthStar Evaluative Criteria

- Does the use of internal committees and working groups, both formal and informal, support the formal organizational structure?

- Has LIPA identified the processes, systems, and controls needed to assure successful implementation of the ServCo business model?

- Has LIPA identified "lessons learned" from the National Grid MSA and incorporated appropriate changes into the PSEG OSA?

Work Tasks:

1. Review the LIPA's overall organization and evaluate the assignment of major functions to assure they can provide quality service to customers and sufficient support to operations.

2. Review recent outside assessments of LIPA overall organization and any LIPA responses.

3. Review the organizational responsibilities for strategic planning, capital budgeting and project prioritization, and O&M budgeting.

4. Evaluate the spans of control, lines of responsibility, number of management levels and staffing levels in the current organizational structure.

5. Review the LIPA/service manager (e.g., National Grid and PSEG Long Island LLC) organization to ensure it provides an efficient utilization of resources with no duplication of services.

6. Review the recent reorganization to determine if it was well planned and monitored to address any issues proactively.

7. Evaluate the use of formal and informal committees and work groups in LIPA's regular operations, currently and under the proposed ServCo model.

8. Evaluate the ServCo model being implemented by LIPA, compared to existing organization, the recent reorganization and industry good practices.

9. Evaluate the organization structure of the ServCo, including the authority, responsibilities and duties of the joint operating committee.

10. Assess the functions, roles, reporting relationships and responsibilities of each party in the ServCo model -- LIPA, PSEG Long Island, Lockheed Martin, and other sources.

11. Identify the personnel of the ServCo by source.

12. Assess whether LIPA has identified the processes need to assure proper allocation of costs and other factors essential to successful a ServCo operating model.

13. Determine if the major functions in the new ServCo model are suitably staffed with qualified personnel to effectively manage PSEG's operations under the OSA.

14. Prepare a Task Report in this area.

Element No. E1.1.c: Board of Trustees

Perspective

The LIPA Board of Trustees is responsible for developing and approving all corporate policy decisions. The Board is comprised of up to 15 members appointed by the Governor (nine appointments), Senate Majority Leader (three appointments), and the Speaker of the Assembly (three appointments). The Board currently has 12 members, as shown in **Exhibit IV-2**. The Board has established six committees -- Governance, Finance and Audit, Operations, Personnel and Compensation, Energy Efficiency and Environment, and Transition.[3]

Exhibit IV-2
Board Members and Committee Assignments

Name	Background	Appointed by	Committee Assignment
Howard E. Steinberg, Chair	Finance	Governor	Transition
Laurence S. Belinsky	Real Estate	Governor	Finance & Audit; Transition
David L. Calone	Venture Capital	Assembly Speaker	Operations; Personnel & Compensation; Transition
X. Cristofer Damianos	Real Estate	Governor	Operations; Energy Efficiency & Environment; Transition
Gemma de Leon	Union management, retail	Assembly Speaker	Operations; Personnel & Compensation
Lawrence Elovich	Law, Public service	Governor	Personnel & Compensation
John Fabio	Public Administration	Assembly Speaker	Governance; Transition
Neal M. Lewis	Law	Senate Majority Leader	None

[3] http://www.lipower.org/company/profile/trustees.html and linked pages, retrieved May 8, 2012.

Susan Gordon Ryan	Government, non-profit executive	Governor	Governance; Energy Efficiency & Environment
Suzette C. Smookler	Health Care, Education	Senate Majority Leader	Governance
Peter K. Tully	Construction	Governor	Finance & Audit; Energy Efficiency & Environment
Lawrence J. Waldman	Accounting	Senate Majority Leader	Finance & Audit; Operations
VACANCIES (3)		Governor	Finance & Audit; two seats on Governance

Lead Consultant: **Carol Etter**
Consultants: **Angela Anderson, Doug Bennett, Robert Rozanski**

Phase II – Technical Review Consultant Hours: 80

RFP Evaluative Criteria:

- Is the role of the Board of Trustees and executive and senior management in the development of budgeting guidelines and periodic budget reviews and approvals appropriate? (from the general governance criteria list. See also E.4, Budgeting)
- Does the Board exercise a suitable level of authority and responsibility?
- Does the Board participate to an appropriate degree in the development and approval of important authority policy decisions?
- Is the Board's role in the hiring and evaluation of the performance of the CEO and other executives appropriate?
- Is the composition of the Board's committees consistent with best practices?

Additional NorthStar Evaluative Criteria

- Does the Board properly represent and address the interests of customers and ratepayers in its monitoring of the organization and its decisions?
- Is the structure and operation of the Board and its Committees consistent with good practices for non-profit boards and municipal utilities?

Work Tasks:

1. Interview members of the Board of Trustees.
2. Review the structure and operation of the Board of Trustees relative to LIPA's organizational documents and good practices for non-profit organizations and municipal utilities.
3. Assess whether the Board of Trustees exercises appropriate authority and responsibility, given the governance documents and constraints.
3. Review recent outside assessments of the LIPA Board and any LIPA or Board responses.
4. Assess the role of the Board and executive management in the development of budgeting guidelines and budget approvals. (See also E4, Budgeting)

5. Evaluate the processes used by the Board to review budget variances and compliance and authorize budget adjustments. (See also E4, Budgeting)

6. Review and assess the role of the Board in the hiring and performance evaluation of the CEO and other senior executives.

7. Review the composition and operations of Board Committees relative to good practices for municipal utilities.

8. Review the processes used by the Board and its Committees to identify and include the interests of ratepayers and customers into the assessment and decision making.

9. Review the processes used by the Board and its Committees to monitor and address other stakeholder input.

10. Prepare a Task Report in this area.

Element No. E1.1.d: Communication and Control

Perspective

Effective management and corporate governance requires that an organization comply with all applicable rules and regulations, that the Board and Executive Management exercise appropriate controls over activities within the organization, and that the organization communicate regularly with its employees, business partners, customers, and stakeholders.

These tasks are particularly important for LIPA. First, as a non-profit, quasi-public entity, there is a greater responsibility for communicating with the general public and government officials. Additionally, LIPA must have clear lines of communication with its outside service providers, as they are actually responsible for delivering the core service to the customers. Breakdowns in either of these lines of communication could have strong implications on the organization, through formal complaints and investigations. Unlike traditional investor-owned utilities were there is a degree of distance between the public and the Board, LIPA Board meetings are open to the public and available on the internet. The Authority's Strategic Plan, contracts, and financial results are posted on the organization's website. Customer complaints and ideas can lead to calls to legislators and may require response from management. Given this, a proactive process of communicating with and managing and responding to stakeholder input can assist with smoother operations.

Lead Consultant: **Angela Anderson**
Consultants: **Carol Etter**

Phase II – Technical Review Consultant Hours: 100

RFP Evaluative Criteria:

- Does LIPA have and comply with appropriate procedures and practices related to the scope of this audit, e.g., internal controls, internal audit function and any voluntary compliance with the Sarbanes Oxley Act? (from the general governance criteria list)

- Is an effective process in place to communicate the result of consultant studies, internal audits and other evaluations to executive management and the Board, and to ensure that follow-up action is taken on any noted deficiencies?

- Is executive management provided with sufficient information through reporting systems to enable them to effectively evaluate the extent to which corporate goals and objectives are being achieved?

- Has LIPA taken measures to ensure that its operations are transparent to key stakeholders?

- Does LIPA have a formalized process to handle customer complaints and inquiries that have not been resolved by its MSA provider, or pending OSA vendor, and the Department of State's Division of Consumer Protection (DCP)? (See also E1.5.b, Customer Service)

Additional NorthStar Evaluative Criteria

- Are there sufficient processes in place to monitor changes in laws and regulations that could impact LIPA and to respond appropriately and in a timely manner?

- Is LIPA's process for receiving and responding to stakeholder input appropriate, given its non-profit, quasi-public status?

- Are the means of communication between departments within the LIPA organization and between LIPA personnel and outside service providers sufficient to meet both regular and emergency needs?

Work Tasks:

1. Examine LIPA's compliance with procedures and practices related to the scope of this audit, e.g., internal controls, internal audit function and any voluntary compliance with the Sarbanes Oxley Act.

2. Determine if an effective process is in place to communicate the result of consultant studies, internal audits and other evaluations to executive management and the Board.

3. Assess whether processes and control exist to ensure that follow-up action is taken on any noted deficiencies.

4. Review the processes used to monitor proposed and enacted changes in laws and regulations that may impact LIPA, and to respond appropriately and in a timely manner.

5. Evaluate whether executive management is provided with sufficient information through reporting systems to enable them to effectively evaluate the extent to which corporate goals and objectives are being achieved.

6. Determine whether LIPA has taken appropriate measures to ensure that its operations are transparent to key stakeholders.

7. Assess the effectiveness of communication tools and processes used by LIPA to communicate with, and receive input from, customers, ratepayers, community groups, governmental bodies, regulators, and other external stakeholders.

8. Evaluate LIPA's processes for receiving and responding to stakeholder input.

9. Evaluate LIPA's processes for monitoring customer complaints lodged with the MSA provider (OSA provider in the future) and the DCP. (See E1.5.b, Customer Service)

10. Assess LIPA's processes for handling customer complaints and inquiries that have not been resolved by the MSA/OSA provider and the DCP. (See E1.5.b, Customer Service)

11. Review processes and tools used by management to communicate with employees, between departments and groups within the LIPA organization, and between LIPA personnel and outside service providers.

12. Evaluate communication procedures and protocols within the organization and its service providers, and with outside stakeholders during storm and other emergencies.

13. Prepare a Task Report in this area.

Element No. E1.1.e: Strategic Planning

Perspective

Strategic planning provides a roadmap of a company's overall direction for the foreseeable future. A company's strategic planning process should include identification of trends and risks, and should be linked to the budgeting and financial processes, development of tactical/operational plans and the Enterprise Risk Management (ERM) process, as illustrated in **Exhibit IV-3**.

Exhibit IV-3
Strategic Planning Components[4]

<table>
<tr><th></th><th>Overall Direction</th><th>Qualitative Factors</th><th>Quantitative Factors</th><th>Performance Management</th></tr>
<tr><td>Near Term (12-18 months)</td><td rowspan="3">Corporate Mission & Vision</td><td>• Tactical Plans</td><td>• Operating Budgets</td><td>• Annual Targets</td></tr>
<tr><td>Mid-Term (2-5 years)</td><td>• Likely challenges
• Have-to and want-to activities
• Multi-year projects</td><td>• 5 year capital plan
• Net income projections
• Financing plans</td><td>• Measurable progress towards meeting mid-term objectives</td></tr>
<tr><td>Long-Term (5-10 years)</td><td>• Horizon opportunities and threats</td><td>• Monitoring possible big needs</td><td>• Monitoring</td></tr>
<tr><td>Risk</td><td colspan="4">Risk Assessment and Monitoring</td></tr>
</table>

LIPA's use of outside service providers for delivery of its core services means that some key elements and inputs into a typical utility strategic plan are outside of the direct knowledge of company staff. Thus, the LIPA strategic planning process should include explicit solicitation of

[4] NorthStar Consulting Group, Inc., 2009

input from the outside service providers, and careful consideration of the impact of and constraints on strategic decisions of the outsourcing of core services. Additionally, LIPA's non-profit status may also influence strategic options and decisions.

Lead Consultant: Carol Etter

Phase II – Technical Review Consultant Hours: 90

RFP Evaluative Criteria:

- Are LIPA's financial position and the level of its rates sufficiently incorporated into the budgeting process? (from the general governance criteria list.) See also E4, Budgeting)
- Has LIPA suitably defined the purpose and mission of the organization?
- Does LIPA have an in-depth understanding of where the organization is now and where it needs to be in the future, who its customers are, and when it is time to shift to a new direction and reevaluate its purpose and mission?
- Has LIPA adequately defined the specific long-range and short-range positions it wishes to occupy?
- Is the process used by LIPA to formulate strategies consistent with good practices?
- Has LIPA effectively established objectives, formulated its strategic plan, followed through with its strategic plan, and assured its activities are consistent with the defined purpose of the organization?
- Has LIPA effectively executed its strategic plan?
- Is LIPA sufficiently flexible in its decision making in light of actual experiences, changing conditions, and new priorities.
- Are LIPA's information systems sufficiently robust to provide new functionalities in light of actual experiences, changing conditions, and new priorities?

Additional NorthStar Evaluative Criteria

- Are LIPA's overall strategic planning processes sufficiently comprehensive in scope and development?
- Are financing considerations incorporated into the strategic plan and capital and O&M budgeting process? (See also E2.1, Application of Industry Standards to Manage Debt)
- Is LIPA's corporate long-term strategic plan linked to its physical system plans, tactical operating plans, capital and O&M budgets, and rate impacts?
- Does LIPA use appropriate tools and reports to monitor progress towards its long-term strategic goals?

Work Tasks:

1. Review LIPA's overall strategic planning process and assess against NorthStar's Preferred Practices checklist, shown in **Exhibit IV-4**.

Exhibit IV-4
NorthStar Strategic Planning Preferred Practice Checklist

NorthStar Preferred Practices	Yes	No
1. Directed by the CEO.		
2. Has significant senior management involvement.		
3. Reviewed and approved by the Board of Directors.		
4. Coordinated and monitored by dedicated resources.		
5. Processes and responsibilities are well-documented and understood by key management.		
6. Process assures appropriate bottom-up input.		
7. Addresses a wide range of issues.		
8. Is responsive to dynamic changes in the operating environment.		
9. Includes detailed functional and departmental performance goals.		
10. Links goal attainment to incentive compensation.		

2. Determine if the strategic planning process provides the tools so that LIPA, its Executive Management team and Board of Trustees have a thorough and timely understanding of the organization's current position and future possibilities.

3. Determine the extent to which LIPA's financial position and the level of its rates are included in the strategic planning process and carried over to the budgeting process.

4. Evaluate the extent to which LIPA's Board of Trustees and Executive Management have adequately defined its specific long-range and short-range positions.

5. Review and assess how LIPA, through its Board of Trustees and Executive Management, formulates strategies for the organization and its subparts.

6. Determine how effectively LIPA has established objectives, formulated its strategic plan, follows through with its strategic plan, and is consistent with the defined purpose of the organization.

7. Assess LIPA's execution of its past strategic plans.

8. Determine LIPA's flexibility in light of actual experiences, changing conditions, and new priorities.

9. Review LIPA's information systems and determine if they are sufficiently robust to provide new functionalities in light of actual experiences, changing conditions, and new priorities.

10. Determine whether LIPA's overall strategic planning processes are sufficiently comprehensive in scope and development, and appropriately incorporate ratepayer needs and rate impacts.

11. Assess the linkages between LIPA's corporate long-term strategic plan, and its physical system plans, tactical operating plans, capital and O&M budgets, and Enterprise Risk Management outputs.

12. Evaluate the manner in which LIPA monitors progress towards its long-term strategic goals, and how adjustments to the strategic plan are made in response to internal and external changes.

13. Prepare a Task Report in this area.

Element No. E1.1.f: Outside Services

Perspective

LIPA accomplishes its mission by outsourcing the vast majority of work involved in running its transmission and distribution (T&D) system through the various service agreements (MSA, OSA, Power Supply Agreement (PSA), and Energy Management Agreement (EMA)). This outsourcing of such a major portion of core services requires the organization to have in place contracts, controls, and reporting mechanisms to ensure the provision of quality, reliable service to its customers. LIPA also outsources a variety of other functions.

Effective management of any outside service providers begins with execution of a strong contract that clearly specifies services provided, roles and responsibilities of both parties, performance requirements, and reporting requirements, along with clear responsibility for costs incurred in execution of the contract. Once a contract is in place, the contract terms are only as effective as the extent to which they are monitored and enforced, so there also needs to be establish processes within the contracting agency to oversee performance of the contracts and to take rapid action should there be variance from contract terms. The centrality of the LIPA MSA/OSA, PSA and EMA to the provision of essential services to LIPA customers increases the importance of contracting, monitoring and enforcement for these service providers.

Lead Consultant: **Doug Bennett**
Consultants: **Mike Joyner, Liz Lemkul, Robert Rozanski**

Phase II – Technical Review Consultant Hours: 170

RFP Evaluative Criteria:

- Does LIPA have in place effective internal controls to prevent abuses by third-party vendors, including the management and control of levels and cost of service, and are these controls utilized? (from the general governance criteria list)

- Where LIPA has delegated authority and responsibility to third parties, are those appropriate in light of best management practices?

- Do operational policies and procedures meet applicable legal, regulatory, and contractual requirements and are they consistently followed?

- Do current and future cost allocation procedures and methodologies ensure that costs are correctly allocated and meet applicable legal, regulatory, and contractual requirements, and are the procedures consistently applied?

- Are contractual agreements regarding storm recovery appropriate in their event definition and in payment terms for storm costs both within and external to the MSA/OSA?

Additional NorthStar Evaluative Criteria

- Are the decisions to use outside vendors for specific non-core services (e.g., legal) compared to in-house personnel, reasonable and regularly supported by analysis?

- Does LIPA apply standard credit risk assessments and mitigation tools with its outside service providers?

- Are there processes and controls in place to ensure that outside service providers meet performance targets and provide value to LIPA and its customers in accordance with contractual agreements and specific assignments, and are those controls consistently applied?

- Has LIPA identified "lessons learned" from the National Grid MSA and incorporated appropriate changes into the PSEG Long Island LLC OSA?

Work Tasks:

1. Review the MSA, PSA, EMA, new OSA and a sample of other key outside supplier contracts (including construction contracts) to identify contractual terms designed to ensure performance and manage performance risk, and cost responsibilities, including authorizations, reporting requirements, penalties for non-performance.

2. Review and assess formal and informal processes within LIPA designed to monitor performance of National Grid/PSEG Long Island LLC and other key outside suppliers.

3. Review processes in place to evaluate continued use of outside service providers compared to in-house personnel.

4. Review and assess processes within LIPA that are designed to prevent outside vendor abuses.

5. Assess whether LIPA's contractor management processes provide sufficient internal controls to manage and control levels and costs of service.

6. Review a sample of outside vendor transactions to determine whether processes and controls are being consistently applied.

7. Review documentation related to the MSA, PSA, and EMA to determine compliance by the outside vendors and consistent management by LIPA of these contracts, including allocation of costs and credits.

8. Review the level of authority and responsibilities delegated by LIPA to third party vendors, in light of good management practices.

9. Ensure that operational policies and procedures, including cost allocation methodologies, are consistently followed and meet applicable legal, regulatory, and contractual requirements.

10. Review cost allocation processes being developed related to the OSA to insure that costs are properly allocated and meet applicable legal, regulatory, and contractual requirements.

11. Review and assess the contractual agreements regarding storm event definition, and payment for storm costs both within and external to the MSA/OSA.

12. Assess the manner in which LIPA evaluates and mitigates credit risk with its major outside service providers, including letter of credit requirements.

13. Evaluate processes and controls used by LIPA to ensure that outside service providers meet performance targets and provide value to LIPA and its customers in accordance with contractual agreements and specific assignments.

14. Prepare a Task Report in this area.

Element 1.1.g: Enterprise Risk Management

Perspective

Enterprise Risk Management (ERM) is the broad process through which organizations identify the risks faced by their company, quantify and prioritize those risks, and proactively undertake activities to mitigate or manage those risks. Depending on the size, type and potential impact of the risks, organizations may purchase insurance policies against the risk (the traditional risk management approach), introduce processes and training to protect against the event occurring (e.g., field safety protocols and training), develop contingency plans (e.g., for storm response), require credit checks to verify suppliers capabilities to deliver, purchase financial hedges, or any number of other activities to protect the organization against risks. Some risks may be determined to be so minor to the organization, or have such a low probability of occurrence that organizations reasonably do nothing.

For organizations that provide essential services, ERM typically becomes part of the corporate culture, with risk considerations embedded in all that is done within the organization. For LIPA, the existence of a strong ERM culture is particularly important, since key services provided by LIPA to its customers are actually provided by outside service providers. We would expect to see a strong ERM focus within LIPA and a clear directive and close coordination with its outside service providers to identify, define, and mitigate/manage risks between the two organizations. Among other factors, there should be a clear statement of responsibility for risk management and close accountability for any risk events. As in any organization, the risks -- financial and operational -- associated with decisions, and options for managing those risk, should be a clear part of corporate decision-making.

Lead Consultant: **Carol Etter**
Consultants: **Al Lucas, Cheryl Jenkins**

Phase II – Technical Review Consultant Hours: 100

RFP Evaluative Criteria:

- Does LIPA have a formalized process (e.g., ERM) for assessing the risks versus benefits of capital plans?
- Are variables used in the ERM models, and the weightings given to those variables appropriate and representative of LIPA's specific situations?
- Are suitable processes employed by LIPA to assess and rank risks to the organization, including physical, financial and operations dimensions?
- Has LIPA taken appropriate steps to address the areas identified as the highest risk?
- Is the schedule used by LIPA to update the ERM reasonable?

Additional NorthStar Criteria

- Does LIPA include its key outside service providers, including National Grid and prospectively PSEG, in its ERM process?
- Has LIPA applied the "lessons learned" from its past experience with National Grid and other key outside suppliers in its contract with PSEG Long Island LLC?
- Is the breadth and scope of the ERM process within LIPA consistent with good practices?
- Are the results of the ERM incorporated into the strategic plans and other corporate decision-making at the executive and Board level?
- Are the potential financial impacts of key risk factors and major decisions adequately incorporated into the ERM processes and reports?

Work Tasks

1. Examine the formalized assessment processes (e.g., ERM) used by LIPA to assess overall risks (physical, financial and operational), with a focus on the topic areas of this audit. Assess the breadth and scope of the ERM process and results across the LIPA organization.
2. Review LIPA's models and ERM tools, the variables considered, and weightings applied to those variables in the models.
3. Review the processes used to incorporate risk factors into the evaluation and ranking of capital projects.
4. Examine and assess the steps LIPA is taking to address the areas identified as the highest risk.
5. Determine if the schedule used to update the ERM is reasonable.

6. Review the processes used to include key outside service providers in the LIPA ERM process, and determine if the involvement of outside providers has or is changing.

7. Review the treatment of risks, risk identification and risk mitigation in the current MSA, and the OSA. Determine if there were gaps in responsibility for risk factors in the current MSA and how those have been addressed in the OSA.

8. Evaluate the links between the ERM process and strategic planning and other corporate decision making at the executive and Board level.

9. Confirm that potential financial impacts of key risk factors and major decisions are adequately incorporated into the ERM processes and reporting.

10. Prepare a Task Report in this area.

Element No. E1.2: System Planning

Perspective

The primary objectives of system planning are to satisfy load requirements while maintaining a high level of reliability at the lowest cost. Aging infrastructure, resource conservation, energy efficiency programs, and a decline in customers and sales due to economic slowdown and competitive alternative providers, increases the need for up-to-date, accurate and dynamic system planning. Over many years increasing demand and system growth provided a natural advantage for reliability enhancements.

Proper system planning integration should produce an optimal investment roadmap for all stakeholders, including ratepayers, generators, transmission owners, the NYISO and the Authority. It should lead the utility in meeting its reliability, safety, and load objectives at the lowest overall cost.

The adequacy of system planning must be evaluated for the area as a whole in view of the pertinent reliability, regulatory, and load requirements. In addition to requiring sound integration of the planning process on a state-wide basis and at all delivery levels, it is also necessary to have seamless and up-to-date load forecasts that can be consistently applied in all investment decisions. A thorough, well-designed system plan is critical to making cost-effective decisions. The plan should identify existing and potential system reliability deficiencies, estimate the likely cost of improvements and evaluate economic trade-offs. Effective system planning optimizes the cost of improved reliability.

Lead Consultant: **Doug Bennett**
Consultants: **Dawn Francis, Mike Joyner**

Phase II – Technical Review Consultant Hours: 140

RFP Evaluative Criteria:

- Do the infrastructure planning and engineering functions operate effectively?

- Does LIPA have appropriate priorities, guidance and other instructions for evaluations, tradeoffs and decision-making including:

  - Asset condition and management process
  - Using input from the asset health review process
  - Linking asset management decisions (e.g., predictive failure analyses) to improve reliability and performance?

- Does LIPA/National Grid develop accurate system forecasts which are used in identifying infrastructure requirements?

- Are other load and infrastructure factors such as advanced metering and energy efficiency initiatives given appropriate consideration in the planning process?

- Are the needs for major projects identified, developed and justified adequately?

- Are the processes and criteria for making decisions regarding replace vs. repair, including how the overall construction program planning process is affected, documented, adhered to and appropriate?

- Are the planning processes for reliability versus new business trade-offs and regional versus central planning dynamics appropriate?

- Are benefit/cost analyses and risk analysis considered in the decision-making process?

- Are the specific types of benefit/cost and risk analysis methodologies used appropriately?

- Are trade-offs optimized with respect to the replacement of older technology with newer technology and the resulting effect on the useful lives and depreciation assumptions of the existing infrastructure, cash flow and system reliability?

Additional NorthStar Evaluative Criteria

- Are load forecasts, resources, and distribution loads integrated and reconciled periodically?

- Does LIPA appropriately analyze reliability benefits for their customers versus short-and long-term rate effects?

- Does LIPA's/National Grid's long-term system planning function address land availability, right-of-way, land use and environmental siting constraints, and do they establish a context for future public interaction on specific projects?

Work Tasks:

1. Examine the development of forecasts for local networks and infrastructure requirements.

2. Evaluate planning processes and work products that focus on asset management, aging infrastructure, inspection/testing programs and their integration with system reliability issues.

3. Determine if demand forecasts, resources, transmission and distribution loads are integrated and reconciled periodically.

4. Assess LIPA's integrated long-range plans and whether a system-wide work plan is developed.

5. Assess the infrastructure planning and engineering functions:

   - Planning and engineering policies and procedures
   - Organizational structure and functions performed
   - Resource levels, work management and the ability to measure quality/performance
   - Interim and final work products and services
   - Workload quantification and backlog recognition
   - Departmental interfaces and coordination.

6. Assess how needs are developed for major projects.

7. Review the process and criteria for making decisions regarding replace vs. repair, including how the overall construction program planning process is affected. (See also Task E1.5.c Transmission & Distribution)

8. Determine the extent to which benefit/cost analyses and risk analysis are considered in the decision-making process. Examine the specific types of benefit/cost and risk analysis methodology being used.

9. Examine the methodologies used to prioritize capital improvement projects competing for limited resources including management guidance and other instructions for evaluations, trade-offs and decision-making.

10. Determine if other load and infrastructure factors, such as advanced metering, energy efficiency and conservation issues are considered in the planning process.

11. Determine how trade-offs are considered with respect to the replacement of older technology with newer technology and the resulting effects on the useful lives and depreciation assumptions of the existing infrastructure, cash flow and system reliability.

12. Determine if LIPA adequately identifies reliability benefits for its customers relative to the short-term and long-term effects on rates.

13. Assess whether LIPA's long-term system planning addresses land availability for rights-of-way and land use and environmental siting constraints, and whether it establishes a context for future public interaction on specific projects.

14. Prepare a Task Report for this area.

Element No. E1.3: Program and Project Planning and Management

Perspective

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

- The potential adverse effects of poor project cost and schedule performance including overruns in cost and schedule;
- The possibility of management being poorly informed and caught off guard regarding project issues and events;
- Problems arising from technical and managerial limitations or insufficient staff resources for successful project completion;
- Pressure from the public or politics relative to project selection;
- The "hidden" cost of delays on customers who must forgo the benefits of late projects;
- The risks arising in general from a potentially litigious environment.

Early program and project planning includes the decisions and processes that shape a project and determine its success. Performing adequate analyses, establishing initial project work plans, and considering various risk factors are critical for successful project execution. Project risks and the process for prioritizing projects must be assessed to develop plans for financing and to identify potential resource requirements and limitations.

Capital projects are investments in the LIPA electric system to preserve assets, ensure or improve system reliability and safety, protect the environment, or expand operating efficiency or capacity. Project scope, budget, and schedule estimates provide the foundation for monitoring and controlling capital projects. While uncertainty is involved in any project estimate, identification of known requirements, particular areas of uncertainty, risk and complexity is fundamental to demonstrating feasibility, analysis of alternatives, and demonstration of project benefits.

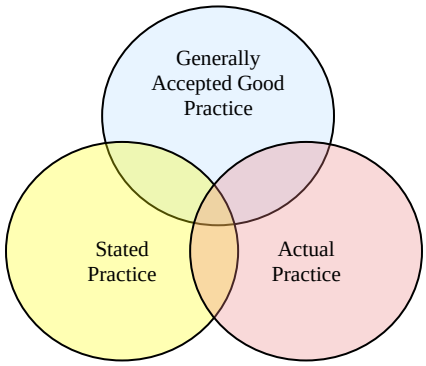
The full implication of many project management decisions cannot be known until project completion. The review of program and project management capabilities must therefore focus on the management decision-making processes used to control construction costs, schedules and quality – as evidenced, for example, by organization and control mechanisms used and whether they are sound, adhered to, logical, and responsive to changing conditions. Fortunately, there is a robust body of knowledge defining "generally recognized good practices" in portfolio, program, and project management. Among them are the following:

- 2007 Comparison of Construction Management and Program Management Costs, Construction Management Association of America
- Best Practices Procurement Manual, FTA, November 2001
- BSI PAS 55: 2008 Specification for the Optimized Management of Physical Assets, The Institute of Asset Management

- Business Process Change: A Guide for Business Managers & BPM (Business Process Management) & Six Sigma Professionals, 2nd Edition, 2007
- Construction Management Standards of Practice -- 2010 Edition; Construction Management Association of America (CMAA)
- Government Design-Bid-Build Work Breakdown Structure (WBS), Project Management Institute
- Guide to the Project Management Body of Knowledge (PMBOK® Guide), 4th Edition, Project Management Institute
- Organizational Project Management Maturity Model – 2nd Edition, Project Management Institute (PMI)
- PAS 55: 2008 Specification for the Optimized Management of Physical Assets Parts 1 and 2, British Standards Institution
- Project Management Institute Government Extension to the PMBOK Guide, 3rd Edition
- Standard for Program Management, 2nd Edition, Project Management Institute

Our approach would compare current written available procedures (stated practice), actual practice as documented in audits of representative projects, and good practices recommended by standard-setting organizations, as shown in **Exhibit IV-5**.

Exhibit IV-5
Best Practice Intersection



Lead Consultant: **Doug Bennett**
Consultants: **Angela Anderson, Jim Ayers, Dawn Francis**

Phase II – Technical Review Consultant Hours: 230

RFP Evaluative Criteria:

- Are programs and projects prioritized and approved over various time horizons in a cost-effective manner? (See also E1.2, System Planning)

- Are the program and project planning, design, estimating, engineering, costing, scheduling and execution functions well documented and performed to LIPA and recognized standards for good practice?

- Are materials and equipment, transportation and other logistical support planned and managed effectively for programs and projects?

- Does LIPA analyze trade-offs and make decisions in order to optimize the use of in-house workforce versus contractor labor?

- Are contractor and engineering bidding practices appropriate?

- Are construction contractor projects planned and managed effectively?

- Does LIPA have effective quality assurance and quality control at the program and project level?

- Does LIPA have effective contractor management and project/program management, including accountability, goals, objectives, and performance measurement?

Additional NorthStar Evaluative Criteria

- Does LIPA use a baseline scope, budget, and schedule for monitoring and controlling projects? How well have projects, programs, and portfolios performed? Are these results visible in a timely way for monitoring and controlling?

- Does LIPA utilize a well-defined structure to estimate, track and monitor project performance and is it used consistently?

- Are project estimates accurate and updated on a periodic basis?

- Is monitoring and controlling against project baselines for scope, budget, and schedule performed?

- Are project scope changes effectively controlled and communicated among participants?

- Are project change orders managed and controlled effectively?

- Are project quality control and technical requirements effectively communicated and transferred to contractors?

Work Tasks:

1. Assess how programs and projects are prioritized and approved over various time horizons in order to establish comprehensive work plans.

2. Define and review program and project planning, design, estimating, engineering, costing, scheduling and execution.

3. Review a sample of the project status reports provided to LIPA. Determine whether the information provided is sufficient for appropriate oversight.

4. Test a representative sample of capital projects (current and completed) to determine whether appropriate policies and procedures are being followed.

    - Interview Project Managers regarding project management and controls.

- Review projects and associated files against a checklist of requirements. A sample checklist is provided in **Exhibit IV-6**.

Exhibit IV-6
Preliminary Capital Project Checklist

Project Management Activity	Performed and Recorded	Performed Not Recorded or Poor Documen-tation	Not Performed
Projects are fully defined in terms of scope, functional requirements and relationships to existing infrastructure			
Execution schedules are planned along with system availability, interdependencies and completion requirements			
Activities are sequenced and the project schedule is confirmed in terms of resource requirements			
Project estimates are accurate and updated on a periodic basis			
A well-defined work breakdown structure is used to estimate, track and monitor project performance			
The project work breakdown structure is consistent between in-house, contracted projects and the utility's cost accounting systems			
Project contingency funds are appropriate and are managed and controlled effectively			
Project scope changes are effectively controlled and communicated among participants			
Project change orders are justified and controlled effectively			
Materials and equipment, transportation and other logistical support are planned and managed for programs and projects			
Variances are tracked and minimized in order to improve cost control, efficiency/productivity and work quality			
Project progress is tracked and reported in terms of cost, schedule and percent complete			
Project work quality is formally checked and recorded prior to acceptance			
Project completion activities such as engineering as-built drawings and closure to plant accounting are performed promptly			

- Follow-up with company personnel regarding any perceived deficiencies or missing file documentation to confirm receipt of all available information.

- Determine the cause of any budget overruns and schedule delays, and determine whether corrective action was taken.

- Identify opportunities to improve performance.

5. Review the rationale for resource decisions, and determine how tradeoffs are analyzed and decisions made in order to optimize the use of in-house workforce versus contractor labor. Procedures are defined for various delivery methods like Design-Build, Contractor-at-Risk, Design-Bid-Build, and Public Private Partnerships.

6. Examine contractor and engineering bidding processes.

7. Evaluate how contracted construction projects are planned and managed.

8. Examine contractor management and project program management processes, including accountability, goals, objectives, and performance measurement.

9. Determine if project quality control and technical requirements are effectively transferred to contractors.

10. Examine quality assurance and quality control at the program and project level.

11. Prepare a Task Report for this area.

Element No. E1.4: Performance and Results Management

Perspective

Performance management is an ongoing process that consists of performance planning, measurement, review, feedback and corrective action. Key elements of performance management include performance monitoring and metrics, reporting and communication, and the design and implementation of an appropriate employee performance review process which links employee objectives and performance targets to achievement of overall corporate goals and objectives. Measures should be meaningful and appropriately linked to the organization's mission, objectives, and strategic and operational plans. Performance should be reviewed and adjusted in a timely manner.

Another important aspect of performance management is the linkage between results and compensation. Targets for compensation must be realistic and attainable and they must be in alignment with a corporation's real challenges and objectives. Management personnel should have a clear understanding of how corporate objectives and KPIs relate to their compensation.

Performance measures can be classified as leading or lagging. Lagging indicators measure the outcomes that have resulted from past actions. Leading indicators provide information about the current situation that may affect future performance. Used properly, leading indicators help an organization respond to changing circumstances and take actions to achieve desired outcomes or avoid unwanted outcomes. It is NorthStar's experience that many utilities utilize a fairly standard set of performance measures (typically lagging indicators) driven by regulatory requirements and industry standard metrics such as customer satisfaction survey levels, reliability indices and service call response times. NorthStar has further found that improvement processes and initiatives may not be adequately tied to or driven by the performance management process.

Exhibit IV-7 provides LIPA's 2011 performance goals.

Exhibit IV-7
LIPA's Performance Goals

Goal	Performance Measure(s)
Provide reliable and economical electric service	• System Average Interruption Duration Index (SAIDI) • System Average Interruption Frequency Index (SAIFI) • Customer Average Interruption Duration Index (CAIDI) • Reliability comparison to other similar NYS utilities using SAIFI and CAIDI • Capital Projects • Reasonableness of Price
Provide superior customer service	• Performance metrics contained in LIPA Management Services Agreement with its contractor National Grid • LIPA's performance/rating according to JD Power and Associates' Electric Utility Business Customer Satisfaction Study and LIPA Contactor Survey • Use of Communications Systems • Services for Special Customers • Financial Assistance Programs • Online/Web-Based Services • On-Bill Customer Usage Information
Accountability	• Compliance with and timely submission of required reports and related governance and disclosure filings • Board Committee Activities • Voluntary Public Information Sessions • Training of Staff and Trustees
Transparency	• Website information availability, including meeting webcasts • Compliance with all aspects of New York State's Open Meetings Law • Public Dissemination of Pertinent Customer and Other Information
Being a leader in the advancement of efficiency and renewable energy	• Efficiency Long Island Performance Report • Performance compared with other utilities as reported in the American Public Power Association and Large Public Power Council reports and as compared to other New York utilities • Participation and cooperation with other governmental agencies

Lead Consultant: **Angela Anderson**
Consultant: **Jim Ayers**

Phase II – Technical Review Consultant Hours: 170

RFP Evaluative Criteria:

- Does LIPA's performance (e.g., reliability and productivity) feed back to its corporate mission, objectives and goals so LIPA can improve processes, redirect resources, and change priorities? (See also E1.1, Corporate Planning)

- Does the Board of Trustees get involved in the performance feedback loop at the right time and to the right extent, and are its role and responsibilities appropriate? (See also E1.1, Corporate Planning)

- Is management held accountable for performance improvements, e.g., cost savings and productivity gains anticipated from specific capital and O&M programs and projects, and specific corporate goals?

- Does LIPA make appropriate use of goals, key performance indicators and metrics?
- Does LIPA use benchmarking techniques to identify and develop performance targets?
- Does LIPA have effective change management and continuous improvement processes?
- Are there impediments that tend to constrain performance improvements and has LIPA taken appropriate actions to remove impediments to performance improvements?
- Are compensation and performance metrics appropriately linked?

Additional NorthStar Evaluative Criteria

- Are performance goals and results measurable and verifiable, and is performance reported in a meaningful manner?
- Does LIPA appropriately monitor contractor service levels and take action as necessary to improve performance?
- Do the MSA and other agreements include appropriate performance targets and disincentives/penalties and/or incentives for meeting service level requirements?
- Are service level requirements and penalties/incentives set in a reasonable manner?
- Will the new OSA with PSEG Long Island LLC include performance requirements and penalties/incentives, and will they be established based on any lessons learned from the current agreement?
- 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?

Work Tasks:

1. Identify existing performance measures and determine how they are used to evaluate and manage performance. Measures to be reviewed include:

   - Corporate performance measures reported to the Board of Trustees.
   - Performance measures and penalties/incentives included in the MSA and other applicable agreements.
   - Measures or KPIs used to assess the performance of LIPA's employees and the effectiveness of its managerial oversight.
   - Other operational metrics.
   - Measures used to evaluate the performance of the construction program and projects.

2. Review processes by which performance targets, incentives and disincentives are established and are updated to reflect changes in conditions, process improvement initiatives and long-term performance improvements.

3. Evaluate LIPA's use of benchmarking techniques to identify and develop performance targets.

4. Review processes by which performance measures, goals and results are communicated to the Board of Trustees, management and the employees.

5. Determine whether performance is communicated in a timely manner and to appropriate personnel to facilitate corrective action as needed.

6. Review corporate mission, goals and any strategic initiatives vis-á-vis existing performance measures. Assess whether LIPA's performance measures tie to and provide feedback relative to its corporate mission, objectives and goals so that it can improve its processes, redirect resources, and change priorities. (See also E1.1, Corporate Planning)

7. Determine whether LIPA has used performance feedback to improve processes, redirect resources and change priorities.

8. Determine if managers are held accountable for performance improvements, e.g., cost savings and productivity gains anticipated from specific capital and O&M programs and projects, and specific corporate goals.

9. Evaluate the Board of Trustees' involvement in the performance management process, including:

    - Board involvement in the identification of performance measures and setting performance targets.
    - Timing, frequency and level of detail of performance reporting by management to the Board of Trustees.
    - How the Board of Trustees responds to any reported performance deficiencies.
    - Whether the Board of Trustees is involved in utilizing performance feedback to make adjustments in processes, resource allocation and priorities.
    - Whether the Board of Trustees gets involved in the performance feedback loop at the right time and to the right extent.
    - Reviewing and approving executive incentive compensation.

10. Determine if there are impediments that tend to constrain performance improvements and how LIPA has addressed any impediments.

11. Assess LIPA's change management and continuous improvement processes. Determine the extent to which these are linked to the performance measurement process.

12. Determine if compensation and performance metrics are linked, and if so whether it appropriately motivates behavior.

13. Determine if improvement initiatives such as capital and O&M programs and projects have defined expected performance improvements, such as, cost savings and productivity or service level improvements.

14. Review performance targets, incentives and disincentives/penalties included in the existing MSA and other applicable agreements.

15. Evaluate LIPA's processes for monitoring compliance with MSA service level requirements. Determine whether results are properly communicated to the appropriate parties in a timely manner.

16. Assess the rationale for any adjustments to the MSA performance metrics.

17. Determine whether MSA service level requirements have been met and whether penalty clauses and performance incentives/disincentives have been assessed as appropriate.

18. Assess efforts to mitigate any non-compliance with performance requirements.

19. Interview LIPA personnel regarding the new MSA with PSEG Long Island LLC:

    - Service level targets to be included in the MSA.
    - How performance levels will be set and benchmarks.
    - Existence of penalties/disincentives and incentives.

20. Determine if 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.

21. Prepare a Task Report for this area.

Element No. E1.5: Efficiency of the Authority's Operations

Perspective

Optimizing the utilization of human resources is a critical component of the effective management of any organization. Departmental or functional areas in a utility that generally offer the greatest cost savings opportunities relative to workforce management include: customer service, T&D operations, and construction. In this area we review the staffing levels and work management systems of LIPA and its service providers, including the major information systems that support the efficiency of the organization, and its communications ability.

We will evaluate the effectiveness of the systems to ensure their effectiveness in comparison to the expectations of today's consumers with respect to accuracy, timeliness, and ease of access. This study will include an analysis of the interoperability of the systems, the openness of the architecture and scalability, and flexibility for new functionalities to be added. While the information systems are operated by National Grid on behalf of LIPA, the review will determine the adequacy of existing systems, the plans for any conversions once the MSA with National Grid expires and the OSA with PSEG Long Island LLC goes into effect on January 1, 2014, and determine what safeguards LIPA has put in place to ensure a smooth transition.

Element No. E1.5.a: Work Management

Perspective

An effective work management program provides a utility with a net positive benefit that can be directly related to improved performance and significant cost savings for the following reasons:

- Work planning improves efficiency and effectiveness in the use of human resources.
- The utility is better able to align its workload with available resources and determine the optimum work force for each area or function, often translating into reductions in labor costs.
- Work management supports the budgeting process by identifying and quantifying the workload requirements for planned activities. Work management also assists in the determination of the time frame for activities consistent with the utility's ability to finance the work.
  - Employee utilization is improved because managers have the tools to monitor and direct resource distribution depending on the workload.
  - Efficiency is improved by getting more work or higher quality work done with the same number of people.
  - Effectiveness is improved by focusing available work-hours on higher priority tasks and delaying or eliminating less important or unnecessary work.
- Work management provides management the tools needed to benchmark its efforts against other utilities.
- Benchmark data developed from consistent reporting also gives management the information needed to negotiate with its union to define better work rules.

Many utilities still do not have a comprehensive and effective work management program.

The NorthStar project team has found that the implementation of a comprehensive work management system and lean process design can be useful in eliminating or minimizing a number of types of process "waste."

Exhibit IV-8 provides a list of process wastes that might be minimized.

Exhibit IV-8
Types of Process Waste

Type	Description/Examples
Over production	• Overstaffing • Failure to provide flexible capacity matched to workload fluctuations • Excessive number of paths for work requests entering the system • Too many points of contact
Waiting	• Often caused by interface problems or process defects at junctures between departments, sections, or individual employees • Queues resulting from operations/ workforce imbalances

Type	Description/Examples
Transportation	• Non-value adding activities • Complex or sub-optimized routing
Over processing	• Duplication in maintaining systems/information • Collecting and maintaining useless information • Overlapping functions in a process • Non value-added levels of approval
Inventory	• Excessive work backlogs, poor control of processes, and lack of visibility over process performance • Process delays • Unbalanced staffing along work processes – bottlenecks in process
Rework	• Multiple repeated processing cycles • Poor documentation of processes leading to variation • Unclear instructions to employees • Incomplete work request inputs
Motion	• Overly complicated process design • Poor training and assignments to process tasks
Waste of Resources	• Scheduling problems and delays • Inflexible assignment capability (e.g., crew sizes, restrictive work rules) • Over-specialization in job classifications; lack of cross training • Excessive troubleshooting/too many follow up inquiries • Poor control and visibility over the process

Implementation of a work management system and the elimination of process inefficiencies can result in substantial productivity savings to utilities.

Lead Consultant: **Jim Ayers**
Consultant: **Mike Joyner, Angela Anderson**

Phase II – Technical Review Consultant Hours: 180

RFP Evaluative Criteria:

- Are programs and projects effectively converted into short-term and day-to-day work?
- Are work management systems used effectively to schedule and manage field crews, including transportation, equipment, and materials?
- Do work management systems appropriately interface with other key systems such the customer information system, dispatch, and outage management?
- Are existing systems current and sufficiently robust and flexible?
- Do existing systems provide timely, accurate information for LIPA customers and other stakeholders?
- Does LIPA/National Grid Electric Services LLC use mobile technology for its field work crews and do existing systems provide timely and accurate information to customer contact personnel?
- Are work program and project schedules managed effectively on a day-to-day basis?

- Does information about rework, failures and repair history get translated into corrective actions, infrastructure aging analysis, and repair versus replace decisions in an effective and timely manner?

- Do the workforce and work management systems feed back into performance improvement opportunities? (See also E1.4, Performance Management)

- Are KPIs established by and reported to/by LIPA appropriate? (See also E1.4, Performance Management)

- Do existing systems and procedures provide adequate data to analyze work volumes and staffing requirements?

- Are existing SCADA, work management and outage management systems effectively used in identifying trends in workload levels, productivity, utilization and service levels?

Additional NorthStar Evaluative Criteria

- Do LIPA/National Grid measure and manage employee availability, utilization, efficiency, productivity and effectiveness in an appropriate manner?

- Are major workforce groups covered by work management systems to assign, execute, and control the work?

- Do excess work and process backlogs exist, and if so, does LIPA/National Grid have plans to eliminate them?

- Are assumptions documented when planning workforce requirements for new projects and continuous operations where history is inadequate to determine staffing levels?

- Do LIPA/National Grid use process and project performance data as a basis for continuous improvement? Do they track improvement in processes and workforce performance?

- Has LIPA/National Grid Electric Services LLC established appropriate decision-making processes and controls to assure that staffing levels are adequate (both in numbers and skills) for both day-to-day operations and emergencies to meet customer service, service quality, safety and reliability standards?

- Has LIPA developed appropriate plans for any work management system conversions necessitated by the switch from National Grid to PSEG Long Island LLC?

Work Tasks:

1. Examine how planning and execution of programs and projects are converted into short-term and day-to-day work planning, task assignment, and control.

2. Document workforce planning and management tools and existing work management system(s), including:

    - Process documentation

- Work measurement standards
- Their function and use
- Work groups/locations covered
- Whether transportation, equipment, and materials are addressed, and in an integrated manner
- Measurement and control and frequency of update
- Use in performance measurement, rewards and recognition, and process improvements.

3. Assess the functionality, flexibility and adequacy of existing work management systems.

4. Review any planned changes or modifications to existing systems to accommodate the change in from the National Grid MSA to the OSA with PSEG Long Island LLC.

5. Determine what safeguards LIPA has put in place to ensure a smooth transition from National Grid to PSEG Long Island LLC on January 1, 2014, and assess their adequacy.

6. Review current SCADA system and any planned modifications or upgrades.

7. Review interfaces and information transfer between work management and other key operational systems including the customer information system, outage management system, and dispatch/scheduling.

8. Determine the extent to which LIPA has made effective use of mobile technology for its field crews and the interface with existing systems.

9. Determine how work management systems are used to schedule and manage maintenance and construction crews, including transportation, equipment, and materials supply.

10. Determine whether work measurement standards are maintained appropriately and whether LIPA/National Grid uses the measurements to manage their workforces.

11. Determine how LIPA/National Grid measures and manages employee availability, utilization, efficiency, productivity, and effectiveness.

12. Determine whether the outage and work management systems provide accurate and timely information for LIPA's customers, outside agencies and stakeholders.

13. Evaluate how work program and project schedules are managed on a day-to-day basis.

14. For a sample of key areas, determine if information about rework, failures and repair history gets translated into corrective actions, infrastructure aging analysis, and repair versus replace decisions.

15. Determine if workforce and work management systems are appropriately used to identify performance improvement opportunities.

16. Review staffing trends for the past five years by functional area.

17. Analyze existing data on key work backlogs by functional area and evaluate reasons for backlogs.

18. Review data on overtime in total, by functional area and by job classification.

19. Document existing decision-making processes and controls that set staffing levels (both in numbers and skills) for projects, day-to-day operations, and emergencies to meet customer service, service quality, and safety and reliability standards.

20. Determine if work schedules are practical and if the schedules are at an appropriate level of detail.

21. Review KPI's used by LIPA/National Grid to monitor performance. Determine how KPI's will change with the transition to PSEG Long Island LLC.

22. Determine whether existing SCADA, work management and outage management systems are effective in identifying trends in workload levels, productivity, utilization and service levels.

23. Prepare a Task Report in this area.

Element No. E1.5.b: Customer Services

Perspective

This area will review LIPA's customer service operations, including complaint handling, customer service support systems, billing, outreach, and customer communications.

Lead Consultant: **Angela Anderson**
Consultants: **Mike Joyner**

Phase II – Technical Review Consultant Hours: 160

RFP Evaluative Criteria:

- Does LIPA have appropriate processes for handling customer complaints and inquiries that have not been resolved by its MSA/OSA provider and/or the Department of State's Division of Consumer Protection?

- Does LIPA have processes and systems for analyzing and reflecting feedback from customers?

- Are existing customer information and customer accounting systems used to support customer service operations efficient and effective?

- Do appropriate interfaces existing between customer systems and other LIPA systems and external service providers?

- Do customers receive accurate and timely bills?

- Does LIPA provide customers with timely and accurate information regarding rate changes, major policy issues or other areas affecting the customer?

- Does LIPA use an array of methods/technologies to communicate with its customers?

Additional NorthStar Evaluative Criteria

- Does LIPA monitor the level and nature of both internal and external customer complaints?

- Does LIPA receive adequate information regarding customer complaints and service levels from National Grid and will this continue with the transition to PSEG Long Island LLC?

- Has LIPA evaluated potential changes to service levels resulting from the shift to PSEG Long Island LLC?

- Does LIPA provide its customers with accurate and timely information regarding service times, service request or customer inquiry status, outages and estimated service restoration times?

- Does LIPA appropriately balance service levels and customer service staffing levels/costs?

Work Tasks:

1. Analyze LIPA's procedures and systems for measuring, tracking, investigating, and resolving customer complaints and inquiries, including those received by LIPA, National Grid and external agencies such as the Department of State's Division of Consumer Protection.

    - Obtain an overview of LIPA's and National Grid's complaint tracking system(s).
    - Assess LIPA's processes for handling customer complaints and inquiries that have not been resolved by its MSA/OSA provider and/or the Department of State's Division of Consumer Protection.
    - Assess processes for handling initial and escalated complaints.
    - Review a sample of complaints and LIPA's or National Grid's response to and resolution of the complaint.
    - Evaluate the timeliness of complaint response.
    - Review processes for analyzing customer feedback and improving processes.
    - Interview personnel regarding anticipated process/system changes with the conversion to PSEG Long Island LLC.

2. Review a sample of customer complaint reports provided by National Grid and those developed internally by LIPA.

3. Determine whether LIPA or National Grid conduct customer surveys or employ other vehicles to obtain customer input and feedback.

4. Evaluate existing and proposed service levels and service level targets.

- Review MSA/OSA customer service targets.
- Evaluate the target-setting process and the appropriateness of the targets.
- Compare service levels to targets and review trends.
- Review any planned changes to service level targets and incentives/disincentives with the transition to PSEG Long Island LLC.
- Determine if the customer service level measurements are adequate.

5. Review any customer-service related process improvement programs. Review any initiatives implemented to address deficiencies or improve service levels.

6. Review the process by which service practices and standards are periodically reviewed and modified to be more responsive to customer needs.

7. Review a sample of customer service performance reports provided to LIPA management by National Grid.

8. Review any LIPA analyses of the effect of the transition to PSEG Long Island LLC on customer service levels. Assess the reasonableness of assumptions.

9. Evaluate the efficiency and effectiveness of existing/planned customer systems.

    - Obtain a demonstration of the existing customer information and billing system.
    - Assess its functionality, efficiency, and ease of use.
    - Review and assess any interfaces with other systems (i.e., customer billing/accounting, field operations/scheduling).
    - Review any implementation plans or technical specifications for any possible system upgrades or conversions planned under the PSEG Long Island LLC OSA.
    - Interview personnel regarding the effect of the new OSA with PSEG Long Island LLC on the customer system.
    - Determine whether customer systems adequately support LIPA's technical business needs and processes, compliance with state laws and regulations, and the achievement of customer service goals

10. Determine what safeguards LIPA has put in place to ensure a smooth and seamless transition from a customer standpoint from the switch from National Grid to PSEG Long Island LLC on January 1, 2014.

11. Review systems used to determine call center staffing levels and schedule/resource requirements. Evaluate resource and service level assumptions and inputs.

12. Review LIPA/National Grid's processes, procedures and controls designed to ensure the accuracy and timeliness of customer bills.

    - Review meter reading/billing performance goals and actual performance, including days between read and bill, actual versus estimated reads and billing accuracy.
    - Review billing integrity reports and billing exception reports.
    - Determine the process by which the LIPA/National Grid handle individual billing exceptions and the resultant potential delay in customer bills.
    - Assess any backlog which may exist in the processing of billing exceptions.

13. Evaluate LIPA's customer outreach efforts for presentation of information, explanations regarding rate changes, and decision-making on major policy issues.

14. Review recent customer communications regarding rate changes or significant customer events including but not limited to, press releases, bill inserts, print or television ads, website content, town halls or other community meetings.

15. Review customer communications plans and timelines for significant customer impacting events.

16. Determine whether LIPA/National Grid effectively uses an array of technologies and methods to communicate with its customers and the anticipated effect on customer communications with the transition to PSEG Long Island LLC.

    - Bill inserts
    - Newspaper/television ads
    - Website
    - Social media (e.g., Facebook, Twitter)
    - Customer calls (reverse 911)
    - Mobile phone text updates

17. Prepare a Task Report in this area.

Element No. E1.5.c: Transmission and Distribution

Perspective

In this area we will review the success of the operation of the T&D System at LIPA, as it is currently overseen by National Grid. We will review the reliability of the system, preventive and corrective maintenance practices and decisions, oversight of the operations by LIPA, including operational reports, success against KPIs, and lessons learned that could impact the new OSA with PSEG Long Island LLC.

Our experience indicates that declines in reliability are typically due to:

- Limited maintenance program funding and staffing, including vegetation management.
- Maintenance that is largely corrective upon failure, rather than preventive.
- Aging infrastructure and under-funded capital programs that do not systematically replace old equipment and systems at a rate sufficient to avoid age-related failures.
- Low staffing levels in key work groups are unable to keep up with engineering, maintenance programs, capital programs and recordkeeping.
- Poor or inadequate management, organization, leadership and work processes.

LIPA's transmission and sub-transmission lines deliver power to its electric system for 1.1 million customers in Nassau and Suffolk counties and the Rockaway Peninsula in Queens County. As defined by the New York Independent System Operator (NYISO), "bulk" transmission includes LIPA's 345 kV and 138 kV systems: and, LIPA's sub-transmission includes the 69 kV, 33 kV and 23 kV systems. Each system has circuits constructed overhead, underground and underwater. In addition, LIPA electric system has five standard alternating current (AC) and two High Voltage Direct Current (HVDC) interconnections to neighboring

electric systems. The two 345 kV interconnections are used mainly to import power from the remainder of New York State to serve load requirements of LIPA, NYPA and Long Island municipalities. In addition, 286 MW of power is wheeled to ConEdison's Jamaica substation over the jointly owned Shore Road – Dunwoodie (Y50) interconnection.

The LIPA sub-transmission system provides service to distribution substations. It consists of those parts of the system that are neither bulk transmission nor distribution, typically including voltages 69 kV and below. In general, the sub-transmission system transfers power from the bulk transmission system to the various distribution substations, which typically serve approximately 10,000 customers per station. It also provides connection points to local 69 kV generation resources. In general, the sub-transmission system is designed in a closed loop arrangement originating from transmission substations that supply one or more distribution substations. Supervisory controlled circuit breakers and air break switches isolate faulted lines and restore service within a matter of seconds. The breakers at each end of a line may be line breakers, bus tie breakers, or part of ring bus, or breaker and half substation bus configurations.

Distribution circuits originate at circuit breakers connected to the distribution substations in the system. The circuits are made up of main line conductors connected in an open loop arrangement to one or more adjacent circuits and branch line conductors that are connected to the main lines through fuses. The circuit mains have various sectionalizing devices to isolate faulted conductors and to facilitate the transfer of customers to adjacent circuits. These devices include, automatic sectionalizing units, automatic circuit reclosers, ground operated load break switches and stick operated load break disconnects. The primary circuit mains are generally designed to operate as part of a radial system but in specific instances, where a higher degree of reliability is desired; they are designed for automatic throw-over or network operation. Primary lines that branch off the mains are equipped with fuses at the point of connection to keep the mains in operation when branch line faults occur. LIPA has two types of low voltage secondary network service. Area networks are supplied from two or more dedicated primary circuits with no other distribution load connected. Spot networks are normally supplied from two or more primary circuits that also supply other distribution load. **Exhibit IV-9** provides an overview of the system.

Exhibit IV-9
LIPA's System

Queens/Nassau Serves approximately 210,512 customers 109 square miles of service territory, 1,035 miles of overhead wire 288 miles of underground cable 75,158 utility poles	**Central** Serves approximately 290,018 customers 210 square miles of service territory 2,374 miles of overhead wire 667 miles of underground cable 145,389 utility poles
Western Suffolk Serves approximately 320,839 Customers 305 square miles of service territory 2,718 miles of overhead wire 1,486 miles of underground cable 152,644 utility poles	**Eastern Suffolk** Serves approximately 289,484 customers 606 square miles of service territory 2,823 miles of overhead wire 2,220 miles of underground cable 161,859 utility poles

Element No. E1.5.c.1: Reliability

Lead Consultant: **Mike Joyner**
Consultants: **Dawn Francis, Jim Ayers**

Phase II – Technical Review Consultant Hours: 130

RFP Evaluative Criteria:

- Does LIPA/National Grid have meaningful SAIFI (System Average Interruption Frequency Index) and CAIDI (Customer Average Interruption Duration Index) goals and are they met?
- Are work processes efficiently designed, implemented and measured?
- Do work force management processes include work definitions, priorities, time durations standards, efficient scheduling, work order procedures, progress reporting, quality controls, performance measurements (productivity, utilization, lost/delay time trends, etc.)?
- Does LIPA/National Grid make effective use of mobile workforce tools?

Additional NorthStar Evaluative Criteria

- Does LIPA achieve and maintain adequate levels of system reliability?
- Does LIPA appropriately monitor and respond to potential reliability issues?
- Does LIPA/National Grid analyze worst performing circuits and take steps to address issues?
- Do storm events or other reliability problems result in lessons learned and changes to the existing system or processes?

Work Tasks:

1. Review LIPA's reliability-related O&M and capital budgets and actual expenditures for the last five years.
2. Review and assess any reliability improvement plan(s), including schedules/timeline, milestones, responsibilities, staffing and results measurement.
3. Review and trend LIPA's reliability performance over the past five years (e.g., SAIDI, SAIFI, CAIDI). Compare reliability performance to similarly situated utilities.
4. Determine how reliability targets are set, how they are factored into the MSA/OSA and whether actual performance exceeds targets.
5. Review root-cause analyses performed by LIPA/National Grid regarding any deviations in performance. Assess corrective measures or resultant performance improvement programs.

6. Review planned and actual reliability-related improvement projects including cost-benefit analyses, selection/evaluative criteria and project prioritization.

7. Assess LIPA's investment in the "3 Ts" of proactive reliability management (Trees (vegetation management), Tools and Training.

8. Review condition assessment and current and prior system plans.

9. Determine whether LIPA/National Grid has taken advantage of appropriate technology to assess the condition of its system.

10. Assess existing reliability-related process to assess efficiency and effectiveness. Identify inefficiencies, redundancies and process waste.

    - Work process design
    - Prioritization processes
    - Work definitions
    - Work standards
    - Procedures
    - Work assignments
    - Job times
    - Crew sizes
    - Use of internal (National Grid) versus contract resources
    - Scheduling and dispatch
    - Routing
    - Training
    - Performance standards
    - Quality control
    - Progress reporting and performance measures

11. Review reliability-related corporate goals and KPIs and how this information is reported to executive management and the Board of Trustees.

12. Assess the use and functionality of any mobile workforce tools.

13. Prepare a Task Report in this area.

Element No. E1.5.c.2: Preventive Maintenance

Lead Consultant: **Mike Joyner**
Consultants: **Dawn Francis**

Phase II – Technical Review Consultant Hours: 140

RFP Evaluative Criteria:

- Is preventive maintenance properly scheduled, performed and noted?

- Are trend analyses maintained?

- Do managers have necessary and timely information?
- Does the organizational design effectively and efficiently support the mission?
- Are facility records (including specifications, location, maintenance, repair, and trouble history) comprehensive, accurate, up-to-date, and easily accessible?

Additional NorthStar Evaluative Criteria

- Are preventive maintenance goals and budgets reasonable?
- Is routine and as-needed maintenance performed on the system (including circuits and other equipment) as appropriate to mitigate potential issues?
- Are LIPA/National Grid's equipment inspection and testing schedules consistent with accepted good utility industry practice?
- Has LIPA/National Grid incorporated up-to-date processes and tools for monitoring, analyzing and maintaining its electric system?
- Are vegetation management cycles and standards consistent with industry practice and appropriate for the service territories?
- Are annual vegetation management goals and objectives met?
- Is LIPA appropriately involved in establishing preventive maintenance standards and requirements?
- Does LIPA have an appropriate system and set of metrics to determine the effectiveness of its preventive maintenance program and the effect of any changes to procedures or timelines?

Work Tasks:

1. Review trends in SAIFI, SAIDI and CAIDI.
2. Review existing inspection and preventive maintenance policies, procedures and programs.
3. Review condition assessments, maintenance history, and equipment failure/trend analyses and other information/reports provided to management.
4. Review worst performing circuit analyses and steps taken to address any issues.
5. Assess maintenance prioritization and scheduling processes and timelines.
6. Review and trend preventive maintenance budgets, staffing levels, and actual expenditures. Analyze any significant deviations.
7. Review preventive maintenance cycles and compare with similarly situated utilities.
8. Evaluate LIPA's vegetation management program.

- Review vegetation management policies, procedures, budgets and cycle times.
- Review planned and actual line and circuit clearing goals and objectives. Review trends in tree-related outage incidents and durations.
- Compare vegetation management cycles and clearances with industry standards.

9. Review budget and staffing levels for field patrols and inspections, and other tools and training used to assess the vulnerability of the overhead system.

10. Evaluate equipment inspection and testing schedules (including poles; overhead, underground and underwater cables; substations, transformers, switches, circuits and other equipment).

    - Assess inspection and testing procedures.
    - Evaluate frequency.
    - Ensure compliance with regulatory requirements and industry standards.
    - Compare with accepted industry practice.
    - Determine how inspection results are used.

11. Assess existing organization, including the use of National Grid versus contract employees, and LIPA's oversight.

12. Review quality assurance processes and procedures.

13. Determine how storm-related repairs affect the preventive maintenance program.

14. Prepare a Task Report in this area.

Element No. E1.5.c.3: Repair/Replace and Reactive/Corrective Maintenance

Lead Consultant: **Mike Joyner**
Consultants: **Doug Bennett**

Phase II – Technical Review Consultant Hours: 80

RFP Evaluative Criteria:

- Are adequate cost/benefit analyses performed to assist in the repair/replace decision-making?

- Are work processes efficiently designed and implemented?

- Does LIPA/National Grid have a comprehensive disaster or emergency restoration, and is it periodically revised, and appropriately communicated with effective training?

- Is LIPA's oversight of costs associated with storm restoration appropriate, including the accounting for storm costs (e.g., salvaged materials)?

Additional NorthStar Evaluative Criteria

- Are LIPA/National Grid's assumptions regarding the life expectancy of key equipment reasonable?

- Is the extent of the use of "run to fail" method, and "life cycle" versus "fit for service" maintenance, rehabilitation and replacement practice appropriate?

- Has LIPA given adequate consideration to underground placement of conductors, circuits and distribution lines in key areas?

- Do disaster or emergency restoration plans consider events affecting a significant portion of LIPA's system?

- Are outage lessons learned reflected in modifications to disaster or emergency restoration plans, training, staffing, system planning or response requirements?

Work Tasks:

1. Determine whether equipment is repaired or replaced in accordance with inspection and testing results.

2. Evaluate the level of equipment-related outages and associated corrective action.

3. Assess LIPA's standards, criterion and practices for new or replacement underground cable installations.

4. Review the process and criteria for making maintenance decisions regarding replace vs. repair, including how the overall construction program planning process is affected.

    - Evaluate maintenance versus replacement criteria.
    - Evaluate priorities, guidance and other instructions for evaluations, tradeoffs and decision-making.
    - Assess criteria for repair, rehabilitate, replace or run-to-fail decisions.
    - Assess criteria for life cycle versus fit for service maintenance.
    - Review any probabilistic models/risk analyses used.

5. Assess linkages between asset management decisions (e.g., predictive failure analyses) to improved reliability and performance.

6. Determine the extent to which benefit/cost analyses and risk analysis are considered in the decision-making process.

    - Examine the specific types of benefit/cost and risk analysis methodology being used.
    - Review cost-benefit analyses for a sample of repair versus replacement projects.

7. Determine how trade-offs are considered with respect to the replacement of older technology with newer technology and the resulting effects on system reliability.

8. Review LIPA's outage management and communications system(s).

9. Review LIPA's oversight and management of recent storms.

10. Examine LIPA's emergency response and major outage restoration plans.

- Determine if the plans are sufficiently robust and consider significant storm events affecting a large portion of the customer base.
- Determine whether roles and responsibilities for all participants are clearly defined.
- Determine whether the plans describe the "trigger points" at which storm plans are activated and the escalation process initiated.
- Determine whether the plans include both tactical and strategic processes for restoration of all customers.

11. Review associated communications plans, training and drill schedules.

12. Prepare a Task Report in this area.

Audit Area E2: The Manner in which the Authority's is Meeting its Debt Service Obligation

Perspective

Utility companies are capital-intensive industries that require significant investment in plant and equipment to maintain efficient and reliable service for customers. In this audit area we will investigate LIPA's activities related to its management and oversight of its debt obligations and the manner in which LIPA meets its debt service obligations. LIPA's compliance with the regulations and covenants related to its debt are addressed in Audit Area E5 later in this Chapter.

As of March 31, 2011, LIPA had approximately $6.9 billion of debt outstanding (including commercial paper issued and outstanding), a large portion of which results from LIPA's acquisition of LILCO and its associated assets and liabilities. Of the $6.9 billion, approximately $1.1 billion is variable rate debt (including commercial paper issued and outstanding). LIPA currently has liquidity and credit facilities supporting its variable rate debt portfolio and commercial paper program in the amount of $1.24 billion (including principal and interest) as is shown in **Exhibit IV-10**.

Exhibit IV-10
Debt Outstanding as of March 31, 2011

Series	Principal	Annual Interest	Credit/Liquidity Support	Expiration Date
Series 1A	$125,000,000	$2,013,699	BayernLB/Landesbank Baden-Württemberg (LLBW)	December 15, 2015
Series 1B	$50,000,000	$805,480	State Street	December 15, 2011
Series 2A	$50,000,000	$805,479	West LB	December 15, 2015
Series 2B	$100,000,000	$1,610,959	BayernLB	December 15, 2015
Series 3A	$100,000,000	$1,610,959	JP Morgan/ LLBW	December 15, 2011/ December 15, 2015
Series 3B	$100,000,000	$1,610,959	West LB	December 15, 2015

Series	Principal	Annual Interest	Credit/Liquidity Support	Expiration Date
Series 2003D, H, I, J, L, M, N, O	$375,225,000	$4,194,297	Dexia Credit Local	May 29, 2013
CP-1	$150,000,000	$11,095,891	JP Morgan	December 15, 2011
CP-2	$50,000,000	$3,698,631	HSH Nordbank	December 15, 2015
CP-3	$100,000,000*	$11,095,899	State Street	December 15, 2011

Note: Bank LOCs scheduled to expire on December 15, 2015 are subject to early termination by the bank on June 15, 2012 and June 15, 2015.

* LIPA's Commercial Paper Series CP-3 is authorized for $100 million, but is currently limited to $50 million as a result of the size of the underlying letter-of-credit.

As of 2010, approximately 25 percent of LIPA's $3,777 million (18.2 cents/kWh) revenue requirement were financing and tax costs.[5] **Exhibit IV-11** shows the impact of LIPA's financing on its rates, as of 2010.

Exhibit IV-11
LIPA Financing Costs – 2010 Baseline

	$ Millions	Cents/kWh
Payments in lieu of taxes	$217	1.0
Rev. Taxes	68	0.3
D&A	251	1.2
Interest	330	1.6
Reserve	75	0.4
Total Financing and Tax	**$942**	**4.5**

Element No. E2.1: Application of Industry Standards to Manage Debt

Lead Consultant: **Robert Rozanski**
Consultants: **Al Lucas, Cherry Ong**

Phase II – Technical Review Consultant Hours: 150

RFP Evaluative Criteria:

- Does LIPA have appropriate debt management and debt retirement plans?
- Does LIPA use industry benchmarking data to evaluate its debt costs?
- Does LIPA employ a fair and reasonable process for selecting underwriters that considers experience and marketing/distribution capabilities and the ability to obtain a high price/low interest cost for bonds sold?
- Are debt cost analyses appropriate and effective?

[5] August 17, 2011 Strategic Organizational Analysis, LIPA Board of Trustees Workshop

- Does LIPA monitor interest rates and other financial factors in the management of its debt costs?

- Has LIPA refinanced its debt to minimize costs?

Additional NorthStar Evaluative Criteria:

- Are financing considerations incorporated into the strategic plan and capital and O&M budgeting process? (See also E1.1e, Strategic Planning and E4.1, Capital and O&M Budgeting)

- Are LIPA's long-term financing and debt retirement plan reasonable in light of system requirements and rate considerations?

Work Tasks:

1. Review LIPA's resource plan, budgets, cash flow projections and associated financing strategy.

2. Review five year projections of funding requirements, and LIPA's consideration of various sources of available funding.

3. Review LIPA's Debt Management Policy and plans and adherence to said policy.

4. Review and evaluate the Authority's debt management plans and consideration of alternative debt management scenarios, including:

    - Debt retirement plans
    - Evaluations of alternative debt management scenarios
    - Refinancing, refunding/restructuring analyses

5. Assess the extent to which the debt management plan has been incorporated in the overall strategic plan and the annual capital and O&M budget.

6. Assess whether the debt management plan is reasonable in light of the near- and long-term capital needs established by the system plan and impact on ratepayers.

7. Review LIPA's process for monitoring the debt market, its outstanding debt portfolio, interest rates and other financial factors relative to the LIPA's management of its debt costs.

8. Determine whether LIPA monitors changes and has appropriately evaluated alternative debt management scenarios given changes in operations, priorities, market conditions and the availability of new financial products.

9. Assess the extent to which LIPA has taken advantage of Federal and State tax credits available under the American Recovery and Reinvestment Act (ARRA), or other low cost/advantageous financing opportunities.

10. Review minutes of applicable Finance and Audit Committee and Board of Trustees meetings.

11. Review LIPA's recently announced (March 2012 Board of Trustees meeting) debt reduction plan and associated assumptions.

    - Ongoing tax challenges.
    - Decline in debt service requirements beginning in 2013.
    - Creation of debt reduction fund.

12. Review structure and projected cost of recent debt issuances, including the use of "back-loaded" debt.

13. Review benchmarking studies used by LIPA to evaluate the costs of debt and revenue requirements.

14. Review the process for selecting a Financial Advisor.

15. Evaluate the selection process for underwriters.

    - Review RFP used to select the current pool of underwriters (Senior Managers, Co-Managers and Selling Group).
    - Assess the roles and responsibilities of the Board of Trustees, the Finance Committee, the CFO, LIPA's Financial Advisor and other individuals/entities in the underwriter selection process.
    - Review list of underwriters to which the solicitation was sent.
    - Review selection/evaluation criteria and scoring.
    - Evaluate the process and criteria by which the CFOA selects the Senior Lead Underwriter (book running manager) for each individual transaction.

16. Prepare a Task Report in this area.

Element No. E2.2: Receipt of Necessary Approval for Debt Management

Lead Consultant: **Robert Rozanski**
Consultants: **Al Lucas, Cherry Ong**

Phase II – Technical Review Consultant Hours: 90

RFP Evaluative Criteria:

- Is documentation related to the debt issuance review and approval process complete and thorough?

- Does LIPA comply with applicable debt issuance requirements and are filings/ documentation complete?

- Has LIPA responded appropriately to the Finance Committee's recommendations with respect to its debt issuance proposals?

Additional NorthStar Evaluative Criteria:

- Has LIPA responded appropriately to regulatory agency comments, concerns and/or recommendations regarding proposed debt issuances?

- Does LIPA have effective processes for ensuring compliance with debt approval and ongoing documentation requirements?

Work Tasks:

1. Review applicable requirements of the Long Island Power Authority Act and the Public Authorities Law, and the Office of State Comptroller's "Debt Issuance Approval Policy Statement and Guidelines."

2. Review debt issuance proposals and analyses developed by LIPA including consideration of alternative structures and pricing.

3. Evaluate information provided to the Audit and Finance Committee of the Board of Trustees by LIPA staff and financial advisors.

4. Review and evaluate LIPA's documentation and its actions in response to the Finance Committee's recommendations.

5. Review and assess the completeness of information provided to the Board of Trustees requesting authorization of recent debt issuances, including, for example:

   - Debt issuance proposals.
   - Documentation from the Finance and Audit Committee's review of and recommendations for the Authority's debt issuance proposals.
   - Minutes or webcast of Board of Trustees meetings authorizing recent bond issuances.
   - Applicable resolutions.

6. Review information provided to the Public Authorities Control Board (PCAB), the Office of State Comptroller and other applicable regulatory agencies seeking approval for recent bond issuances, and LIPA response to associated comments.

   - Memo to the PCAB summarizing the requested authorization.
   - Use of the proceeds, structure, and other details of the proposed issuance.
   - Draft PCAB resolution.
   - Resolution adopted by the Board of Trustees authorizing the proposed debt issuance.
   - Any revisions to proposed debt offering.

7. Review ongoing compliance documentation (e.g., continuing disclosure certificates, IRS regulations).

8. Prepare a Task Report in this area.

Element No. E2.3: Audit of Debt Management Practices

Lead Consultant: Robert Rozanski

Consultants: **Al Lucas, Cherry Ong**

Phase II – Technical Review Consultant Hours: 60

RFP Evaluative Criteria:

- Does LIPA have an appropriate policy for the internal audit of its debt management?
- Are audits well documented?
- Does LIPA take appropriate action in response to its internal audit organization reviews?
- Does LIPA effectively manage its credit rating agency relationships and respond to credit rating agencies in an appropriate manner?

Work Tasks:

1. Evaluate the debt management audit process.

   - Review and evaluate the Authority's policy for the internal audit of its debt management.
   - Review the current audit plan.
   - Evaluate the scope and timing of internal and external audits.
   - Review and evaluate LIPA's documentation of debt management internal audits conducted by Baker Tilly.
   - Review results of any internal or external audit's of LIPA's debt management policies and activities and the associated management response.

2. Assess actions taken by LIPA in response to audit findings and recommendations.

3. Evaluate LIPA's documentation of follow up actions in response to its internal audit organization reviews.

4. Review recent agency credit rating reports and reasons for any changes in LIPA's credit ratings.

5. Evaluate the effectiveness of LIPA's communication with debt rating agencies and management of its relationship and credit rating.

   - Organizational roles and responsibilities.
   - Communications plan and content.
   - Participation in credit rating agency meetings/calls.
   - Review of draft rating agency reports.
   - Process for review of information to be provided to the rating agencies.
   - Processes for timely and appropriate agency response.

6. Assess LIPA's response to rating agency feedback.

7. Prepare a Task Report in this area.

Element No. E2.4: Effectiveness of Risk Management Techniques

Lead Consultant: **Robert Rozanski**
Consultants: **Al Lucas, Cherry Ong**

Phase II – Technical Review Consultant Hours: 60

RFP Evaluative Criteria:

- Does LIPA have an appropriate debt management policy, statement and strategy? (See also E2.1, Application of Industry Standards for Management of Debt)
- Doe LIPA have appropriate processes for monitoring interest rates and other financial factors relative to its risk management techniques.
- Are LIPA's interest rate swap policies and procedures appropriate?

Additional NorthStar Evaluative Criteria:

- Are debt financing risks included in the ERM process? (See also E1.1g, Enterprise Risk Management)
- Is there appropriate coordination and collaboration between financial risk management and the financial management of supply and supply price risks?

Work Tasks:

1. Review and assess LIPA's Debt Management Policy and strategy and adherence to said policy. (See also E2.1, Application of Industry Standards for Management of Debt)
2. Review and evaluate LIPA's applicable risk management policies and procedures, including its policy regarding the use of debt derivative products (including interest rate swaps).
3. Assess the use of interest rate exchange agreements including rate swaps, basis swaps, forward rate transactions, float transactions, and collars, and review associated evaluations.
4. Determine whether any interest rate exchange agreements are consistent with LIPA's policy, and are reasonably expected to reduce exposure to changes in interest rates, result in a lower costs of borrowing or reduce financial exposure.
5. Determine if LIPA has entered into any agreements for speculative purposes.
6. Review LIPA's processes for ongoing monitoring of interest rates and the cost of liquidity support for opportunities to refund/restructure and reduce financing costs.
7. Review LIPA's counterparty credit rating and collateral requirements.
8. Review reports to the Finance Committee and Board of Trustees regarding the interest rate exchange agreements.

9. Review the ERM process and reports in conjunction with Audit Element E1.1g, relative to the inclusion of interest rate risk in the ERM process and mitigation assessment.

10. In coordination with Audit Area E3, identify the degree of coordination between interest rate risk management and the management of supply and supply price risk.

11. Prepare a Task Report in this area.

Element No. E2.5: Effectiveness of the Ratemaking Model Relative to Meeting the Authority's Debt Obligations

Lead Consultant: **Robert Rozanski**
Consultants: **Carol Etter, Cheryl Jenkins, Cherry Ong**

Phase II – Technical Review Consultant Hours: 120

RFP Evaluative Criteria:

- Does LIPA have appropriate policies, analyses and plans that address its debt management strategies relative to meeting its debt obligations? (See also E2.1, Application of Industry Standards for Management of Debt)

- Does LIPA appropriately respond to meetings and reports from credit rating agencies with regard to LIPA meeting its debt obligations? (See E2.3, Audit of Debt Management Practices)

- Does LIPA consider assessments and recommendations from its regulatory bodies in its ratemaking model?

- Do major capital projects have specific funding sources and are they documented?

Additional NorthStar Evaluative Criteria:

- Is the effect on customer rates given appropriate consideration in debt planning?

Work Tasks:

1. Review LIPA's debt management policies, analyses and plans. (See also E2.1, Application of Industry Standards for Management of Debt)

2. Evaluate the LIPA's response to feedback from credit rating agencies (See E2.3, Audit of Debt Management Practices).

3. Review the results of the Strategic Organizational Analysis (2005 and 2010 studies) and the consideration of the impact of various organizational options on financing costs and rates.

4. Review documentation from LIPA's meetings with and from audits/studies conducted by its regulatory bodies regarding debt management and/or proposed debt offerings.

5. Review other applicable regulatory agency analyses.

6. Determine the extent of LIPA's response to agency concerns or recommendations.

7. Review analyses of debt service costs/alternative debt management scenarios and the related impacts on customer rates.

8. Evaluate LIPA's documentation of capital projects and the respective funding for each project?

9. Prepare a Task Report in this area.

Element No. E2.6: Background Events that led to the Establishment of the Shoreham Acquisition Adjustment and Subsequent Changes to the Adjustment

Perspective

When LIPA acquired the LILCO assets that were not sold to KeySpan, it was able to finance the acquisition/merger with 100 percent tax-exempt debt, as it is a governmental, not-for-profit entity. The assets and liabilities of LILCO that were acquired by LIPA consist of: (i) LILCO's electric transmission and distribution system; (ii) its net investment in Nine Mile Point Nuclear Power Station, Unit 2; (iii) certain regulatory assets and liabilities associated with its electric business; (iv) allocated accounts receivable and other assets and liabilities; and (v) substantially all of its long-term debt. At the time of the merger, a significant amount of the LILCO debt ($4.1 billion of the $6 billion total) was related to the Shoreham project. The "Shoreham Debt" was result of LILCO's investment in the Shoreham Nuclear Power Plant, which after a ten-year construction period beset by cost overruns and delays, was only operated intermittently over a two-year period before it was shut down in June 1989. The final Shoreham project cost, including decommissioning costs, was more than $6 billion.

Because of the manner in which LIPA's rates and charges were established by the Board of Trustees, the original net book value of the transmission and distribution and nuclear generation assets acquired in May 1998 was considered to be their fair value at the time of acquisition. The excess of the acquisition costs over the fair value of the net assets acquired was recorded as an intangible asset titled "acquisition adjustment" and was to be amortized over a 35 year period. The acquisition adjustment principally arose through the elimination of LILCO's regulatory assets and liabilities, totaling $6.3 billion, and net deferred federal income tax liability of approximately $2.4 billion. Therefore, the amortization of the regulatory assets and liabilities was effectively replaced by the amortization of the acquisition adjustment.[6]

LIPA had originally intended for debt equal in amount to the Shoreham Debt to be retired by 2013 through a series of scheduled and optional debt repayments. However, the anticipated optional debt payments were foregone by LIPA in order to subsidize customer fuel and purchased power costs, a practice which LIPA has since ceased, as well as to finance LIPA's capital expenditure program. As a result, LIPA's long-term debt in 2010 stood at $6.4 billion in 2010 (with related interest expense of $323 million) – more than the long term debt at the time of the merger.

[6] Notes to Financial Statements For the Nine Months Ended September 30, 1999 (Unaudited)

Lead Consultant: **Al Lucas**
Consultants: **Cherry Ong**

Phase II – Technical Review Consultant Hours: 80

RFP Evaluative Criteria:

- Does LIPA have adequate documentation regarding the establishment of the Acquisition Adjustment and related debt?
- Does LIPA have appropriate plans for the amortization of the Acquisition Adjustment and related debt, and does LIPA adequately manage and execute these plans?
- Does LIPA have adequate documentation about the Acquisition Adjustment and related debt, and did it take appropriate follow-up actions to address these issues?
- Is there adequate correspondence and other documentation between LIPA and its regulatory bodies as it amortizes the Acquisition Adjustment and retires the related debt?
- Has LIPA taken appropriate actions in response to any recommendations made by the regulatory bodies to which it is accountable, as it amortizes the Acquisition Adjustment and retires the related debt?

Additional NorthStar Evaluative Criteria

- Is the methodology used by LIPA to determine the Acquisition Adjustment and subsequent changes to the adjustment consistent with general accounting principles, Trustee decisions and regulatory orders?

Work Tasks:

1. Review the thoroughness of the LIPA's documentation on the establishment of the Acquisition Adjustment and related debt.
2. Obtain a list of each component of the Acquisition Adjustment as recorded by LIPA in May 1998. Determine the date and basis for the recording of the original balance and amortization method and rate.
3. Evaluate the LIPA's plans and management of its plans for the amortization of the Acquisition Adjustment and the related debt.
4. Review and evaluate documentation about the Acquisition Adjustment and related debt as well as the LIPA's follow-up actions that addressed those issues.
5. Review and evaluate documentation between the LIPA and the regulatory bodies to which it is accountable, as it amortizes the Acquisition Adjustment and retires related debt.
6. Review and evaluate the LIPA's actions in response to any recommendations made by applicable regulatory bodies.

7. Determine whether LIPA's amortization of the Acquisition Adjustment and retiring of related debt was reviewed by its internal and external auditors. If so, review auditors' reports/work papers addressing this topic.

8. Obtain and review any discussions and decisions by the Board of Trustees that impact the establishment and amortization of the Acquisition Adjustment and the related debt.

9. Reference the recorded amortization and retired debt amounts to information contained in the Board of Trustees decisions, including changes in accounting practices, or other recommendations from LIPA's regulatory bodies.

10. Prepare a Task Report for this area.

Element No. E2.7: Cash Reserve Policy

Perspective

Determining appropriate cash reserve levels and targeted amounts of revenue to receive from customers are important to a utility's bond ratings, creating rate stability for customers, and enable a utility to maintain reliable electric infrastructure. Cash reserve policies must consider variability of expenses, volatility of power supply costs, and the utility's exposure to risks as well as developing targeted revenue recovery from customers that consider funding capital replacements and debt service to help avoid large rate adjustments.

Lead Consultant: **Robert Rozanski**
Consultants: **Cherry Ong**

Phase II – Technical Review Consultant Hours: 40

RFP Evaluative Criteria:

- Is LIPA's cash reserve policy appropriate?

Additional NorthStar Evaluative Criteria

- Are reserve requirements evaluated on a routine, periodic basis and adjusted as appropriate?

Work Tasks:

1. Review LIPA's cash reserve policy and any changes to the policy over time.

2. Determine whether cash reserve targets are reasonable.

   - Review the process by which LIPA sets cash reserve targets.
   - Review current and projected operating, capital and special reserve requirements.
   - Evaluate assumptions used in establishing targets/reserve requirements.
   - Assess appropriateness of LIPA's consideration of potential risks and variability of expenses/revenues.
   - Assess justification for current cash reserve levels.

3. Review LIPA analyses regarding the effect of its cash reserve policy and targets on revenue requirements, rates, bond ratings and bond issuances.

4. Assess LIPA's processes for reviewing, managing and adjusting reserves.

5. Determine how cash reserve policies are factored into LIPA's financial plans and revenue requirements.

6. Prepare a Task Report for this area.

Audit Area E3: The Authority's Fuel and Purchased Power Cost Adjustment Clause and Recovery of Costs Associated with Such Clause

This audit element focuses on LIPA's management and oversight of fuel and purchased power activities, and the recovery the cost associated with its Fuel and Purchased Power Cost Adjustment Clause. It also reviews LIPA's involvement with wholesale electricity market and/or reliability entities to address issues which may affect the reliability and cost of electricity for LIPA's customers.

Element No. E3.1: LIPA's Active and Effective Involvement in New York Independent System Operator (NYISO) Issues and Operation as well as Other Regional Entities

Perspective

The reliability and pricing of electric supply for LIPA's ratepayers depend on a number of interactive factors, including:

- The volume and composition of mass market default customers loads and the availability and costs of the resources needed to meet such loads.
- Availability and costs of renewable energy and other greenhouse gases management resources.
- The ability to provide long-haul transmission for Renewable Portfolio Supply (RPS) generation at least cost.
- Effectiveness of energy efficiency, self-generation, and distributed generation programs.
- The availability and competitiveness of long-term power supply.
- Competitiveness and dynamics of the spot markets.
- Effectiveness of the NYISO in assuring system reliability and managing wholesale markets.
- Effectiveness of utility risk management strategies and practices.

Most of these factors are outside the direct control of individual utilities; however, it is critical that utilities maintain an active presence in the organizations and processes that have the ability to affect the various factors. For example, in New York State, the planning and construction of long-haul transmission to move electricity (particularly wind-generated power) from upstate to New York City is of critical importance to meeting long-term supply needs of the downstate area. The questions of financing and then pricing the needed transmission lines, along with environmental and other siting issues, are under debate currently and are of critical importance to all New York State electric utilities.

As a transmission owner and participant in New York's wholesale energy market, LIPA must comply with the rules and standards put forth by wholesale electricity market and/or reliability entities such as the NYISO as well as New York State Reliability Council (NYSRC); Northeast Power Coordinating Council (NPCC); and the North American Electric Reliability Corporation (NERC). Each of these entities has stakeholder forums (such as standing committees, working groups and task forces and ad hoc groups) to address issues which may affect the reliability and cost of electricity for LIPA's customers:

- *The New York Independent System Operator (NYISO)* operates New York's high-voltage transmission network, administers and monitors New York's wholesale electricity markets, and plans for the state's energy future. NYISO has a shared governance structure. Market Participants, government officials and public interest groups work together in committees and working groups to forward market improvement recommendations to the Board of Directors. There are three standing committees: the Management Committee, the Business Issues Committee, and the Operating Committee. Each committee oversees its own set of working groups and/or subcommittees, and has a defined scope of responsibilities.

- *The New York State Reliability Council (NYSRC)* promotes and preserves the reliability of electric service on the New York State Power System by developing, maintaining, and updating the Reliability Rules for NYISO and all entities engaging in electric transmission, ancillary services, energy and power transactions on the New York State Power System. The NYSRC is governed by the NYSRC Executive Committee comprised of transmission owners (including LIPA) and other interested parties. The Executive Committee appoints three subcommittees: Reliability Rules Subcommittee; Reliability Compliance Monitoring Subcommittee; and Installed Capacity Subcommittee.

- *Northeast Power Coordinating Council (NPCC)* is responsible for promoting and improving the reliability of the international, interconnected bulk power system in Northeastern North America. NPCC fulfills its reliability mission through committees, subcommittees, task forces and other groups as the Board of Directors may deem appropriate, including a Regional Standards Committee, a Compliance Committee, a Reliability Coordinating Committee (NPCC's principal technical committee), a Public Information Committee and an Audit and Finance Committee.

- *The North American Electric Reliability Corporation (NERC)* oversees eight regional reliability entities and encompasses all of the interconnected power systems of the contiguous United States, Canada and a portion of Baja California in Mexico. NERC has a complex committee structure which brings together hundreds of industry expert volunteers in nearly 50 committees, sub-committees, task forces, and working groups

considering issues from wind and renewable power integration to education to demand-side management and energy efficiency.

In order to protect customer interests and associated reliability and cost impacts, an electric utility should identify, monitor, analyze, and advocate for reliability and power market issues which impact its operations. Involvement in stakeholder forums enables the utility to go beyond mere compliance to proactively developing and advocating changes in market and reliability rules to help improve overall market efficiency and reliability.

Lead Consultant: **Doug Bennett**
Consultants: **Angela Anderson, Elizabeth Lemkul**

Phase II – Technical Review Consultant Hours: 70

RFP Evaluative Criteria:

- Does LIPA have appropriate coverage at stakeholder forums (e.g., standing committees, working groups and task forces and ad hoc groups) in market/reliability entities such as NYISO, NYSRC, Northeast Power NPCC and NERC in terms of number and expertise of both assigned personnel and management oversight, particularly in areas and emerging issues that are expected to have a significant impact?

- Does LIPA take appropriate actions to advocate for and protect customer interests and associated reliability and cost impacts in relevant stakeholder forums with respect to issues such as NYISO operations, NYISO billing, interpretations and applications of NYISO market rules (including the internal administrative compliance costs of participating in various markets); potential changes in market rules; interpretations and applications of NYSRC, NPCC and NERC reliability rules; potential changes in reliability rules, and results of planning studies conducted by the NYISO and others?

- Does LIPA have adequate initiatives in developing and advocating changes in market and reliability rules in relevant stakeholder forums to help improve overall market efficiency and reliability?

- Does LIPA take adequate interest in improving the overall efficiency and effectiveness of state and regional market and reliability entities including, but not limited to, budgeting, and cost control, performance objectives and metrics, strategic planning and overall management?

Additional NorthStar Evaluative Criteria

- Does LIPA have adequate processes to identify emerging issues that may have a significant impact on its operations and its ratepayers?

Work Tasks:

1. Review the role of LIPA's governmental affairs/relation function and any associated government affairs/"lobbying" plans.

2. Determine the extent of the Board of Trustees involvement in identifying and promoting key issues in the interest of LIPA and its ratepayers.

3. Assess LIPA's process to oversee and manage its participation in stakeholder forums. Determine whether there is adequate management oversight of the process.

   - Obtain a list and background of LIPA personnel (name and position) participating in each stakeholder forum at NYISO, NYSRC, NPCC and NERC for the past three years.

   - Review minutes of such meetings, if available.

   - Determine whether LIPA has an adequate number of personnel assigned to stakeholder forums, and whether they have the appropriate experience level for effective participation in the forum, particularly in areas and that are expected to have a significant impact.

4. Interview representatives from NYISO, NYSRC, NPCC and NERC as appropriate regarding LIPA's involvement.

5. Assess LIPA's processes to identify emerging issues in market/reliability entities that may have a significant impact on its operations and its ratepayers and to ensure that LIPAs interests are represented in the appropriate stakeholder forums.

6. Assess LIPA's process to communicate relevant current issues at NYISO, NYSRC, NPCC and NERC to affected LIPA organizations and the Board of Trustees and to reflect the concerns of all LIPA organizations in its actions in stakeholder forums.

7. Review LIPA's actions advocating for and protecting customer interests and associated reliability and cost impacts in relevant stakeholder forums with respect to issues such as NYISO operations, NYISO billing, interpretations and applications of NYISO market rules (including the internal administrative compliance costs of participating in various markets); potential changes in market rules; interpretations and applications of NYSRC, NPCC and NERC reliability rules; potential changes in reliability rules, and results of planning studies conducted by the NYISO and others.

8. Evaluate LIPA's initiatives in developing and advocating changes in market and reliability rules in relevant stakeholder forums to help improve overall market efficiency and reliability.

9. Review LIPA's interest in improving the overall efficiency and effectiveness of state and regional market and reliability entities including but not limited to budgeting, and cost control, performance objectives and metrics, strategic planning and overall management.

10. Prepare a Task Report for this area.

Element 3.2: LIPA's Fuel and Purchased Power Contract Management, including PSA, Fuel Management and Bidding Services Agreement (FMBSA), and EMA

Perspective

LIPA and National Grid have three principal contracts pertaining to the operation and maintenance of generating facilities:

- *Power Supply Agreement (PSA).* The PSA provides for National Grid's sales to LIPA of all of the capacity and, to the extent LIPA requests, energy from the existing oil and gas-fired generating plants on Long Island, formerly owned by LILCO. Such sales of capacity and energy from the National Grid facilities are made at cost-based wholesale rates regulated by the Federal Energy Regulatory Commission. In addition to cost control, the PSA provides incentives and penalties for National Grid to maintain the output capability of the generating facilities as measured by annual industry-standard tests of operating capability, and to make capital improvements that benefit plant availability

- *Energy Management Agreement (EMA).* LIPA has an EMA with National Grid Energy Trading for the procurement and management of fuel supplies for the generating plants on Long Island which were formerly owned by LILCO. Prior to 2010, the EMA also managed the scheduling, bidding, buying and selling of power on LIPA's behalf in various power markets. The EMA provides incentives for the control of the cost of fuel purchased on behalf of LIPA. Under the EMA, LIPA pays National Grid: a) a monthly management fee; b) the cost of fuel; and c) a fuel purchase performance incentive/ disincentive payment.

- *Fuel Management and Bidding Services Agreement (FMBSA).* The FMBSA between LIPA and National Grid Energy Trading provides for fuel management services required to supply certain generating units other those which were formerly owned by LILCO.

LIPA is responsible for monitoring National Grid's implementation of the agreements. All three agreements are scheduled to expire in May 2013. Except for the RFP issued in August 2010 for 2,500 MW of generation, discussed in the next Audit Element, LIPA has not announced its plans relative to extending or replacing any of these contracts.

Lead Consultant: **Carol Etter**
Consultant: **Elizabeth Lemkul, Angela Anderson**

Phase II – Technical Review Consultant Hours: 110

RFP Evaluative Criteria:

- Does LIPA audit, enforce and manage its PSA to effectively and efficiently balance reliability with low cost electricity for its customers?

- Does LIPA audit, enforce and manage its EMA to effectively and efficiently balance reliability with low cost electricity for its customers?

- Does LIPA audit, enforce and manage its FMBSA to effectively and efficiently balance reliability with low cost electricity for its customers?

Additional NorthStar Evaluative Criteria:

- Has LIPA taken adequate corrective actions in response to any previous recommendations regarding its oversight of its fuel management and power supply contracts?

- Is the oversight of the PSA, EMA and FMBSA agreements assigned to appropriate LIPA personnel, and are the oversight responsibilities clearly delineated?

- Does LIPA have appropriate resources to oversee the fuel management and power supply contracts? If not, does LIPA effectively use outside resources to monitor National Grid's performance on the PSA, EMA and FMBSA agreements?

- Does LIPA take appropriate action when National Grid does not meet performance standards or comply with contractual requirements?

- Are the types and extent of communications between National Grid and LIPA with respect to the PSA, EMA and FMBSA sufficient?

Work Tasks:

1. Review the Office of the New York State Comptroller's report on LIPA's Oversight of Contracts with National Grid (Report 2009-S-9) and determine the extent to which it can be relied upon in this audit.

2. Determine whether LIPA has taken adequate corrective actions in response to any previous recommendations regarding its oversight of its fuel management and power supply contracts.

3. Review PSA, EMA and FMBSA agreement terms and conditions. Identify the oversight authority and controls available to LIPA in the agreements and develop a list of contract requirements and performance incentives, including reporting requirements and performance metrics, for use in the review of LIPA's contract oversight. Determine whether the contract requirements and incentives encourage National Grid to effectively and efficiently balance reliability with low cost electricity for LIPA's customers.

4. Review any amendments to the agreements and determine whether they are effective in protecting the interests of LIPA and its ratepayers. As necessary, interview LIPA personnel and review relevant documentation to understand the genesis of each amendment, and its impact on the agreement execution.

5. Review relevant policies and procedures.

6. Determine whether oversight of the PSA, EMA and FMBSA agreements is assigned to appropriate LIPA personnel, and whether the oversight responsibilities are clearly delineated.

7. Determine whether LIPA has appropriate resources to oversee the fuel management and power supply contracts and whether it uses external resources to monitor National Grid's performance when necessary.

8. Identify and review National Grid reports and/or correspondence to LIPA regarding its performance on the PSA, EMA and FMBSA agreements.

9. Assess LIPA's actions to verify the information and invoices provided by National Grid, particularly information provided in support in any incentive payments.

10. Assess LIPA's oversight of National Grid's power supply and fuel management performance and its efforts to ensure that National Grid effectively and efficiently balances reliability with low cost electricity for LIPA's customers.

11. Examine National Grid's reported performance under these agreements and the actions taken by LIPA when National Grid did not meet performance standards or comply with contractual requirements.

12. Develop a Task Report in this area.

E3.3: LIPA's Supply Procurement

Perspective

LIPA does not own generation facilities other than its 18 percent interest in Nine Mile 2 nuclear power plant. To meet its load requirements, LIPA purchase on-Island and off-Island power suppliers. Currently, 5.5 percent of LIPA's total supply is provided by NYPA purchases and LIPA's 18 percent ownership in Nine Mile 2. Fifty-seven (57) percent is supplied by National Grid.

LIPA had available 5,910 MW of contracted capacity resources and 2,150 MW of tie-line capability to meet demand during the summer of 2009. Since 2001, LIPA has contracted for the addition of more than 2,000 MW of power supply capability, which includes thirteen new on-Island generating stations and two submarine transmission cables connecting Long Island to surrounding power markets. These additions were made in response to the growth in Long Island's demand for electricity and the reliability requirements established by the NYSRC and the NYISO. The balance of these requirements has been met through purchases from the wholesale electricity markets, including the NYISO, the Independent System Operator - New England (ISO-NE), and the PJM Interconnection (PJM).[7]

LIPA has various power purchase contracts with the owners of on-Island generating facilities:

- The principal power purchase contract is the PSA which provides for the sale to LIPA by National Grid of capacity and energy from the oil and gas-fired steam-electric, combustion turbine, and internal combustion (diesel) generating plants on Long Island formerly owned by Long Island Lighting Company. Those facilities provide approximately 4,000 MW in capacity. Under the PSA, LIPA is responsible to provide

[7] Current LIPA Resource Plan

fuel (natural gas or liquid fuel) as needed to produce electricity under economic dispatch. (LIPA contracts the fuel procurement activities to National Grid through the EMA.) The PSA expires on May 27, 2013, though LIPA may, in its sole discretion, renew the PSA for an additional 15-year term.

- LIPA issued a request for proposals in August 2010 seeking proposals for up to 2,500 MW of new and/or repowered generation. The earliest expected in-service date of any new and/or repowered power plant(s) constructed as a result of this RFP is May 2016.

- In addition, LIPA purchases approximately 1,000 MW of capacity under long-term power purchase agreements from generating facilities constructed on Long Island between 2001 and 2009, under which LIPA is responsible to provide fuel (gas and/or liquid fuel) as needed to produce electricity under economic dispatch. [8] LIPA contracts the procurement of fuel for these generating units to National Grid under the FMBSA.

LIPA's day-to-day power supply management functions are provided by Consolidated Edison Energy Inc. (CEE) and Pace Global Energy Risk Management (PACE). CEE and PACE provide certain services relating to bidding and scheduling of the LIPA Generating Facilities, as well as purchases and sales of energy, capacity and ancillary services. CEE provides "front" and "back" office power supply management services, and PACE monitors and reports the performance of CEE. Services under both contracts commenced full operation on January 1, 2010 and are for an initial five-year period, and are subject to an extension for a period of five years at LIPA's option.[9]

With respect to risk management practices, LIPA should have a "Risk Management Policy" which includes all associated control practices. Key risk management control practices are governance, control practices and execution of the process. Senior management should be involved in policy development, oversight, hedge strategy and execution. The Board should approve the Risk Management Policy, and the Audit Committee of the Board should oversee and review quarterly risk reports. A dedicated Risk Management function (which includes wholesale credit risk) should be independent from the supply procurement function.

Preventive controls that should be in place include trade documentation, trader authorization, financial product approval, and trade limits. Front, middle and back office activities should be segregated from the Risk Management function. Controls should include internal audit review, system-generated limit exception reports, accounting trade reconciliations, daily reconciliations, and voice recordings. Effective execution of trade control requires proper segregation of duties, appropriate software systems, reconciliation processes, trained staff and senior management support. The oversight process should ensure that an appropriate control environment exists, that industry leading practices are in place and that senior management is committed to having an effective hedge strategy. Improvements in a utilities supply procurement process can produce potentially significant savings depending on the nature of the utilities activities and the cost of capacity and energy purchases.

Lead Consultant: Carol Etter
Consultant: Dawn Francis, Elizabeth Lemkul

[8] LIPA April 2012 Fuel Management RFP
[9] LIPA April 2012 Fuel Management RFP

Phase II – Technical Review Consultant Hours: 180

RFP Evaluative Criteria:

- Does LIPA have appropriate supply portfolio principles, goals and objectives for mass market default customers?
- Does LIPA have appropriate risk management strategies and practices?
- Does LIPA use appropriate methods to evaluate the effectiveness of its supply portfolio with respect to price volatility and cost?
- Does LIPA have appropriate supply procurement strategies, policies, processes, and methods, including as it relates to fuel purchased for the on-island generation?
- Does LIPA have appropriate financial and physical hedging practices by customer type?
- Does LIPA use supply procurement performance benchmarking with other utilities in an appropriate manner to improve and monitor procurement performance?
- Does LIPA set appropriate portfolio performance goals?
- Are LIPA's portfolio oversight and controls adequate and effective?
- Are demand management/response, energy efficiency, and migration of retail customers to competitive suppliers factored into the portfolio and procurement processes in an appropriate manner?
- Is the current and proposed use of on-island generation provided by National Grid's Generation Company effective and efficient?
- Does LIPA's existing and planned power supply portfolio include the appropriate use of alternate energy sources (e.g., hydropower, wind, energy storage, etc.)?

Additional NorthStar Evaluative Criteria

- Are LIPA's organizations and processes to oversee power supply activities appropriate and effective?
- Does LIPA adequately oversee the power supply management functions provided by CEE and audit the monitoring and performance reports provided by PACE?
- Is the supply procurement planning process integrated with strategic and operational planning processes?
- Is LIPA appropriately involved with NYISO for supply planning purposes?
- Does LIPA effectively manage its long term power purchase agreements with the independent Long Island generating facilities?

- Does LIPA have appropriate strategies and plans to provide best cost, reliable energy and capacity for its mass market customers after the expiration of the PSA, EMA and FMBSA in May 2013?

Work Tasks:

1. Review supply procurement strategies, policies, processes, and methods, including portfolio performance goals, oversight and controls.

2. Determine whether or not the current mix of long-term and short-term electric supply arrangements for LIPA was established in accordance with a well-developed plan.

3. Assess the process for participating in the NYISO electric capacity and energy markets, and determine that the companies' activities represent the best interests of the ratepayers.

4. Determine whether LIPA reviewed and revised the supply procurement strategy to address changes in competitive pricing and risk issues associated with current energy markets and policy trends.

5. Identify and evaluate risk management strategies and practices as they relate to supply procurement and price hedging activities and assess the implementation of the financial and physical hedging practices.

6. Examine the use of performance benchmarking in the procurement processes, including the use of metrics and targets from other utilities.

7. Assess the role of demand management/response, energy efficiency and migration of retail customers to competitive suppliers in the portfolio and procurement processes.

8. Review the organizational placement of the responsibility for supply procurement planning, and oversight of supply procurement agreement activities.

9. Assess the mechanisms used to monitor and measure performance of the supply procurement performance, including the performance of National Grid, CEE and PACE, and determine if they are appropriate and result in sufficient controls and encouragement of process improvements.

10. Evaluate whether there is a clear and definitive system of approval authority by: a) type of commitment, b) value of commitment, c) level of approval required, d) stage at which approval is required, and e) documentation of approval.

11. Evaluate the policies and procedures that control supply procurement-related activities, including short and long-term contracting, daily purchases, nominations of NYISO systems, execution of hedges, verification of purchases, settlement and billing activities.

12. Examine documentation requirements concerning development and evaluation of portfolio and supply alternatives, and execution of portfolio decisions. Confirm that requirements are observed and adhered to.

13. Examine the policy and practice regarding internal audit reviews of the supply procurement agreements.

14. Examine the organizations and systems used to capture key data (e.g., credit evaluations, risk exposures, transaction details). Verify that those systems operate with adequate accuracy, completeness, security and integrity.

15. Determine if supply procurement policies and procedures are consistent with work requirements and supply procurement and marketing objectives.

16. Determine if the supply procurement process is sound, and integrated with strategic and operational planning processes.

17. Assess whether financial and physical hedging practices benefit customers. Verify that hedging purchases are made consistent with hedging guidelines, and that they represent an appropriate balance of opportunistic and mechanistic or pre-set purchases.

18. Assess LIPA's involvement with NYISO for supply planning/coordination purposes, demand forecasting, transmission coordination, scheduling and settlement. Confirm the involvement is sufficient to monitor and protect the interests of the ratepayers.

19. Review the processes for interface with independent wholesale and distributed generators, and confirm processes are reasonable, efficient and followed on a consistent basis.

20. Identity and evaluate the method(s) used by LIPA to evaluate the effectiveness of its supply portfolio with respect to price volatility and cost.

21. Review and assess LIPA's plans for replacement or extension of the PSA, EMA and FMBSA.

22. Review LIPA's financial and physical hedging practices by customer type.

23. Review and assess the current and proposed use of on-island generation provided by National Grid's Generation Company.

24. Evaluate LIPA's position and use of alternate energy sources (e.g., hydropower, wind, energy storage).

25. Assess LIPA's oversight of the power supply management functions provided by CEE and the monitoring and performance reports provided by PACE.

26. Assess LIPA's management of its long term power purchase agreements from generating facilities constructed on Long Island between 2001 and 2009.

27. Prepare a Task Report in this area.

E3.4: LIPA's Fuel and Purchased Power Cost Adjustment Clause Tariff Leaf 166[10]

Perspective

Utility regulatory bodies often provide for recovery of frequently changing costs, such as fuel and purchased power costs through some form of automatic adjustment clause, that are allowed to change periodically as the underlying expenses change without the need for a full rate case.

There are three general reasons for using for automatic adjustment clauses:

1. The underlying costs are often large and quite volatile. Variances in forecast costs could result in significant cash shortfalls for the utility if costs are not recovered in a timely manner or unduly high rates for ratepayers when costs are lower than projected.

2. The underlying costs are largely beyond the utility's control.

3. The costs have been "pre-approved", such as the costs of long-term power purchases as part of a commission-approved resource plan and do not need to be subject to further review in a full rate case.

Many automatic adjustment clauses include costs in addition to simple fuel and purchased power expenses. For example, as utilities have become more reliant on wholesale markets for short-term purchases and sales of diverse services such as short-term energy and capacity, ancillary services, and congestion relief, these costs have increasingly been authorized for recovery through automatic adjustment clauses.

LIPA adopted its initial electric tariff in its April 9, 1998 Rate Decision. The tariff was made effective May 29, 1998, upon LIPA's acquisition of LILCO. The initial tariff included a Fuel and Purchased Power Cost Adjustment (FPPCA) which was derived from LILCO's existing Fuel Cost Adjustment. LIPA's tariff listed the categories of fuel and purchased power and related costs to be recovered in the FPPCA. Since 2000, various modifications have been authorized by the Authority's Board of Trustees, including the partial waiver of amounts recoverable, and elimination a one-year lag recovery feature. The the current tariff provides for recovery in the current period of up to 100 percent of actual fuel and purchased power costs.

According to information available on the LIPA website, LIPA plans to modify its FPPCA in 2012. The proposed changes include the determination of the Adjustment Rate on a monthly basis, rather than quarterly, and basing the Adjustment Rate on a rolling twelve month forecast of fuel and purchased power and energy sales. Any variations from the previous month's estimate of recoveries will be added to or subtracted from the new rate.[11]

Lead Consultant: **Angela Anderson**
Consultant: **Elizabeth Lemkul**

Phase II – Technical Review Consultant Hours: 90

[10] A "leaf" refers to the numeric designation used to locate the applicable section of the Tariff, similar to a page number.
[11] LIPA Finance and Audit Committee Presentation, "Fuel and Purchased Power Cost Adjustment", March 29, 2012.

RFP Evaluative Criteria:

- Is LIPA's FPPCA Tariff clear, useful and comprehensive?
- Are the items listed under Tariff Leaf 166 reasonable, and are they related to fuel and purchased power costs?
- Has LIPA implemented its fuel and purchased power tariff in compliance with the requirements specified in the tariff?
- Are changes necessary to LIPA's Tariff Leaf 166 to better describe and illustrate actual fuel and purchased power costs?

Work Tasks:

1. Review the Liberty Consulting Group's September 2009 report on the LIPA's fuel and purchased power cost adjustment to determine the extent to which it can be relied upon in this audit.

2. Obtain and review LIPA's Tariff for Electric Service – Leaf No. 166 and assess the clarity of the language and whether all terms, particularly, the types of costs included in the FPPCA, are clearly and unambiguously defined. Determine whether the tariff allows sufficient transparency of the costs to be recovered and the recovery mechanisms/timing.

3. Identify all cost types recovered through the FPPCA.

4. Assess the reasonableness of cost types recovered through the FPPCA and their relationship to fuel and purchased power cost.

5. Determine whether costs listed in LIPA's Power Supply Charge tariff provision are of the nature to reasonably be considered components of the costs of fuel and purchased power.

6. In conjunction with work performed in Element 3.5, evaluate the usefulness and thoroughness of LIPA's FPPCA tariff. Determine if the clause addresses all relevant fuel and purchased power costs and recovery mechanisms.

7. In conjunction with work performed in Element 3.5, examine LIPA's implementation of the tariff for consistency with the requirements specified under its fuel and purchase power tariff.

8. Review LIPA's proposed changes to the FPPCA tariff and determine whether they are beneficial to LIPA and its ratepayers.

9. Identify possible changes to LIPA's Tariff Leaf 166 to better describe and illustrate costs to be included in the FPPCA.

10. Prepare a Task Report for this area.

Element No. 3.5: LIPA's Fuel and Purchased Power Cost Recovery

Lead Consultant: **Angela Anderson**
Consultant: **Elizabeth Lemkul, Cherry Ong**

Phase II – Technical Review Consultant Hours: 110

RFP Evaluative Criteria:

- Are the costs included in LIPA's clause recovered exclusively through that clause, or are they also included in other rates and charges?
- Do the actual costs recovered correctly reflect what is allowed under Tariff Leaf 166? (See also E3.4, LIPA's Fuel and Purchased Power Cost Adjustment Clause Tariff Leaf 166)
- Are the charges recovered through the FPPCA approved by the appropriate managers and Authority's Board of Trustees?
- Does LIPA maintain sufficient historical financial records for a reasonable time frame to assist with the verification of fuel and purchased power cost?
- Are the projections of future fuel costs incorporated in the Power Supply Charge reasonable?
- Are there possible improvements to LIPA's fuel and purchased power cost reconciliation with customer bills?
- Does LIPA have effective policies, procedures, and processes for determining the correct cost recovery amounts?
- Does LIPA have effective policies and procedures for approving changes to cost recovery?
- Does LIPA have effective policies and procedures for verifying cost recovery under the adjustment clause?
- Do LIPA' day-to-day practices comply with the requirements specified under its fuel and purchased power policies and procedures?

Work Tasks:

1. Meet with LIPA personnel to understand the FPPCA approval, accounting and cost recovery processes.
2. Obtain and review LIPA policies and procedures for determining the cost recovery amount, and verifying that the cost recovery amount is correct.
3. Obtain and review LIPA policies and procedures for approving changes to cost recovery.

4. Obtain and review LIPA's policies and procedures for verifying cost recovery under the adjustment clause.

5. Interview personnel responsible for performing the FPPCA calculations in order to understand the processes used, accounts involved, methods, calculations, work papers produced, and any tests/examinations performed to verify them.

6. Examine LIPA's day-to-day practices for consistency and adherence with the requirements specified under its fuel and purchased power policies and procedures.

7. Determine the effectiveness of LIPA's policies, procedures, and processes for determining the correct cost recovery amount.

8. Gain an understanding of relevant LIPA rate elements (base, FPPCA, and any others) and identify the cost types and amounts that form their bases. Compare the FPPCA cost types to the cost types in other LIPA rate elements.

9. Determine whether the costs LIPA recovers through the FPPCA are allowed per Tariff Leaf 166. (See also E3.4, LIPA's Fuel and Purchased Power Cost Adjustment Clause Tariff Leaf 166)

10. Compile a list of cost types identified in the FPPCA. Obtain and review documentation that contains the Board's authorization of FPCCA cost recovery, as well as manager's approval. Verify that costs recovered through the FPPCA are approved by the appropriate managers and the Board.

11. Determine whether LIPA has appropriate controls to assure the accurate assignment of costs between base rates and the FPPCA.

12. Evaluate the reasonableness of LIPA's projections of future fuel costs incorporated in the Power Supply Charge. Compare LIPA's projections of annual fuel costs (initial projections and any revisions to the projections during the course of the year) to the actual costs fuel costs recorded in the FPPCA. Identify and determine the cause of any significant variances.

13. Evaluate and identify improvements to LIPA's fuel and purchased power cost reconciliation with customer bills.

14. Prepare a Task Report for this area.

Element No. 3.6: Load Forecasting

Perspective

Load forecasts are a fundamental input to a number of strategic and planning considerations. The utility's forecasts for peak design day provide inputs to reliability considerations including transmission and distribution system design, required natural gas storage and pipeline capacity, and city-gate maximum daily send-out. The natural gas commodity sales forecasts provide inputs into supply planning, rate design, financial projections, and marketing programs. Accurate forecasts are critical to rate stability and reliability.

Modeling assumptions such as weather, price elasticity, and economic drivers are key inputs. Understatement of variables such as weather and economic conditions may result in underspecified infrastructure requirements or supply shortages. Overstatement of assumptions could result in unnecessary capital expenditures affecting rates. NorthStar's review of LIPA's load forecasting activities will include not only the models and recent accuracy, but also the assumptions used to populate the models and sensitivity analyses conducted on those input assumptions.

NorthStar's recent experience indicates that load forecasts are often less accurate than optimal due to a number of factors, including:

- The forecasting models may not be robust or their technology may be outdated.
- The utility may not have region-specific forecasting processes.
- Meter data collection activities may be inadequate to support development of end-use modeling.
- Projected effects from energy efficiency initiatives may not be included in forecasts.
- The impacts on consumption of inter-fuel competition and resulting commodity price changes do not reflect current research.
- Incorporation of retail access trends may be based on outdated assumptions of consumer behavior.

Lead Consultant: **Dawn Francis**
Consultant: **Carol Etter**

Phase II – Technical Review Consultant Hours: 90

RFP Evaluative Criteria:

- Are the models, assumptions, key drivers and other inputs to forecast local and system-wide load requirements appropriate?
- Are inputs, including demand side management (demand response), energy efficiency, and other similar factors given appropriate consideration in the forecasting process?
- Are forecasting functions organized and staffed appropriately?
- Are planning for electric load and region-specific factors integrated into the overall business processes and strategies?
- Does NYISO affect LIPA's forecasting in an appropriate manner?

Additional NorthStar Evaluative Criteria

- Does LIPA have well-defined forecasting platforms including multiple forecasting horizons, appropriately segmented customer models, and sufficient data sources?

- Does LIPA have access to and use best available data to support implementation of energy efficiency, demand response and other initiatives?

- Are the LIPA system load forecasts accurate, and are deviations between the forecasts and actual experience investigated and promptly corrected?

- Do the load forecasting functions/products meet the needs of finance and rates, supply procurement, regulatory compliance, system planning and other organizations within LIPA? (See also E1.1, Corporate Planning; E1.2, System Planning; and E3.3, Supply Procurement)

Work Tasks:

1. Assess the organization structure and staffing of forecasting activities.

2. Assess the manner in which load forecasting affects various strategic initiatives or provides substantial risk to LIPA. (See also E1.1, Corporate Planning)

3. Determine whether management processes ensure that all planning is based upon a set of common assumptions relating to demographics, economic conditions, financial capability and other factors which significantly affect the load forecast. (See also E1.1, Corporate Planning)

4. Evaluate the performance of the models, inputs, and assumptions LIPA uses to forecast load and supply requirements.

5. Assess the overall forecasting platform for types of models, data development, and application of models.

6. Determine if LIPA employs current technology and modern methods for data gathering in the development of its load forecasts.

7. Review and evaluate LIPA load research data.

8. Determine the adequacy of the input data used and consider whether the models provide adequate capability to assess the effects of potential loss of load to alternative energy providers, conservation, price sensitivity and other variables across a broad range of possibilities.

    - Review the types and sources of weather data used in each of the forecasts.

    - Determine the adequacy of demographic assessments, appliance saturation studies, customer surveys, and elasticity of demand studies and similar information used in the development of load forecasts.

    - Determine how demand side management (demand response), energy efficiency and other conservation initiatives are considered in the forecasting process.

    - Determine how LIPA accounts for the effects of retail access in their forecasting methodologies.

9. Review sensitivity or impact analyses performed on the load forecasts.

10. Compare actual sales and load data with forecasts for selected years.

    - Determine whether LIPA proactively participates in the NYISO and other regional forecasting activities on in the development of the Authority's FERC transmission filings.

11. Prepare a Task Report for this area.

Audit Area E4: The Authority's Annual Budgeting Procedures and Process

Perspective

This audit element focuses on LIPA's management and oversight of its capital and operations and maintenance (O&M) budgeting process. LIPA's O&M expenses are budgeted at $1.035 billion for 2012. O&M expenses are comprised of costs related to the T&D system management and PSAs with National Grid, which contain the costs associated with operating LIPA's T&D system and providing generated power. The MSAs and PSAs with National Grid total $744.6 million, or 72 percent of all O&M expenses. Other major costs included in O&M expenses are those for LIPA's Efficiency and Renewables Program ($116.3 million), New York State (NYS) assessments including the NYS Temporary Energy and Utility Conservation Assessment enacted in 2009 ($43.7 million) and the NYS Administrative Cost Recovery Assessment ($8.2 million), storm restoration costs ($52.0 million), the O&M activities associated with LIPA's 18 percent ownership interest in Nine Mile Point 2 nuclear power generating plant ($33.4 million), and losses on uncollectible accounts ($22.4 million). Professional services, consisting of outside engineering, financial, legal and other professional services, are budgeted at $19.5 million. Payments-in-lieu of taxes (PILOTs) are budgeted at $264.5 million, an increase of $42.5 million, or 19.1 percent, as compared with the expense level budgeted for 2011.

Typically, capital and O&M budgeting are separate, but closely related processes. Capital budgets are often driven from the top down by broad organizational needs such as customer and load growth and restrictions related to the capability of the utility to fund needed capital projects. O&M budgets are more often developed from the bottom up with recognition of the immediate physical needs of the system as well as long-term maintenance priorities. However, O&M budgets are often affected from the top by the same sort of funding restrictions that affect capital budgets. Because budgets are affected by both upper level (executive management) and lower level (line and operations) management, it is critical to review the roles of all levels involved in the budget development processes.

The review of budget processes must determine how and in what way needs-based information is incorporated. It must also determine what limitations on budgets are placed from the top down and the basis for these limitations. For example, are top-down restrictions based on predetermined profit margins and rates of return? In previous reviews of the capital and O&M budgeting processes at other utilities, NorthStar has identified weaknesses such as the following:

- Managers at inappropriate levels make decisions in the budget preparation process.

- Managers apply inconsistent rationale in decision making.

- Cost effective, efficiency improvements, and long-term maintenance priorities consistent with safety and reliability standards are deferred due to lack of capital.

- Decision-making criteria are not well-articulated or documented and are not consistently applied across all business units.

- The budgeting process does not have sufficient input from the bottom.

- The interface between workforce planning and the budgeting process is not clearly described and effectively implemented.

- Budgets and the related variance/management reporting processes are not consistent with operational plans or the implementation of those plans.

- Reports provided to managers are not useful in assisting managers to exercise their business responsibilities. Too often financial reports do not provide the appropriate detail and structure needed by operations managers.

Element No. E4.1: Capital and O&M Budgeting

Lead Consultant: **Doug Bennett**
Consultants: **Al Lucas, Cheryl Jenkins**

Phase II – Technical Review Consultant Hours: 180

RFP Evaluative Criteria:

- Are the roles and responsibilities of the Board of Trustees, and executive and senior management in the budget goal setting, preparation and oversight appropriate and are they executed effectively?

- Does the Board of Trustees see and have access to a sufficient level of budget detail relative to its budgetary responsibilities?

- Is the construction/capital priority setting process balanced, consistent and appropriately executed from the top down?

- Are incremental O&M expenses associated with new construction factored into the budgeting process in an appropriate manner?

- Do allowed revenues/rates and financing opportunities or constraints adversely affect budget levels and priorities?

- Are relationships among planned/budgeted expenditures and actual expenditures appropriate?

- Is the capital budgeting process documented, adhered to, appropriate and effective?

    - Project authorization
    - Project appropriation

- Increases/decreases to authorization and appropriation amounts
- Capital budget status reporting
- Validation in advance of appropriation
- Funding controls and other elements of the process

- Does LIPA use budgeting guidelines, practices and procedures, including "zero-based" and other alternative methods, effectively?

- Does LIPA have an effective methodology for prioritizing and approving capital projects?

- Does LIPA use appropriate modeling software in the capital and O&M budgeting processes?

- Is LIPA appropriately involved in the capital project prioritization process?

- Are capital budgets managed and controlled?

- Are bottom-up and top-down processes for developing budgets for capital/construction classifications and categories appropriate?

Additional NorthStar Evaluative Criteria

- Are financing considerations incorporated into the strategic plan and capital and O&M budgeting process? (See also E2.1, Application of Industry Standards to Manage Debt)

- Are the reports provided to managers clearly related to the budget and provide data that are helpful to managers in achieving budget goals?

Work Tasks:

1. Assess LIPA's role in the budgeting and project prioritization process relative to National Grid.

2. Evaluate the respective roles and involvement of the Board of Trustees and executive and senior management in the budgeting process and determine if they are appropriate.

    - Determine whether the Board of Trustees gets involved in the capital and O&M budget processes at the right time and to the appropriate extent.

    - Determine if the Board of Trustees sees and has access to sufficient detail.

    - Determine if the Board of Trustees responsibilities are documented and adhered to.

    - Determine if the Board of Trustees and executive and senior management are properly involved in the development of budgeting guidelines and management execution (e.g., investment priorities and allocations, periodic budget reviews and approvals) that are in the interest of NYS ratepayers.

3. Assess whether the construction/capital priority setting process is balanced and appropriate. Evaluate LIPA's methodology for prioritizing and determining which capital projects it approves.

4. Determine if organizational responsibilities for planning priorities and budgeting allocations are appropriate.

5. Determine if capital and O&M budgets effectively balance safety and reliability. Determine if repair versus replace decisions affect infrastructure/capital expenditures positively over the long-term.

6. Determine if cost-effective efficiency improvements are deferred due to lack of capital.

7. Determine whether appropriate capital budgeting policies and procedures exist, are clearly documented and understood, and are adhered to. (See also Program and Project Management.) Procedures should address:

    - Project authorization and appropriation
    - Increases/decreases to authorization/appropriation amounts
    - Validation in advance of appropriation
    - Funding controls
    - Capital budget status reporting.

8. Review and assess LIPA's budgeting processes.

    - Evaluate LIPA's use of budgeting guidelines, practices and procedures, including "zero-based" and other alternative methods.
    - Review capital and O&M budgeting systems.
    - Evaluate the timing of the budget development.
    - Review guidance given to the various organizational units involved in developing the budget.
    - Determine if bottom-up and top-down processes for developing the budgets for capital/construction classifications and categories are appropriate.
    - Determine how capital and O&M budgets are integrated.
    - Determine how incremental O&M associated with new construction is factored into the budgeting process.
    - Evaluate whether decisions are made at appropriate levels.

9. Assess the annual process for reviewing and determining whether total planned capital and O&M expenditures are adequate.

10. Determine if allowed revenues/rates and financing opportunities or constraints adversely affect budget levels and priorities.

11. Determine if relationships among planned/budgeted expenditures and actual expenditures are appropriate.

12. Determine if expenditures are managed and controlled. (See also project management)

- Review methodologies used to control and manage overall capital expenditures in the near-term and long-term.
- Assess the effectiveness of cost control systems and processes from both a top-down and bottom-up perspective.
- Determine if there are sufficient controls in place to ensure that increases and decreases to the construction budget/expenditures are justified and appropriately approved.
- Determine whether reports available to managers are appropriate to assist them in achieving budget targets.

13. Prepare a Task Report for this area.

Element No. E4.2: Program/Project Planning and Management

Lead Consultant: Doug Bennett

Phase II – Technical Review Consultant Hours: 30

RFP Evaluative Criteria:

- Do capital and O&M plans and budgets convert to specific programs and projects in an effective manner?

- Does LIPA have an effective methodology for tracking costs, work units and work quality for specific programs and projects?

- Does LIPA routinely identify typical variances between original budgeted and actual capital expenditures and work units?

- Does LIPA track and minimize variances in order to improve the cost control, efficiency/productivity and work quality?

Work Tasks:

1. Review how capital and O&M plans and budgets convert to specific programs and project schedules.

2. Examine methodology for tracking costs, work units and work quality for specific programs and projects.

3. Determine if variances between original project budgets and actual capital expenditures and work units are justified.

4. Review cost control methods and procedures, including reporting and accountability.

5. Prepare a Task Report in this area.

Audit Area E5: The Authority's Compliance with Debt Covenants

Perspective

Generally, when a utility issues debt, it must comply with State and Federal (Securities and Exchange Commission) security regulations, as well as with all requirements set by the lenders in the debt agreements. It is incumbent upon LIPA to meet its due diligence by complying with all stipulations made by its regulatory bodies and other requirements of its debt instruments. Moreover, LIPA must actively review its debt covenants in order to determine opportunities for increased efficiencies and cost savings relative to administrative costs and opportunities to reduce its risks and lower its cost of debt.

Element No. E5.1: Compliance with all Debt Covenants

Lead Consultant: **Al Lucas**
Consultants: **Robert Rozanski, Cherry Ong**

Phase II – Technical Review Consultant Hours: 80

RFP Evaluative Criteria:

- Does LIPA have appropriate policies and procedures for ensuring compliance with debt covenants?
- Does LIPA appropriately manage debt covenant defaults?
- Does the Board of Trustees effectively monitor LIPA's debt covenant compliance?

Additional NorthStar Evaluative Criteria:

- Are bond proceeds utilized as required by the bond covenants?

Work Tasks:

1. Review applicable laws and regulations.
2. Obtain details of bond issuances and covenants.
3. Assess organizational accountability and assignment of responsibilities.
4. Review existing policies, procedures, processes and controls for ensuring compliance with debt covenants and assess their adequacy.

    - Funds acquired are being used as approved.
    - Insurance coverage and reserve accounts requirements are maintained as required by bond covenants.
    - Proceeds invested as required to avoid arbitrage interest requirements, where applicable.
    - Principal and interest payments made as required.
    - Debt service requirements are met.

5. Review applicable internal and external audit reports, and regulatory examinations report. Review response or corrective action to any deficiencies identified.

6. Determine whether long-term debt is properly classified and presented on financial statements.

7. Review process for managing debt covenant defaults. Review any defaults and efforts taken to cure defaults.

8. Review information provided to the Board of Trustees regarding debt covenant requirements and compliance and applicable Board meeting minutes.

9. Assess the effectiveness of reporting and Board oversight of the process.

10. Determine whether LIPA complies with all applicable regulations and whether debt restrictions/requirements are followed.

11. Prepare a Task Report in this area.

Element No. E5.2: Management of Debt Covenant Requirements

Lead Consultant: **Al Lucas**
Consultants: **Robert Rozanski, Cherry Ong**

Phase II – Technical Review Consultant Hours: 60

RFP Evaluative Criteria:

- Does LIPA have appropriate processes for ongoing review of its debt covenant requirements? (See also E.5.1, Compliance with all Debt Covenants)

- Has LIPA been effective in modifying its debt covenant requirements to increase efficiencies, reduce costs and minimize risks?

Work Tasks:

1. Review process and procedures for ongoing review of existing debt covenants and identification of potential opportunities to reduce costs/rates, minimize risks, and increase efficiencies.

2. Review recent evaluations performed by LIPA, actions taken and results.

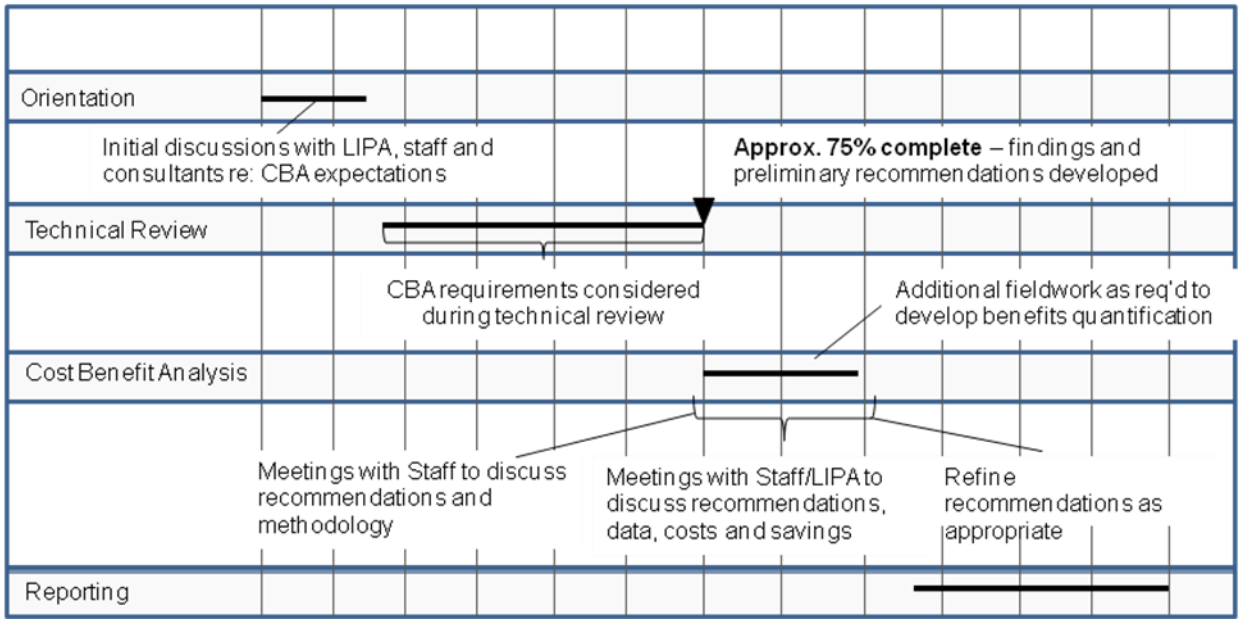
3. Review LIPA's recently announced debt reduction plan.

4. Prepare a Task Report in this area.

C. RECOMMENDATION COST-BENEFIT ANALYSES (CBA)

NorthStar will be responsible for fully developing the findings, conclusions and recommendations, and all findings, conclusions and recommendations will be subject to Staff's review for completeness. The need to thoroughly define recommendations and expected benefits, and quantify cost saving to the extent practicable, will be an integrated part of the overall audit process as shown in **Exhibit IV-12.**

Exhibit IV-12
CBA Process Overlay



As discussed in **Chapter III**, at about 75 percent complete NorthStar will develop preliminary recommendations and define the expected costs and benefits. This provides the requisite process structure and allows us to ensure recommendation are fully defined, realistic and can be implemented. All expected recommendation benefits will be defined and cost savings or revenue enhancements will be quantified to the extent appropriate and practicable. During this phase we will work with LIPA and the Staff in definition of expected benefits and the development of the costs and savings methodology and projections, where appropriate. NorthStar envisions this as an iterative, consultative process.

Potential costs and benefits are provided in **Exhibit IV-13.**

Exhibit IV-13
Potential Categories of Costs and Benefits

Cost Components	Benefit Components
• One-time and recurring costs • O&M and capital costs • Labor • Materials • Equipment • Systems • Training and development	• Increased productivity • Improved reliability • Reduced expenses • Reduced capital requirements • Reduced full time equivalents (FTEs) – internal labor or contractors • Improved practices and processes • Improved schedule adherence • Improved work quality • Optimized organization

Recommendations will consider cost benefit or risk benefit analyses, where appropriate. For those recommendations where the expected costs or benefits are difficult to quantify (e.g., having a member of the BOD that lives within the service territory) we will provided qualitative measures and expected benefits. In other areas, the costs of implementation may be *de minimus* and not warrant a detailed CBA. Our cost benefit analyses will include estimated implementation durations (months or years) and quantified dollar benefit and cost streams, as appropriate, using the following model:

- For a recommendation that is expected to have quantifiable net dollar benefits, we will define known cost components and quantify as many as feasible. We will also define all benefit components and quantify as many as feasible.

- For a recommendation that does not have quantifiable benefits, but nevertheless is desirable (improved performance or good management practices), we will define cost components and quantify as many as feasible. We will also define all benefit components.

- At a minimum, we will define as many benefit and cost components as feasible so that if/when more information becomes available, those components can be more readily quantified.

- We may also recommend a methodology for LIPA to capture the costs and benefits of implanting a specific recommendation.

Recommendations for improvements and/or change will be justified and accompanied by adequate supporting information, especially those involving significant implementation costs and/or savings. We will provide a five year schedule of implementation costs and savings. In providing supporting information for recommendations, NorthStar will include estimates of the following:

- Operating costs incurred before implementation of the recommendation.

- Operating costs to be incurred after implementation of the recommendation (one-time and recurring costs).

- Time frame for implementing the recommendation.

- Costs of implementing the recommendation and any annual maintenance costs.
- Savings after consideration of implementation and maintenance costs.
- Risks associated with not implementing the recommendation.

The cost-benefit analysis will be integrated with the evaluation and considered in the development of the final recommendations. Preliminary recommendations may be further defined or revised based on the cost-benefit analysis to maximize the benefits of NorthStar's recommendations while minimizing costs.

V. PROJECT TEAM AND RESPONSIBILITIES

The successful execution of the audit requires a project team with a unique blend of capabilities. NorthStar has assembled a project team with the technical and functional expertise and skills to meet the objectives of the audit. In particular, our team provides:

- Knowledge of utility industry matters and the capability to identify and address significant issues that affect LIPA's ability to provide quality, low-cost service to its customers.
- Experience in conducting management audits of utilities, balanced with experience in assisting clients implement recommendations.
- Specific experience in electric utility operations, including transmission and distribution, and customer operations.
- Expertise in municipal utility finance including debt management.
- An MBE CPA firm with experience in audits of utility accounting, finance and debt service.
- A senior project management team with extensive experience in performing complex, large engagements for utility regulators.
- Ability to work closely and communicate with the PSC staff and LIPA to ensure that Staff and Commission needs are addressed as recently demonstrated in our performance of the NMPC and Central Hudson audits.
- Freedom from any potential impairments or conflicts of interest. Neither NorthStar, nor any of its affiliates, personnel or subcontractors have any current or prior (within the past ten years) contracts or agreements with LIPA or any organizations which may represent their work forces.[1] NorthStar performed two prior engagements for the NYPSC – the management audits of Central Hudson and NMPC, and a management diagnostic for the New York Independent System Operator. None of these engagements pose a conflict.

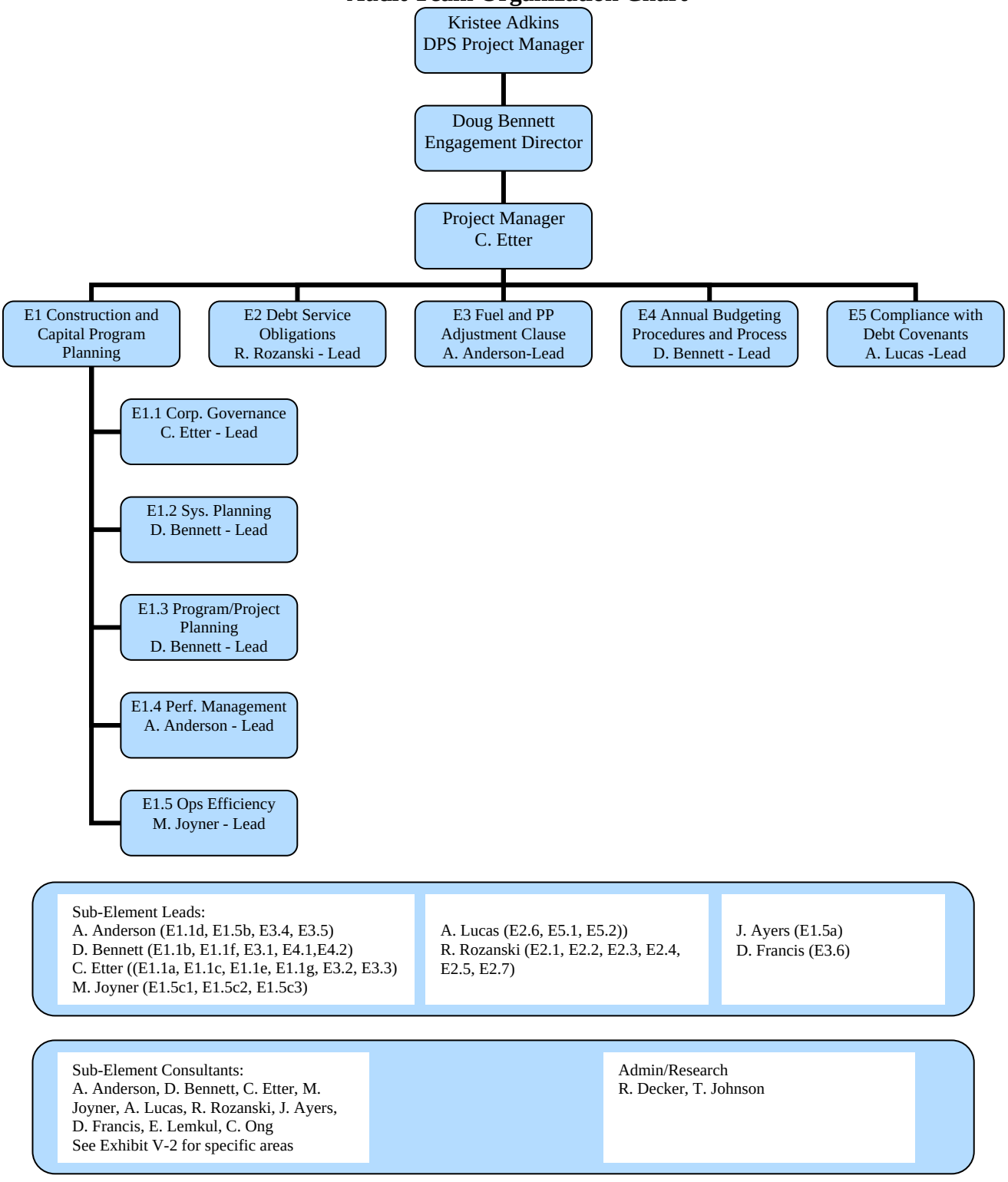
A. KEY PERSONNEL AND PROJECT ORGANIZATION

Each major audit area is assigned to a Lead Consultant who is an expert in that field. To facilitate coordination of our project team activities, we have organized the project audit areas as displayed in **Exhibit V-1**. Within each audit area are sub-elements with leads and support consultants. Four of our proposed team members worked on our Central Hudson

[1] In the late 1980's some of the NorthStar personnel worked on an engagement for PSE&G while employed with Theodore Barry & Associates.

audit and three worked on the NMPC audit. The relevant experience and the role of each team consultant team are summarized following the exhibit.

Exhibit V-1
Audit Team Organization Chart



Project Management

Mr. Douglas Bennett, a NorthStar founder and Managing Director, will act as Engagement Director and will serve as lead consultant for the reviews of system planning, program and project planning and management, and capital and O&M budgeting. He served in a similar capacity and directed our recent management audits of Central Hudson and NMPC for the New York PSC. Mr. Bennett has over 30 years of management consulting experience. He has directed and performed management audits for over 50 public service clients including electric and gas utilities, municipalities, seaports, airports and public service commissions. His work on numerous management audits has included operations and maintenance management, corporate performance, fuels procurement, work force management, materials management, purchasing, engineering, and construction. He has a BS in Industrial Engineering from California State Polytechnic University.

Ms. Carol Etter is an engineer and business management expert with over thirty years of experience in the utility industry. She will be Project Manager and lead consultant for the corporate governance and supply procurement review area. Her areas of expertise include corporate and strategic planning, utility management and controls, fuel and supply procurement, regulatory compliance, budgeting and financial analysis, and affiliate transaction analysis. Ms. Etter has extensive project management expertise, having served as project manager on numerous feasibility, fuel procurement, and energy efficiency projects for utility regulatory commissions across the country, most recently for a natural gas procurement audit in Ohio. Prior to her consulting work, she was employed by Citizens Utilities, a gas, electric and water utility where she conducted strategic planning and special projects for all segments of the company's operations. While with Citizens, Ms. Etter managed the $104 million acquisition of BHP GasCo's Hawaiian propane business by Citizens, including coordinating the due diligence field work, preparation and presentation of business case to the Citizens' Board of Directors, all regulatory approvals, and internal logistical integration activities, meeting Citizens' closing schedule and seamless conversion goals. Later, she served as the Utility Division Project Manager for implementation of a five-module SAP financial ERP system across twenty operating units in fifteen states. On the NMPC and Central Hudson audits, she was the lead consultant for supply procurement and a consultant for corporate mission. She also reviewed affiliate transactions as part of the audit of Central Hudson. She has a BS in Engineering from Swarthmore College and an MBA from the University of Colorado. She is a registered professional engineer in Colorado.

Audit Area Leads

Ms. Angela Anderson, a Certified Management Consultant (CMC), has over twenty-five years of utility consulting experience. She will be the lead consultant for performance management, the fuel and purchased power adjustment clause, the customer service sub-element, and the cost-benefit analysis. Ms. Anderson's areas of experience include regulatory compliance, management, operations and process reviews, performance measurement, financial assessments, internal controls, human resources, and customer service. Ms. Anderson recently reviewed performance management on the audit of Central Hudson. She has reviewed the customer service and complaint handling processes of

numerous entities including American Water, four Ohio Gas utilities, Just Energy (an alternative energy marketer), Southern Connecticut Gas, Glendale Water and Power and the Los Angeles County Department of Public Works. Ms. Anderson has conducted numerous audits of power supply, energy efficiency programs, utility tariffs, fuel and purchased power, utility adjustment clauses/balancing accounts, and stranded costs, and has testified regarding the results of these reviews. Ms. Anderson managed a $2 million review for the New Jersey Board of Public Utilities (BPU) looking at the power procurement practices and deferred balances (adjustment clauses) of three electric utilities. Ms. Anderson has an AB from the University of Chicago, and continued her education with additional coursework at the University of Chicago's Graduate School of Business and at Villanova University in Project Management.

Mr. Michael Joyner has almost thirty years of utility consulting and industry experience. He will be the lead consultant for the operations efficiency audit area. An expert in utility operations, his areas of specialization include transmission and distribution, work management, manpower planning, emergency preparedness, storm restoration, operations planning, organization, operations planning, project management and budgeting. Mr. Joyner has served on a wide assortment of large and complicated assignments and has demonstrated his effectiveness in analyzing complex processes and finding opportunities for improvement. Mr. Joyner has played a key role in more than two dozen utility management audits on behalf of regulatory agencies and has also helped at least sixteen utilities prepare for and navigate through regulatory audits. He also has a wide range of experience in evaluating utility emergency preparedness and storm restoration activities.

Mr. Al Lucas is a Principal in the assurance practice at TCBA, an MBE, CPA firm certified in New York. Mr. Lucas will serve as lead consultant for the review of debt covenant compliance and provide support for the review of LIPA's debt management. Mr. Lucas has more than 30 years of audit and business consulting experience, with particular focus on state and local government clients and public utilities. He has worked with NorthStar personnel on a number of prior engagements. Mr. Lucas reviewed the financial structure of both the Water Services and Energy Services Division of LADWP which included a review of the debt structure. Prior to joining TCBA, Mr. Lucas was responsible for SEC reporting and regulatory reporting for a major utility company in the Washington D.C. area which included monitoring compliance with and proper reporting of debt agreements and working with the Chief Financial Officer in projecting cash flow requirements for operations and capital. Mr. Lucas' clients also include several municipal government entities with significant debt portfolios such as the District of Columbia Government, Montgomery County and Prince George's County in Maryland, the City and State of New York and the Air Quality Management District of Los Angeles. Mr. Lucas is a Certified Public Accountant, a Certified Internal Auditor and a Certified Information Systems Auditor. He has a BS in Economics from Cornell University and an MBA in Accounting/Finance from the University of Rochester.

Mr. Robert Rozanski is a specialist in utility financial operations. His expertise extends across debt management, financing, budgeting, and internal audit. Mr. Rozanski will serve as lead for the review of LIPA's debt management and will assist with the review of debt covenant compliance. Mr. Rozanski has over 30 years of public utility experience.

Previously, he served as Chief Financial Officer of the Southern California Public Power Authority (SCPPA), Acting General Manager of the Los Angeles Department of Water and Power (LADWP) – the nation's largest municipal utility, and LADWP's Assistant Chief Financial Officer and Treasurer, where he managed LADWP's debt portfolio that included a commercial paper program, variable-rate demand obligations, and fixed rate bonds, including liquidity support (i.e., stand-by bond purchase agreements, and letters/lines of credit). In his capacity as Assistant CFO at LADWP, Mr. Rozanski was responsible for a $9 billion debt management and reduction plan during the transition to competitive electric markets. LADWP was facing the possibility of over $4 billion in stranded assets associated with its off balance sheet generating plants. He reduced retail electric rates from among the highest to the lowest in the State by implementing a comprehensive energy deregulation plan that involved significant cost reductions and complex restructuring of a $7.0 billion bond portfolio. Mr. Rozanski has a BSBA in Accounting from California State University in Long Beach and an MBA with Beta Gamma Sigma Honors from UCLA. Until recently, Mr. Rozanski was a Certified Public Accountant (CPA) in the State of California.

Sub-Element Leads/Support Personnel

Mr. James Ayers is a CMC and work force management and productivity improvement expert with extensive consulting experience assessing and implementing operations improvement. He will be lead for the work management sub-element, and assist in the reviews of performance measurement and program and project planning and management. His clients include government agencies, utilities, manufacturers, and private industries. Mr. Ayers has assisted over 25 clients improve their project management and workforce management and implement best practices. In addition to his consulting work, Mr. Ayers provides management training, including a two-day workshop that is certified fully compliant with the Project Management Institute's Body of Knowledge (PMBOK-Guide®). The workshop details best practices in lean and six sigma disciplines. Mr. Ayers is a member of the Project Management Institute (PMI) and the Council of Supply Chain Management Professionals. He is a published author and frequent speaker in Europe and Asia. Mr. Ayers holds a BS (with distinction) from the U.S. Naval Academy and MBA and MS Industrial Engineering (MSIE) degrees from Stanford University. His MSIE specialty was economic systems planning which focused on engineering economy and capital budgeting.

Ms. Elizabeth Lemkul is a CMC with over 25 years of management consulting experience in the electric utilities industry. She is the owner of EAL Consulting, a women-owned business enterprise (WBE), and a frequent NorthStar subcontractor. EAL Consulting is certified in California and has applied for authorization in New York. Ms. Lemkul will assist in the review of outside services and the fuel and purchased power adjustment clause review area. Ms. Lemkul has performed over 30 management audits of utility companies for regulators and government agencies. Her areas of expertise include power supply and resource planning, budgeting and accounting, contract oversight, and utility management and operations. Ms. Lemkul has performed operational audits of several public power organizations, including LADWP, Lower Colorado River Authority, and Burbank Public Service Department. Most recently, she reviewed LADWP's renewable power program and fuel adjustment clause in an audit performed for the Los Angeles Controller's Office. She also has performed several reviews of utility power supply. She served as Lead Consultant

for the review of the Atlantic City Electric Company's power procurement practices, and has also previously reviewed energy resource planning and power supply issues in reviews of the City of Burbank Public Service Department, Nevada Power Company, Connecticut Light and Power, and Dayton Power & Light. Ms. Lemkul has a Sc.B. in mechanical engineering from Brown University, and an MBA in finance and marketing from the University of Chicago.

Ms. Dawn Francis has over twenty years of experience in the utility industry as both a consultant and utility professional. She will be the lead consultant for the load forecasting sub-element and provide technical support in a variety of other areas. On the NMPC and Central Hudson audits, she was the lead consultant for load forecasting and a consultant for the system planning and program planning areas. She LADWP's load forecasting process as part of an audit for the City Controller. Prior to joining NorthStar, Ms. Francis had over ten years of direct experience in utility resource and financial planning having served as the electric rates manager for LADWP. She holds a BS in Electric Power Engineering from Rensselaer Polytechnic Institute and is a Registered Professional Engineer in the State of California.

Ms. Cheryl Jenkins, CPA, is a TCBA Senior Audit Manager with more than 25 years of progressive and diversified experience having worked with "Big Four" Public Accounting firms, Fortune 50 businesses, and the Executive Branch of the New Jersey State Government. She will assist with the reviews of budgeting, ratemaking and ERM. Ms. Jenkins has developed extensive knowledge of financial accounting and reporting policies and requirements and internal control systems. She has held senior positions on the consulting staffs of Coopers & Lybrand and Deloitte Touche, where most of her work involved operational efficiency reviews; budgeting, expense, cost allocations and cash flow analyses, and financial controls reviews. As Chief Financial Officer of the Office of Children's Services in the New Jersey Department of Human Resources, Ms. Jenkins managed, coordinated and directed all activities related to the financial and related operating units, environment, processes, and financial and management reporting structure for the Division. As a Policy and Financial Adviser in the State of New Jersey Office of the Governor, Ms. Jenkins advised the Governor, cabinet and senior staff on matters pertaining to the fiscal policies of New Jersey's 38 independent authorities and agencies. She represented the Governor's Office on New Jersey's Commission on Capital Budgeting and Planning for the annual capital budget recommendation of the 19 state departments. Ms. Jenkins obtained a BS in Business Administration, Accounting from the University of Florida, Gainesville, FL.

Ms. Cherry Ong, CPA, is a TCBA Audit Manager with over 14 years of professional experience in financial and compliance audits, accounting, financial analysis and control, and tax preparation for audit units that belong to not-for profit, healthcare, and governmental industries. Ms. Ong has reviewed debt management programs, including strategies for debt refunding/defeasance to manage interest rates, provided assistance for new debt issuances, and has review programs for ensuring compliance with debt covenant requirements. She provided assistance to bond issuers and underwriters in analyzing historical accounting data to develop trends used in determining the feasibility and soundness of the proposed governmental bond issuance. She also developed an accounting manual for Industrial Development Bonds issued by the Miami-Dade Industrial Development Authority on behalf of a not-for-profit organization. Ms. Ong has a BS in Accountancy from the University of

the Assumption, Philippines, and a BS in Mathematics from the University of Sto. Tomas, Philippines.

Administrative/Research Personnel

Mr. Robert Decker has over twenty-nine years of experience in industry with a focus on information technology. He will provide administrative and research support. He served as the project administrator on the NMPC and Central Hudson audits. His utility clients have also included Southern California Edison and Qwest Communications. Mr. Decker has a degree from Evergreen Valley College in Business Administration and Accounting and attended San Jose State University. He also has a B.S. in Business Accounting from the University of Phoenix.

Mrs. Tracy Johnson will provide administrative and research support. She recently provided project administrative services for NorthStar's audit of JustEnergy where she also reviewed the third-party verification and customer complaint processes. Ms. Johnson provides expertise in quantitative analysis and finance. Prior to joining NorthStar, Ms. Johnson was a branch manager at Vine Street Trust, responsible for business development, client/customer relationships and loan auditing. She also worked in risk management at Liberty National. Ms. Johnson has a BBA in finance and an MBA from the University of Kentucky.

B. ROLES, RELATIONSHIPS AND EXPECTED TIME COMMITMENT

Exhibit V-2 provides the roles of the consulting team members, describes their relationship with NorthStar and provides their expected project time commitment. Credentials were summarized above and are detailed in the consultant resumes that follow. The members of the proposed team have worked together on many projects in the past. **Exhibit V-3** provides a list of assignments which included at least three of the project team members. Detailed work hour estimates are provided in **Exhibit V-4**.

Exhibit V-2
Roles, Relationship and Time

Consultant	Lead Role(s)	Support Roles	Relationship	Expected Time Commitment
Doug Bennett	Engagement Director E1.1b – Organization Structure E1.1f – Outside Services **E1.2 – System Planning** **E1.3 – Program/Project Planning** E3.1 – NYISO E 4.1 – Capital and O&M Budgeting E4.2 – Program/Project Planning and Management	E1.5c.3 – Repair/ Replace and Reactive/ Corrective Maint.	NorthStar	595

Consultant	Lead Role(s)	Support Roles	Relationship	Expected Time Commitment
Carol Etter	Project Manager **E1.1 – Corporate Governance** E1.1a, 1.1c, 1.1e and 1.1g E3.2 – Fuel and PP Contract Mgmt E3.3 – Supply Procurement	E1.1d Communication and Control E2.5 - Ratemaking	NorthStar	665
Lead Personnel				
Angela Anderson, CMC	E1.1d – Communications/Control **E1.4 - Performance Management** E1.5b – Customer Service **E3 - FPPCA and Recovery** E3.4 and 3.5 Cost-Benefit Analysis	E1.1a – Executive Management E1.3 - Program and Project Planning E1.5a - Work Management	NorthStar	660
Mike Joyner	**E1.5 – Efficiency of Operations** E1.5c 1-3 T&D	E1.5a – Work Management	NorthStar	480
Al Lucas, CPA, CIA, CISA	**E5 – Compliance with Debt Covenants** E5.1, E5.2 E2.6 Shoreham	E2 – Debt Service Obligations E4.1 – Capital & O&M Budgeting	MBE - TCBA. Has worked with NorthStar personnel on numerous prior engagements.	420
Robert Rozanski	**E2 – Debt Service Obligations** E2.1, 2.2, 2.3, 2.4, 2.5, and 2.7	E1.1c - BOT E5 – Compliance with Debt Covenants	NorthStar	375
Consultants				
Jim Ayers	**E1.5a – Work Management**	E1.3 - Program and Project Planning E1.4 - Performance and Results Management	Subcontractor – no prior NorthStar projects. Worked with NorthStar personnel when all were employed at Theodore Barry & Associates.	245
Dawn Francis, PE	3.6 – Load Forecasting	E1.2 - Sys. Planning E1.3 - Program and Project Planning E3.3 – Supply Procurement	NorthStar	365
Liz Lemkul, CMC		E1.1f – Outside Services E3.1 – NYISO E3.2 – Fuel and PP Contract Management E3.3 - Supply Procurement E3.4 - FPPAC Tariff E3.5 - Fuel and PP Cost Recovery	WBE. Formerly NorthStar. Has worked with NorthStar on numerous prior engagements.	325

Consultant	Lead Role(s)	Support Roles	Relationship	Expected Time Commitment
Cheryl Jenkins, CPA		E1.1e – Strategic Planning E1.1g – ERM E2.5 - Ratemaking E4.1 – Capital/O&M Budgeting	MBE-TCBA	285
Cherry Ong, CPA		E2 – Debt Service Obligations E3.5 – Fuel and PP Cost Recovery E5 – Compliance with Debt Covenants	MBE-TCBA	280
Robert Decker, Tracy Johnson		Project Administration Research Support	NorthStar	490

Note: Major Audit Areas are listed in bold, and correspond to the organization chart provided in Exhibit V-1.

Exhibit V-3
Consultant Shared Project Experience

Client – All Projects Below are NorthStar Engagements	Bennett	Anderson	Etter	Ayers	Francis	Joyner	Lemkul	Lucas	Rozanski
ILAW (2012)	X	X	X		X				
Central Hudson (2010)	X	X	X		X				
LA Renewables (2011)	X	X			X		X		
NJAW (2010)	X	X	X		X		X		
Ohio Gas Credit (2010)		X	X		X				
SCG (2009)		X	X		X				
NMPC (2009)	X		X		X				
SCE (various)	X	X			X				
LCRA (2007)		X			X				
Sempra (2006)	X				X				
PG&E Financial Condition (2001)		X				X			
CPUC Financial Audits (various)		X					X	X	
SCE Research & Development Audit	X	X					X	X	
PSE&G (2000)	X				X	X			
ACE Restructuring Filings		X					X	X	

Exhibit V-4 provides the detailed work hour estimates for each consultant.

Exhibit V-4
Work Hour Estimate

		D. Bennett	A. Anderson	J. Ayers	C. Etter	D. Francis	E. Lemkul	M. Joyner	R. Rozanski	A. Lucas	C. Jenkins	C. Ong	Admin/RA Support	Total
Phase I: Planning and Orientation		**80**	**80**	**30**	**80**	**40**	**40**	**40**	**40**	**40**	**30**	**0**	**40**	**540**
Phase II: Technical Review														
E1.1a	Executive Management		30		50				10					90
E1.1b	Org Structure	30			10				20					60
E1.1c	BOT	10	20		30				20					80
E1.1d	Communication and Control		30		30								40	100
E1.1e	Strategic Planning	10			70						10			90
E1.1f	Outside Services	40	10		10		40	20	10				40	170
E1.1g	Enterprise Risk Management				20				10	20	50			100
E1.2	System Planning	50				70		20						140
E1.3	Program and Project Planning	65	60	30		75								230
E1.4	Performance and Results Measurement		80	60									30	170
E1.5a	Work Management		30	60				90						180
E1.5b	Customer Service		80					20					60	160
E1.5c.1	Reliability		10	20		20		60					20	130
E1.5c.2	Preventive Maintenance					20		100					20	140
E1.5c.3	Repair/Replace and Reactive/Corrective Maint.	35						55						80
E2.1	Industry Standards for Management of Debt								50	50		50		150
E2.2	Approvals for Debt Management								20	30		40		90
E2.3	Debt Management Practices								20	20		20		60
E2.4	Risk Management								10	30		20		60
E2.5	Ratemaking Model				30				30		40	20		120
E2.6	Shoreham								10	30		40		80
E2.7	Cash Reserve								20			20		40
E3.1	NYISO	20	20				30							70
E3.2	Fuel and PP Contract Management	10	20		30		50							110
E3.3	Supply Procurement		10		70	30	30						40	180

		D. Bennett	A. Anderson	J. Ayers	C. Etter	D. Francis	E. Lemkul	M. Joyner	R. Rozanski	A. Lucas	C. Jenkins	C. Ong	Admin/RA Support	Total
E3.4	Fuel and PP Adjustment Clause Tariff		40				50							90
E3.5	Fuel and PP Cost Recovery		30				30					50		110
E3.6	Load Forecasting		10		10	70								90
E4.1	Capital and O&M Budgeting	40								50	90			180
E4.2	Program/Project Planning and Management	30												30
E5.1	Compliance with Debt Covenants								10	50		20		80
E5.2	Management of Debt Covenant Requirements								20	20		20		60
	Subtotal Phase II	**340**	**480**	**170**	**360**	**285**	**230**	**365**	**260**	**300**	**210**	**280**	**250**	**3,530**
Phase III: Cost-Benefit Analyses		**50**	**50**	**25**	**25**	**10**	**25**	**25**	**25**	**30**	**25**	**0**	**0**	**290**
Phase IV: Report Development		**50**	**50**	**20**	**50**	**30**	**30**	**50**	**50**	**50**	**20**	**0**	**0**	**400**
Project Management		**75**			**150**								**200**	**425**
	Total Hours	**595**	**660**	**245**	**665**	**365**	**325**	**480**	**375**	**420**	**285**	**280**	**490**	**5,185**

Note: Lead team members highlighted in yellow.

C. RESUMES

The following pages contain detailed resumes of the proposed audit team. The resumes are presented alphabetically.

ANGELA L. ANDERSON, CMC

Project Roles: **Lead Consultant:** **Performance and Results Management**
Fuel and Purchased Power Adjustment Clause
Cost-Benefit Analysis
Consultant: **Executive Management, Program and Project Planning and Work Management**

Summary of Qualifications

Ms. Angela L. Anderson is a CMC with 20 years of consulting experience. She has directed or served as lead consultant in numerous engagements for regulators or other government agencies. Ms. Anderson's areas of experience include regulatory compliance, management, operations and process reviews, performance measurement, financial assessments, internal controls, human resources, and customer service. Ms. Anderson recently reviewed performance management on the audit of Central Hudson. She has reviewed the customer service and complaint handling processes of numerous entities including American Water, four Ohio Gas utilities, Just Energy (an alternative energy marketer), Southern Connecticut Gas, Glendale Water and Power and the Los Angeles County Department of Public Works. Ms. Anderson has conducted numerous audits of power supply, energy efficiency programs, utility tariffs, fuel and purchased power, utility adjustment clauses/balancing accounts, and stranded costs, and has testified regarding the results of these reviews. Ms. Anderson managed a $2 million review for the New Jersey Board of Public Utilities (BPU) looking at the power procurement practices and deferred balances (adjustment clauses) of three electric utilities. Ms. Anderson has an AB from the University of Chicago, and continued her education with additional coursework at the University of Chicago's Graduate School of Business and at Villanova University in Project Management.

Representative Customer Service Experience

- Directed a management and compliance audit of the sales and marketing practices, complaint handling and call center operations of Just Energy Illinois (an alternative natural gas supplier) for the Illinois Commerce Commission. The objective of the audit was to substantially reduce customer complaints. (2011-2012)

- Reviewed the cost of customer services and external affairs charged to Illinois American Water by the American Water service company. (2011-2012)

- Review customer service (including complaints), external relations, call center operations and human resources as part of the comprehensive management audit of New Jersey American Water of the NJ Board of Public Utilities. Reviewed affiliate marketing programs and executive compensation as part of the engagement. (2010)

- Project Manager for a process review of the credit and collection policies and operations of the four investor-owned gas utilities in Ohio for the Public Service Commission of

Ohio. Reviewed Columbia Gas Ohio's operations. The review included an assessment of the effectiveness of both internal collection activities as well as first and third party external agencies, including call center operations. (2010)

- Project manager for the comprehensive management audit of Southern Connecticut Gas. Reviewed customer service, call center operations and the marketing function. (2009)

- Managed the review of the Customer Services Section of Glendale Water & Power for the City of Glendale. Analyzed call center operations, business processes and made recommendations for improvement.

- Reviewed customer service and performance measures as part of the management review of the Los Angeles County Department of Public Works. Conducted a benchmark survey of other public works agencies to assist in the development of best practices.

- Assessed collections and payment processing as part of the customer service audit of Pacific Bell for the California Public Utilities Commission. Review was initiated as a result of customer complaints regarding the speed and accuracy of Pacific Bell's payment processing function.

- Assessed customer services, demand-side management and marketing in the management audit of New Jersey Natural Gas for the New Jersey BPU.

Representative Power Supply and Adjustment Clause Audits

- Managed an audit of the Los Angeles Department of Power's renewable program for the City Controller. Reviewed renewable project selection and procurement practices, LADWP's tariff, its fuel/purchased power adjustment clause and categories of costs included in the clause. The review also included an assessment of the Board's oversight and performance reporting.

- Managed a $2 million prudence review of Atlantic City Electric Company's, Jersey Central Power & Light's and Public Service Electric & Gas' (PSE&G's) procurement practices and the reasonableness of the utilities deferred balances (fuel and purchased power costs) for the New Jersey BPU. Reviewed PSE&G's power procurement activities. Testified before the New Jersey BPU in proceedings related to the audit of deferred balance costs and the reasonableness of management practices.

- Assistant Project Manager for an assessment of the financial condition of Pacific Gas & Electric during the California energy crisis. Testified before the CPUC regarding PG&E's deferred balances (fuel and purchased power costs) and the potential impact of a proposed accounting change. PG&E's deferred balances had increased to over $6 billion as a result of rising power costs and frozen rates. Briefed the Energy, Utilities and Communications Committee of the California Legislature on the cause of the deferred balances, the mechanics of the accounting, and the impact of a proposed accounting change.

- Managed a compliance review of SCE's transition cost balancing account balances and headroom revenues as part of a Commission-ordered audit. The audit included a review of the fuel adjustment clause.

- Project Manager for the review of hourly power exchange prices of Southern California Edison Company, San Diego Gas & Electric Company and Pacific Gas & Electric for the California PUC. Reviewed the utilities' tariffs and associated cost calculations.

- Reviewed Los Angeles Department of Water and Power's wholesale trades during the first half of 2002 to determine whether the trades were consistent with the Department's wholesale trading policies and procedures and risk management policies. Reviewed a sample of trades to determine whether the trades were backed by physical capacity, fuel purchases, or were speculative in nature.

- Directed a compliance audit to assess the status of NPC's implementation of the original audit recommendations and to review the recommendations in light of the current bulk power marketplace and changes in the electric industry. The review focused on NPC's power system operations, including fuel and purchased power practices. Reviewed NPC's wholesale trading and power procurement activities for a sample of days and hours, as part of that assessment.

- Determined stranded investment under rules defined by the Public Utilities Commission of Texas applicable to investor-owned utilities in comparison to an analysis performed using municipal rate making principles and a model developed by the firm for a publicly owned utility in Texas. Ran alternative scenarios assuming various mitigation strategies.

- Assistant Project Manager for the financial verification compliance audit of the costs associated with Pacific Gas & Electric's Diablo Nuclear Power Plant for the California PUC.

- Managed a review of SDG&E's electric industry restructuring transition costs as part of a Commission-ordered audit. Reviewed non-recorded sunk costs and estimated future costs resulting from existing obligations. The audit included a review of the fuel adjustment clause.

- Provided assistance to the Burbank City Council in the development of a strategic plan for the Public Service Department in response to industry restructuring. The engagement included the determination of stranded investment and future use of assets, development of rate strategies for recovering stranded investment and transition costs, and identification of mitigation opportunities.

Performance Measurement and Efficiency Reviews

- Lead consultant for performance measurement and results and consultant for capital and O&M budgeting in the management audit of Central Hudson for the New York PSC. (2010)

- Reviewed performance measurement and executive compensation for a non-profit. (2011)

- Reviewed the Los Angeles Department of Water & Power's energy efficiency program management as part of a compliance audit for the City of Los Angeles.

- Directed an audit of the operational effectiveness of a fund administered by two utilities for the Connecticut DPUC. Assessed internal controls, organizational structure, staffing levels, cost controls, administrative costs and existing processes.

- Conducted an organizational analysis for Maricopa County Arizona's Environmental Services Department, Water and Wastewater division. Reviewed organization structure, staffing levels and all major work processes to identify efficiency improvements and eliminate non-valued added activities. Reviewed the Department's fee model.

Other Financial-Related Audits

- Directed a $2.4 million financial and management audit of utility public goods charge programs for the California PUC. Reviewed procurement practices, internal controls, costs, program management, delivery and administration. Assessed SCE's compliance with market share requirements and other Commission rules as they relate to utility affiliates and other energy service companies.

- Directed an audit of eleven entities receiving emergency energy efficiency and low-income assistance funding (SBX15) for the California PUC. Determined whether the funds achieved demonstrable energy peak demand reduction while limiting administrative costs associated with the expenditures.

- Audited direct, indirect and allocated costs (including corporate services and other departmental charge backs) as part of NorthStar's audit of the transmission cost of service of the Lower Colorado River Authority.

- Managed an audit of Citizens Telecommunications Company of California's California High Cost Fund-B (CHCF-B) claims performed for the California PUC.

- Reviewed generation RD&D projects in the evaluation of SCE's Research, Demonstration and Development (RD&D) program for the California PUC.

- Reviewed energy efficiency program management, program controls, contract administration and program costs for the residential programs as part on an audit of PG&E's demand-side management programs.

- Reviewed the reasonableness of Pacific Gas and Electric Company's management of the construction of the $850 million Pipeline Expansion Project for the California PUC. Lead consultant for the review of the development of the fixed-price contract between the owner and the project manager. Quantified the excess costs incurred as a result of mismanagement. Managed the preparation of rebuttal testimony and provided written and oral expert testimony.

- Lead Consultant for two compliance audits of merger costs and savings performed for the Illinois Commerce Commission. Assessed merger transaction costs, allocated costs between Ameritech Illinois and its affiliates and between regulated and non-regulated activities, and reviewed transactions with selected affiliates.

Work Experience

- Director, NorthStar Consulting (2009 to present)
- Independent Management Consultant (1989-1990, 2008)
- Managing Director, blueCONSULTING, Inc. (2003-2007)
- Director, Barrington-Wellesley Group, Inc. (1991-2002)
- Associate, Theodore Barry & Associates (1987-1989)

JAMES B. AYERS, CMC

Project Role: **Lead Consultant: Work Management**
Consultant: Performance and Results Management
Program and Project Planning and Management

Summary of Qualifications

Mr. Ayers has extensive consulting experience in assessing and implementing operations improvement. Client industries include government agencies, utilities, manufacturers, and private industry service providers. Some of his clients include the Port of Long Beach, FedEx, San Francisco County Transportation Authority, Bombardier Transportation Services (rail vehicles after sales support), Western Municipal Water District, Los Angeles Department of Water & Power (LADWP), American Electric Power, Southern California Edison, Orange County Water District, and Omaha Public Power District. He has reviewed field crew support; professional, technical, and administrative functions; and all phases of capital project planning and construction.

Mr. Ayers' areas of expertise include lean supply chain implementation, productivity improvement, quality improvement, information systems requirements and implementation, facilities management, organization reviews, and a range of industrial engineering skills. He has developed approaches to evaluating hard-to-measure technical and professional environments, including paperwork intensive workflows with complex requirements for participant decision-making. Throughout his career, Mr. Ayers has also developed and applied methodologies for activity-based costing to justify process changes that cross department and organization boundaries. He has also applied the Project Management Institute's (PMI) Organization Project Management Maturity Matrix in a management perform audit of the San Francisco Municipal Transportation Agency's (SFMTA) capital program. The audit included assessing the adequacy of processes in all three PMI project management domains – projects, programs, and portfolios.

In addition to his consulting work, Mr. Ayers provides management training, including a two-day workshop that is compliant with PMI's Project Management Body of Knowledge (PMBOK-Guide®). The workshop details best practices in lean and sigma disciplines. Mr. Ayers also conducts workshops and courses internationally. Work has included Executive MBA supply chain management course to Chinese executives under contract to UCLA Extension.

In the last decade, Mr. Ayers has authored six books on the emerging supply chain management discipline with an emphasis on the role of project management in implementing change. Several are best sellers used in college level courses internationally. He speaks frequently in Europe and Asia and is the editor of the Encyclopedia of Supply Chain Management published in 2012. Jim's recent book on Supply Chain Project Management 2nd Edition will be translated into Chinese.

Mr. Ayers is a member of the Project Management Institute (PMI) and the Council of Supply Chain Management Professionals. He serves on the Institute of Management Consultants' Certification Committee which maintains IMC's ISO-approved certification process and reviews candidates for certification. Mr. Ayers holds a BS (with distinction) from the U.S. Naval Academy and MBA and MS Industrial Engineering (MSIE) degrees from Stanford University. His MSIE specialty was economic systems planning, a discipline that includes measuring rates of return from public sector investments.

Work Force Management and Process Improvement Consulting Experience

- Productivity improvement expert employing project management and workforce management best practices and methodologies. Clients include half-dozen utilities and over 20 other government agencies, manufacturers, healthcare organizations, and service organizations.

- Conducted numerous reviews and implementation of work force management and logistics improvement projects addressing organization structure, process reengineering, inventory control, and information technology modernization. Related client experience at utility and non-utility clients includes:

American Electric Power	Port of Long Beach (POLB)
Bombardier Transportation	Public Service Company of New Mexico (PNM)
Brookstone Telecom	Public Service Enterprise Group (PSEG)
City and County of San Francisco	Schlumberger Limited
City of Anaheim	Sierra Pacific Power Company (now NV Energy)
Los Angeles Department of Water & Power (LADWP)	Southern California Edison
	Tucson Electric Power Company
Omaha Public Power District	U.S. Postal Service
Orange County Water District	Western Municipal Water District

- Provided extensive process documentation of the construction process lifecycle at Port of Long Beach (POLB). Employed the PMI standard for public agency construction project work breakdown structure. The process analysis work Jim supported at the Port also encompassed over 20 environmental planning and permitting activities. As a result, the Port implemented stronger processes for managing the engineering project life cycle.

- Analyzed POLB processes and systems including procurement of construction-related software and related services. Prepared solicitations for portfolio and construction project management software, including user-defined features and requirements, and coordinated Port staff evaluations of alternative solutions. The requirements addressed the entire asset lifecycle from planning to post-construction operation.

- Facilitated a review of Bombardier Transportation's aftermarket logistics and procurement organization. The company is the world's largest manufacturer of rail vehicle and provides extensive maintenance services to transit operators. This led to a redesign of its organization, measures, and processes for supporting vehicle maintenance and overhaul. The result included structuring of the Materials and Logistics organization to focus on operator requests for outsourced maintenance services to maintain and assure availability of fleet vehicles.

- Facilitated the creation of a service request system for the POLB Engineering Design Division that handles smaller construction and major maintenance projects. Evaluated current processes for service requests and designed streamlined process supported by Port SharePoint application.

- Assisted Western Municipal Water District (WMWD) (Riverside CA) to analyze its warehouse and purchasing functions. The scope included planning warehouse layout and equipment, designing processes for procurement and material management using Council of Supply Chain Management (CSCMP) *Process Standards*, and recommending an implementation plan.

- Analyzed future operating requirements and made recommendations for the Orange County Water District's Groundwater Replenishment System (GWRS), a 70 MGD "toilet to tap" facility. Work included an analysis of staff numbers, organization, and shift scheduling for operating a greatly expanded facility. The deliverables provided a roadmap for reviewing staff levels as the technology was implemented. The project budget was over $400 million.

- Project Manager for capital program performance audit of San Francisco Municipal Transportation Agency (2010-2012). The project employed international standards to evaluate capital program processes, organization, and systems for expansion construction, facility rehabilitation, and vehicles planning and replacement. Standards employed included PMI's Organizational Project Management Maturity Model (OPM3) and the Institute of Asset Management's PAS 55-1 and 2: 2008 (*Specification for Optimized Management of Physical Assets).*

- Structured and served as engagement leader for company-wide workforce management improvement initiatives at Theodore Barry & Associates. Contributed to criteria for evaluating utility work force management practices. Developed a service model used to evaluate the completeness of management processes for monitoring and controlling workforce levels. Led efforts to implement audit finding at several electric utilities including Columbus and Southern Electric Company (now AEP), Public Service of New Mexico, and Omaha Public Power District.

Other Representative Experience

- Reviewed load planning functions for Tucson Electric Power Company as part of a management audit.

- Prepared process improvement training curriculum based on industry best practices for use by Port of Long Beach divisions. Delivered training to Port business analysts to prepare for process improvement assignments within Port divisions. This activity accompanied the implementation of new information management programs budgeted at $24 million.

- Assisted the Port in implementing its Business Continuity Plan. Set up teams, defined processes that required continuity plans, and implemented support software (eBRP Toolkit).

- Supported development of Air Products and Chemicals' Ionic Transport Membrane (ITM) technology. ITM applications include innovations in energy production. Work produced estimates of "should cost" manufacturing processes to meet expected demand.

- Provided cost estimating model support to Jet Propulsion Laboratory and Sandia Laboratories for estimating the cost of producing, marketing, and installing photovoltaic solar cells in residential, commercial, and industrial markets. The work guided funding decisions and progress toward goals for a large research effort sponsored by the U.S. Department of Energy.

- Provided expert testimony in State of Virginia utility rate hearing on the effect of rates on the speed of solar technology penetration.

Work Experience

- Principal, CGR Management Consultants Inc. (1993 to Present)
- Partner Designate, Ingersoll Engineers (1991 to 1993)
- Partner, Coopers & Lybrand (1989 to 1991)
- Vice President and Director, Theodore Barry & Associates (1971 to 1989)
- U.S. Navy Submarine Force (1964 to 1969)

DOUGLAS A. BENNETT

Project Role: **Engagement Director**
Lead Consultant: **System Planning**
Project and Program Planning and Management
Capital and O&M Budgeting

Summary of Qualifications

Mr. Bennett, a NorthStar founder and Managing Director, has over thirty years of consulting experience to the public service and utilities industries. He has directed and performed management reviews for over 50 utility clients as well as directing audit assignments for over 20 regulatory agencies. He is an expert in operations improvement and corporate performance particularly in the areas such as production operations, work force management, materials management, purchasing, engineering and construction. In his 16 years as a Vice President and Director for a major management consulting firm, he had responsibility for the firm's operations and productivity improvement practice area. He has a BS in Industrial Engineering from California State Polytechnic University.

Project and System Planning Experience

- Lead consultant for the review of project management and system planning for the management audits of NMPC and Central Hudson for the New York PSC. (2009 and 2010) Mr. Bennett also served as engagement director.

- Directed a project for Southern California Edison to develop strategies to reduce regulatory risks for its construction program. Surveyed large utility construction projects and performed benchmarking analyses to highlight regulatory risk potential.

- Directed an improvement program for the City of Phoenix Aviation Department's Capital Expenditure Program. Developed project management tools, and integrated management controls between the program manager, contractors, and the City.

- Directed numerous studies of engineering and construction management functions for the following clients:

Arizona Public Service Company	Pacific Gas & Electric Company
Consolidated Edison Company	Public Service Electric & Gas Company
El Paso Electric	Public Service Company of New Hampshire
Los Angeles Dept. of Water and Power	Sierra Pacific Power Company
Nevada Power Company	Southern California Edison Company
New York Power Authority	Utah Power and Light Company

- Directed three projects covering the engineering and construction of the Palo Verde Nuclear Generating Station for Arizona Public Service: project management, planning and construction; litigation support; and summary level project history.

- Conducted numerous reviews of materials management and logistics functions to improve organizational structure, re-engineer processes, upgrade technology and systems support, and control inventory. Clients include:

Arizona Public Service	Los Angeles Dept. of Water & Power
Carolina Power & Light	Nevada Power Company
Columbus Southern Ohio Electric	New Jersey Natural Gas Company
East Bay Municipal Utility District	Northern States Power Company
Glendale Public Utilities	Oklahoma Gas & Electric Company
General Public Utilities Corporation	Public Service Company of New Mexico
Jersey Central Power & Light	Public Service Electric & Gas Company
Pennsylvania Electric Company	San Diego Gas & Electric Company
Metropolitan Edison Company	Southern California Gas Company

- Directed a management audit of Pacific Gas & Electric's Pipeline Expansion Project's management practices, project costs and controls, and cost allocations for the California PUC. Focused on project management fees, contract selection, engineering and construction costs, cost classifications, and owner involvement.

Capital Project Planning

- Directed a program for Southern California Edison's Transmission & Distribution (T&D) Business Unit to improve policies and procedures utilized to identify, design, and construct electric system capital projects. Improvement areas included: the Transmission Construction Master Plan; the project management organization; evaluation criteria and prioritization scheme; executive decision-making; policies and procedures, and strategies for outsourcing and contracting.

- Directed a capital project planning and organizational review of the Sky Harbor International Airport for the City of Phoenix, Arizona. The Department renewed efforts to complete the Master Plan, improve project management controls and reporting systems; and develop policies and procedures to support project management.

- Performed a comprehensive production competitive study for Public Service Electric & Gas. Revised organizational structure and management practices in plant operations and maintenance, capital project planning, economic dispatch, performance and cost comparisons, and production cost modeling.

- Assisted Nevada Power Company in its efforts to improve capital and O&M facilities planning and management activities, resulting in facility improvements that were incorporated in the North Las Vegas service center.

- Conducted numerous generation, transmission and distribution improvement programs for clients that include:

Boston Edison Company	Nevada Power Company
Central Power and Light	Niagara Mohawk Power Corporation
City of Colorado Springs Department of Public Utilities	New York State Electric & Gas Company
Columbus and Southern Ohio Electric	Niagara Mohawk Power Corporation
Consumers Power Company	Oklahoma Gas and Electric

Glendale Public Utilities
Kentucky Utilities
Ketchikan Municipal Utilities
Los Angeles Department of Water and Power
Montana Power Company
Mountain Fuel Supply Company
Omaha Public Power District
Public Service Company of New Mexico
Public Service Electric and Gas
Seattle City Light
Tampa Electric Company
Utah Power and Light

Other Management Audit Experience

- Directed an audit of the fees assessed to Illinois American Water by its affiliate service company for the Illinois Commerce Commission. (2011)

- Directed the audits of NMPC and Central Hudson for the New York PSC. Lead consultant for system planning, program/project management, and capital and O&M budgeting. (2009 and 2010)

- Directed the 1999, 2000, 2001 and 2006 Affiliate Transaction Audits for Southern California Edison. These audits, ordered by the California PUC, determined compliance with the State's Affiliate Transaction Rules.

- Directed the 2002 and 2004 Affiliate Transaction Audits for San Diego Gas & Electric and Southern California Gas. These audits, ordered by the California PUC, determined compliance with the State's Affiliate Transaction Rules.

- Directed an audit of Public Service Electric & Gas's compliance with affiliate transaction standards. Assessed the extent of cross-subsidization of competitive services provided by the utility or its affiliates.

- Conducted a comprehensive management audit of the Research Demonstration and Development program of Southern California Edison for the CPUC. Reviewed projects to ensure compliance with FERC guidelines, costs and program justification.

- Project manager for a management audit of the Los Angeles Department of Water and Power. Reviewed power operations and maintenance, design and construction, transmission, dispatch, fuels management, and for overall project administration.

Work Experience

- Managing Director and Founder, NorthStar Consulting Group, Inc. (1999 – present)
- Vice President, Navigant Consulting. (1997 - 1999)
- Managing Director and Co-Founder, Barrington-Wellesley Group, Inc. (1990 - 1997)
- Vice President and Director, Theodore Barry & Associates. (1973 - 1990)

CAROL L. ETTER

Project Role: **Project Manager**
Lead Consultant: **Corporate Governance, Fuel and Purchased Power Contract Management, Supply Procurement**
Consultant: **Load Forecasting, ERM, Ratemaking, Communication & Control**

Summary of Qualifications

Ms. Etter has over thirty years of experience in the energy and utility industry, including strategic and business planning, fuel procurement and regulatory compliance, budgeting and financial analysis, implementation of enterprise software system, acquisition analysis and execution, and energy industry restructuring. She has extensive experience in market and financial analysis, rate and regulatory initiatives, supply portfolio development, operational efficiencies, management analysis and business process re-engineering. She has consulted for public utility commissions, public and municipal utilities, and private energy companies across the country, in many cases serving as project manager for the engagement. She was employed by Citizens Utilities, one of the early nationwide gas, electric and water utilities, conducting strategic planning and special projects for all segments of the company's operations. She has a BS in Mechanical Engineering from Swarthmore College and an MBA in Finance from the University of Colorado.

Project Management Experience

- Project manager for the management/performance audit of the fuel procurement operations of Duke Energy of Ohio for the Ohio PUC.

- Project manager for the $104M acquisition by Citizens Utilities of BHP GasCo's Hawaiian propane and manufactured gas operations, including oversight of due diligence work, business case preparation and presentation, fuels and operating risk components of contract negotiations, coordination of all in-house/target teams implementing the merger, identifying and resolving staff and organizational challenges arising from the merger of two organizations with vastly different corporate cultures, regulatory filings, and smooth, on-line cut over of operations and management.

- Project manager for the implementation of the SAP Enterprise Resource Program at Citizens Utilities, including consolidation of charts of accounts, development of cost allocation systems, programs and procedures, utility field staff training, and smooth, on-time cut over. Implementation affected over twenty operating units in fifteen states.

- Coordinated all budgeting and strategic planning for the public utility operations of Citizens Utilities. As part of these efforts, oversaw the activities to forecast gas and electric demand and to integrate the purchasing of natural gas, and contracts for the purchase and sale of power into the strategic and operational plans. The budgeting efforts also included review and coordination with regulatory affairs and accounting

department personnel to assure appropriate recording, forecasting, and tracking of supply purchases and costs for regulatory oversight purposes.

- Project manager for a proposed joint venture between Citizens Utilities and an engineering firm to supply backup generation for pumping stations for the New Orleans Sewerage & Water Board. Coordinated efforts of the gas supply and the regulatory affairs departments, and the engineering firm to obtain the necessary permits from the state regulatory commission and the City Council.

- Project manager and lead consultant on numerous natural gas and electric fuel and power contract management audits. Prepared detailed evaluations of fuel supply portfolios, purchased power, coal and gas supply contract terms, and developed assessments of those terms relative to market trends and corporate risk abatement activities.

- Served as project manager on a three-year gas procurement audit in Tennessee involving all three of the regulated gas utilities in the state. Developed on-going monitoring reports, and oversaw the monthly tracking of gas procurement activities.

- Project manager on a comprehensive review of Atlanta Gas Light's integrated resource plan. Reviewed the demand forecasting methodologies for their appropriateness for use in demand-side management (DSM) program development. Reviewed the gas supply planning processes and identified opportunities for improving the integration of demand forecasting into the supply planning process.

- Project manager on projects in Montana and British Columbia to evaluate the role of gas DSM programs as alternatives to expending pipeline facilities to meet increased customer demand. These projects involved integration of supply forecasting procedures, demand forecasting models, and the demand side management programs.

Supply Procurement Experience

- Lead consultant for supply procurement/wholesale markets for the management audits of NMPC and Central Hudson for the New York PSC. (2009 and 2010)

- Lead consultant for supply procurement for the management audit of Southern Connecticut Gas for the CT DPUC. (2009)

- Lead consultant for the management/performance audit of Duke Energy of Ohio's gas supply procurement processes, planning, implementation and results. Duke had elected to outsource most of its gas supply daily operations, so the audit focused on planning, controls, and coordination with the third-party supplier. (2009)

- Reviewed technical and financial risks for numerous wind-power and cogeneration power projects, including developing appropriate contractual and/or rate treatments to mitigate risks to both investors and ratepayers associated with non-performance.

- Served as Senior Consultant on fuel procurement projects in Illinois and Indiana. In both projects, reviewed existing practices and policies and identified gaps and opportunities

for improvements. The Illinois project also included examination of the risk mitigation program operated by the company.

- Prepared a Midwest gas distribution utility for a biannual gas procurement review audit. Reviewed all procurement, demand forecasting, and price volatility mitigation programs and documentation. Reviewed all on-system gas procurement over a three-year period, along with price and deliverability risk mitigation programs.

Corporate Governance and Planning Experience

- Consultant for the review of corporate mission and strategic planning on the management audits of NMPC and Central Hudson for the New York PSC. Also reviewed Central Hudson's affiliate transactions. (2009 and 2010)

- Lead consultant for the review of shared services costs charged or allocated to Illinois American Water. (2011)

- Lead consultant for strategic planning and finance for the management audit of Southern Connecticut Gas for the CT DPUC. (2009)

- Lead consultant for strategic planning for the management audit of New Jersey American Water for the New Jersey BPU. (2010)

- Lead consultant on the management decision-making and productivity improvement elements of a Business Process Review of Central Vermont Public Service. Included assessment of the decision-making processes, models, documentation, and effectiveness. Reviewed the overall strategic planning process, implementation of an ERP software package and examined the productivity improvement process used to identify and prioritize process improvements, as well as the results of the improvements. (2008)

- Developed corporate policies, state commission filings, and implementation plans for Citizens Utilities' electric industry restructuring activities. Prepared electric industry filings for Vermont and Arizona commissions addressing activities for Citizens' operations in those states. Developed corporate positions on consumer protection, supplier of last resort, stranded cost recovery, functional separation of regulated and non-regulated operations, and provision of ancillary services.

- As part of prudence reviews, reviewed management decisions associated with continuing or canceling construction of large nuclear and coal-fired power plant decisions. The projects involved examining changes in demand forecasts over time, compared to the costs of continuing, suspending, or canceling construction contracts.

Work Experience

- Director – NorthStar (2008 - present)
- Independent Consultant (2002 – 2007)
- Director – Economic Development, Downtown Development District, New Orleans, Louisiana, (2000 – 2001).

- Citizens Utilities Company (Public Services Sector); Harvey, Louisiana (1995 – to 2000)
  - Director, Financial Analysis and Reporting
  - Project Director, Strategic Market Development Team
  - Acting Vice President, Marketing Department
  - Director, Market Development
- Manager RCG/Hagler Bailly, Boulder, Colorado (1983-1995)

DAWN FRANCIS

Project Role: **Lead Consultant: Load Forecasting**
Consultant: Supply Procurement, System Planning
Program and Project Planning and Management

Summary of Qualifications

Ms. Francis has over 20 years of professional experience in the utility industry as both a consultant and utility professional. Ms. Francis has over ten years experience in utility resource and financial planning. She served as the electric rates manager for the Los Angeles Department of Water & Power. Ms. Francis actively participated in the utility's rate designs, marginal cost studies, load research program, and incremental cost causation models. She recently served as lead consultant reviewing the load forecasting functions of NMPC and Central Hudson. Ms. Francis holds a BS in Electric Power Engineering from Rensselaer Polytechnic Institute and is a Registered Professional Engineer in the State of California.

Load Forecasting Experience

- Consultant for the review of load forecasting on the management audits of Central Hudson and NMPC for the New York PSC. Assisted in the review of system planning. (2009 and 2010)

- Reviewed the Los Angeles Department of Water and Power's (DWP) load forecast as part of an audit of DWP's renewables program. (2010)

- Lead consultant for the review of load forecasting on the management/performance audit of gas supply procurement of Duke Energy for the Ohio PUC. (2009)

- As Assistant Supervisor of Load Forecasting for the Los Angeles Department of Water & Power, responsible for the development and population of econometric and end-use models used to forecast system peak demand. Developed weather normalization and customer elasticity models.

Project and Program Planning Experience

- Consultant for program/project planning on the management audits of NMPC and Central Hudson for the New York PSC. (2009 and 2010)

- Lead consultant for a performance review of the City of Los Angeles' energy conservation program. Assessed how the City is planning, implementing and maintaining energy conservation initiatives for City facilities. Identified organizational and technological improvements that would assist the City meet its energy goals. (2008)

- Lead consultant responsible for regulatory research on construction retrospective reviews for Southern California Edison. Determined the causal factors that lead to increased

regulatory scrutiny and rate base disallowances. Allowed the utility to include analyses and considerations prior to project initiation and ultimately obtain the required results while recovering all costs through the rate base. (2003)

- Lead consultant responsible for the development of project implementation policies and processes for the City of Phoenix Aviation Department's Capital Improvement Program. Assisted in the development of the Capital Program Annual Budget and a project prioritization system.

- Performed a study for the City of Los Angeles Bureau of Engineering to evaluate the effectiveness of organization changes and project management tools. The study was a "before and after" analysis that utilized metrics as percent cost overrun, number of projects on schedule, and percent overhead cost to complete project.

Other Utility Consulting Experience

- Reviewed service company costs allocated to Illinois American Water (2011).

- Lead consultant for affiliate interests on the management audit of Southern Connecticut Gas for the Connecticut DPUC. (2009)

- Lead consultant on the review of the credit and collection practices of the four Ohio gas utilities for the Ohio PUC. (2009)

- Directed a management audit of the Lower Colorado River Authority (LCRA) and its Transmission Services Corporation. The purpose of this audit was to determine the necessity of reasonableness of costs recovered through LCRA's wholesale transmission rates. The study focused on the effectiveness of the administration of capital transmission expansion projects, the appropriateness of direct charges, and the reasonableness of overhead cost allocations. (2006)

- Lead consultant on the 2000, 2001, 2002 and project manager for the 2004 Affiliate Transaction Audits of SDG&E and SoCalGas. Responsible for review of customer service functions, non-discrimination, and separation. Performed analysis of affiliate transactions for the procurement of natural gas and electricity to determine compliance with the Affiliate Transaction Rules.

- Lead consultant on an audit of Public Service Electric & Gas's compliance with affiliate transaction standards. The audit also assessed the extent of any cross-subsidization of competitive services provided by the utility or its affiliates. (2000).

- Lead Consultant for the 1999 Affiliate Transaction Audit of Southern California Edison. The purpose of the audit, ordered by the California PUC, was to determine the degree of compliance of Edison with the State's Affiliate Transaction Rules. Specific areas of responsibility included non-discrimination and separation applicability and assessment.

- Lead consultant responsible for performance measure calculation verification for the 2003/2004 Colorado Performance Assurance Plan Audit of Qwest Communications. The

purpose of this audit was to determine if Qwest provides service to competitive local exchange providers in the same manner as to its own local exchange provider.

- Lead consultant on a gas procurement study for the Public Service Company of New Mexico. The purpose of this study was to investigate Commission-approved trading and hedging mechanisms utilized for natural gas procurement throughout the U.S. and determine the impact on ratepayers. Responsible for identifying types of mechanisms utilized, how the mechanisms were developed, the relative merits and limitations of the mechanisms, and the constraints and limitations placed on traders. (1999)

- Participated in an organizational and operational assessment for the City of Phoenix Aviation Department. The goals of the project were to identify opportunities to reduce costs, increase efficiency and improve service levels. A comprehensive review was conducted that included organization missions and functions, management systems, administrative procedures and operational practices, based on benchmarking comparisons and a knowledge of best practices employed by other planning, engineering design and construction management organizations. Responsible for reviewing contract change order management.

- Lead consultant on regulatory reporting requirements review for Southern California Edison. The purpose of the study was to identify opportunities for consolidation, elimination, and modernization of processes associated with filing documents with the California PUC. (2002)

Work Experience

- Senior Associate, NorthStar Consulting (1999 to present)
- Los Angeles Department of Water & Power
  - Manager of Electric Rates. Responsible for the development and maintenance of the City's Electric Rate Ordinance. Responsible for the development of rate classes, marginal cost of service studies, embedded cost of service studies, system and class load shapes, and rate design. Administered the system load research program.
  - Supervisor of Retail Customer Contracts. Responsible for the development of long-term customer performance contracts. The purpose of these contracts was to encourage customers to alter usage patterns, interrupt load and/or defer uneconomic bypass of the system.
  - Assistant supervisor of Strategic and Business Planning. Responsible for the development of customer marginal cost and profitability analysis and evaluation of wholesale utility costs against wholesale market cost.

CHERYL D. JENKINS, CPA

Project Roles: Consultant: Strategic Planning
Enterprise Risk Management
Ratemaking Model
Capital and O&M Budgeting

Summary of Qualifications

Ms. Cheryl Jenkins CPA, is a TCBA Senior Audit Manager with more than 25 years of progressive and diversified experience having worked with "Big Four" Public Accounting firms, Fortune 50 businesses, and the Executive Branch of the New Jersey State Government. She has developed extensive knowledge of financial accounting and reporting policies and requirements and internal control systems. She has held senior positions on the consulting staffs of Coopers & Lybrand and Deloitte Touche, where most of her work involved operational efficiency reviews; budgeting, expense, cost allocations and cash flow analyses, and financial controls reviews.

As Chief Financial Officer of the Office of Children's Services in the New Jersey Department of Human Resources, Ms. Jenkins managed, coordinated and directed all activities related to the financial and related operating units, environment, processes, and financial and management reporting structure for the Division. As a Policy and Financial Adviser in the State of New Jersey Office of the Governor, Ms. Jenkins advised the Governor, cabinet and senior staff on matters pertaining to the fiscal policies of New Jersey's 38 independent authorities and agencies. She represented the Governor's Office on New Jersey's Commission on Capital Budgeting and Planning for the annual capital budget recommendation of the 19 state departments. Ms. Jenkins obtained a BS in Business Administration, Accounting from the University of Florida, Gainesville, FL.

Selected Relevant Experience

- Participated in a comprehensive review of the New York Metropolitan Transit Authority (MTA), the Metro-North Railroad (MNR), Long Island Rail Road (LIRR), and the New York City Transit (NYCT) Operating and Maintenance Expense Budgets to ensure that the financial resources allocated to these activities are sufficient to maintain its rolling stock and infrastructure adequately for the safety of its passengers.

- Conducted a detailed budget analysis of the MTA Bus Company. Reviewed the budgets for the inspection, maintenance, and repair program for all assets categories for the MTA Bus Company. The objective of the review was to recommend whether the budgets should be certified as reasonable, appropriate and sufficient to assure the combined operation of MTA Bus Company.

- Provided financial management and organizational structure to the City of Camden to develop a cost of service and rate design for the water and sewer utilities owned by the City of Camden, including the development of a financial model and the conduct of a public education and participation program to support the cost of service and rate study.

- Managed, coordinated and directed strategic financial consulting services to the City of Newark, NJ management and staff of various City departments as well as relevant county and state agencies:

  - Provided strategic financial consulting services to the City of Newark in the development of a 5-year Capital Improvement Plan; an assessment of the UCC permit process and fees (including cost allocation and customer pricing), the Insurance Fund Commission, and the City Employees' Retirement System; to improve capital budgeting and additional assigned areas.

  - Reviewed, reconciled and monitored the Grants Funds (Federal, state, county and local as well as private agencies): Budgets, expenses, draw downs, allocations and reporting, including the timely maintenance and update of the Grants' Management Reporting Tools. The Grant Budget Log Book, Available Balance Report, Receivable Report, and Combined Available and Receivable Report being the primary reports/tools.

  - Assisted in identifying operational efficiencies such as the automations of reports, use of Grant Module Financial Components (coordinated with the PeopleSoft IT Staff), and others in Grant Accounting.

  - Assisted in identifying operational efficiencies, and office and file logistics in the City's State Employee Retirement Systems.

- Served as the Schomburg Charter School's Financial Advisor to the Board of Trustees to provide assistance and advice on its overall Financial Direction and Strategic Planning.

  - Assisted in putting in place sufficient financial and budgetary controls to ensure fiscal integrity and accurate financial reporting, and assisted with the monthly and on-going reviews.

  - Assisted with the preparation of the Comprehensive Annual Financial Report (CAFR) and the annual audit and filing of other supporting forms, schedules and data indicating fiscal stability (N.J.S.A. 18A:23-1).

  - Assisted in participating in and implementing operating measures to promote the efficient expenditure of funds, and sufficient and required accountability over restricted revenues.

- Participated in an organizational review of the effectiveness and efficiency of the Delaware River Port Authority; to review management, administration, and operations of each division, department, office, unit and function of the Authority

Education

B.S., Business Administration, Accounting
University of Florida, Gainesville, FL

Certifications

Certified Public Accountant (CPA), New Jersey

MICHAEL C. JOYNER

Project Role: Lead Consultant: Efficiency of the Authority's Operations
Consultant: Work Management

Summary of Qualifications

Mr. Joyner has almost thirty years of utility consulting and industry experience. An expert in utility operations, his areas of specialization include transmission and distribution, work management, manpower planning, emergency preparedness, storm restoration, operations planning, organization, operations planning, project management and budgeting. Mr. Joyner has served on a wide assortment of large and complicated assignments and has demonstrated his effectiveness in analyzing complex processes and finding opportunities for improvement. His vast experience has made him acutely aware of the constantly changing environment faced by today's regulated utilities, as well as the need to respond to those changes. Mr. Joyner has played a key role in more than two dozen utility management audits on behalf of regulatory agencies and has also helped at least sixteen utilities prepare for and navigate through regulatory audits. He also has a wide range of experience in evaluating utility emergency preparedness and storm restoration activities. Mr. Joyner has a BS in General Engineering from the United States Naval Academy.

Audit Preparation Experience

- Assisted several utilities in preparing for and navigating through management audits by their respective state regulatory agencies (2006 through 2012). Clients companies included:

  Atlantic City Electric
  Consolidated Edison
  Elizabethtown Gas
  Fairpoint Communications
  Iberdrola
  National Fuel Gas
  New Jersey American Water
  New Jersey Natural Gas
  New York State Electric and Gas
  Rochester Gas and Electric
  Public Service Electric and Gas

- Project manager for a review of South Jersey Gas to help it prepare for a commission-ordered a management audit. Major review areas include affiliate relations and transactions, cost allocation manual, gas procurement and corporate governance. (2004 and 2012)

Transmission and Distribution (T&D) Experience

- Served as lead consultant for an evaluation of the electric T&D operations of the Los Angeles Department of Water and Power. Assessed the Department's effectiveness and cost in providing reliable service to its customers. Reviewed the entire T&D process, including planning, engineering and construction, maintenance, and response to trouble calls.

- Served as lead consultant for T&D in the management and operations review of United Illuminating (UI) on behalf of the Connecticut DPUC. Reviewed reliability of the T&D system, construction and maintenance practices (including tree trimming), budgeting, staffing and organization. Examined the utility's response to a windstorm in the fall of 2002.

- Served as consultant to the Senior Vice President responsible for natural gas and electric power T&D and customer services of the Rochester Gas and Electric. During an eighteen-month period, facilitated the reorganization of approximately two-thirds of the company by providing advice and offering innovative suggestions for the new structure.

- Project Manager for a management and operations study of West Penn Power for the PA PUC. Reviewed T&D operations and management, and conducted focused studies of staffing and compensation, affiliate costs, information services, engineering and construction and transmission and distribution.

- Project Manager for an audit of Pennsylvania Power for the PA PUC. Evaluated transmission and distribution, staffing, compensation and benefits, cost allocations, interchange and purchased power, economic development, collection policies and joint ownership of power plants.

Reliability and Storm Restoration Experience

- Evaluated the emergency outage management and storm restoration processes of Fitchburg Gas and Electric Company (a Unitil company) in preparing for a management and operations audit by the Massachusetts Department of Public Utilities. Testified on behalf of the utility in a proceeding to determine whether all costs incurred by the company during the December 2008 Ice Storm were reasonable and appropriate.

- Served as project manager for an evaluation of the effectiveness of the outage management and storm restoration efforts of four electric utilities and two telephone companies in response to a major ice storm that devastated New Hampshire in December 2008. The study, performed on behalf of the New Hampshire Public Utility Commission, evaluated each utility's storm restoration process and provided recommendations for better preparing the utilities for future emergencies.

- Worked with a team of consultants and company personnel at Ameren of Illinois in responding to a management and operations audit of emergency preparedness, outage management and storm restoration by the Illinois Commerce Commission. The audit was focused on Ameren's performance in restoring service to its Illinois customers following two summer storms and an ice storm in 2006. Helped Ameren prepare for the audit by reviewing the utility's restoration efforts and emergency plans and making recommendations for improvements in processes and tools.

- Managed a team of consultants providing support to Ameren of Illinois in responding to recommendations resulting from a storm restoration audit by the Illinois Commerce Commission. The audit was focused on Ameren's performance in restoring service to its Illinois customers following two summer storms and an ice storm in 2006. Helped

Ameren prepare for the audit by reviewing the utility's restoration efforts and emergency plans and making recommendations for improvements in processes and tools.

- Served as project manager for an audit of Duke Power Company's power restoration and maintenance procedures on behalf of the South Carolina PSC. The audit included an exhaustive review of preventive maintenance programs, an analysis of the effect of personnel cutbacks in contributing to extended outages, as well as any adverse affects stemming from the company's pole and cable replacement program and tree trimming activities.

- Served as lead consultant for examining all of the management issues related to a massive power outage experienced by customers of ComEd during a heat wave in the summer of 1999. Examined communications, staffing levels, work management, customer service, budgeting and organization.

Work Management and Manpower Planning Experience

- Reviewed planned improvements to the work management processes, systems and tools of the Energy Delivery Department of the Rochester Gas and Electric. Reviewed the electric and gas T&D business processes and evaluated changes being made to the work procedures and new technologies being introduced in order to lower cost and improve efficiency.

- Developed and implemented a human resources planning and management system for Perusahaan Listrik Negara (PLN), the Indonesian electric company. Designed a manpower planning model for line managers to forecast workload to determine optimum staffing levels. Developed a user's manual and conducted implementation training for the 52,300 employee company.

- Over an eighteen-month period, facilitated the reorganization of natural gas and electric power transmission and distribution and customer services areas of the Rochester Gas and Electric. (RG&E).

- Advised Rochester Telephone in the areas of work management, manpower planning, and profit center management. Directed a client team which developed methods and procedures for all Engineering and Operations cost centers, subsidiaries, and the long distance engineering group.

- Reviewed staffing levels for the Network Planning and Engineering (NP&E) Department of New York Telephone. Evaluated manpower requirements, work management procedures, and manpower planning processes for each major division.

- Project Manager for three major implementation projects resulting from a staffing levels study of New York Telephone. Provided support and direction to client personnel working to improve a work force planning system. Directed a productivity improvement program for the Network Engineering department.

- Served as staff on a project to develop and install a white-collar productivity program for New York Telephone.

- Lead Consultant in a management audit of the Central Hudson Gas and Electric Company. Evaluated the effectiveness of the corporate human resources planning process. Examined the use of tools and procedures both in the field and home office and made recommendations for their improvement.

- Project Manager of a productivity improvement program for the El Paso Natural Gas Company. Project included training utility personnel, recommending staffing levels, and installing a work force management program in three operating divisions.

- Served as lead consultant for a management audit of Philadelphia Gas Works, on behalf of the Pennsylvania PUC. Areas of responsibility included staffing levels and support services. Recommendations regarding Staffing Levels were selected as the subject of an implementation project.

Other Management Audit Experience

- Served as a subject matter expert on two customer service related assignments, assisting two utilities prepare for and respond to management audits of their customer service functions. Both utilities recently replaced their customer information systems and implemented new and revised customer service procedures. Both audits addressed the prudence of expenditures for the new systems and the effectiveness of each company's new processes and procedures.

- Served as project manager for a rate case regarding the prudence of electricity delivery expenditures of the Commonwealth Edison on behalf of the Illinois Commerce Commission. Aside from coordinating the activities of a team of consultants and maintaining relationships with the company and its regulators, his areas of responsibility included communications, customer service, organization, budgeting, staffing, and work management.

- Directed a retrospective review of the affiliate transactions of the New York Telephone Company for the New York PSC. Produced a comprehensive description and analysis of the company's affiliate interests, evaluated the reasonableness of major purchases and transactions, and assessed adverse effects on ratepayers.

- Project Manager for an audit of the affiliate interests of the C&P Telephone Company of Maryland for the Maryland PSC. Reviewed C&P's relationships with Bell Atlantic and its subsidiaries and affiliates.

- Project manager for an affiliate transactions audit of Southern California Edison (SCE). Evaluated compliance with the code of conduct established by the California PUC. Assessed the effectiveness of steps taken to implement compliance plans. Evaluated the overall control environment and performed testing of transactions related to each rule.

- Directed an evaluation of the affiliate relationships and agreements of Virginia Power and its parent company, Dominion Resources, Inc., for the Virginia Corporation Commission. Assessed all aspects of the holding company structure, including corporate governance and finance and diversification issues.

- Lead Consultant in the review and analysis of Pacific Gas and Electric's cost management activities in conjunction with the CPUC sponsored study of PG&E in the midst of the California energy crisis. Also examined the gas supply portfolio and related storage and peaking facilities in the context of the cash crisis to assure continued reliable gas supply for PG&E customers for the remainder of the 2001 winter.

- Lead consultant for a focused audit of the merger between Ameritech and SBC on behalf of the Illinois Commerce Commission. Evaluated the efforts of Ameritech and SBC merger teams who identified savings that will result from the merger, and determining whether the merger teams appropriately accounted for savings that will be realized by Ameritech Illinois.

- Lead Consultant in a management audit of the New York State Electric and Gas Company. Evaluated the effectiveness of the company's strategic and corporate planning methods and procedures. Reviewed personnel qualifications as well as tools and systems used in support of each function.

- Lead Consultant for a management and operations audit of the Kentucky Power Company. Evaluated the engineering and construction methods and procedures utilized by the parent company, American Electric Power Corporation, on behalf of the utility. (1988)

- Lead Consultant in three areas of a management audit of Orange and Rockland Utilities, Inc. Evaluated the effectiveness of the company's construction program planning methods and procedures. Also conducted a thorough study of gas operations and gas dispatch. Reviewed tools and systems used in support of each function.

- Lead Consultant in the management audit of Southern Connecticut Gas affiliate relations for the Connecticut DPUC. Reviewed the utility's gas pipeline and supply transactions with its non-regulated subsidiaries.

Other Utility Management Consulting Experience

- Lead consultant on a BWG project to assist Public Service Electric & Gas prepare its affiliate interests compliance plan which was filed with its state regulatory commission in the second quarter of 2000.

- Facilitated the development of the framework for the strategic plan for the Allegheny Electric Cooperative and Pennsylvania Rural Electric Association. The project was initiated in response to impending deregulation and increasing competition.

- Project manager for a review of South Jersey Gas to help it prepare for a commission-ordered a management audit. Major review areas include affiliate relations and transactions, cost allocation manual, gas procurement and corporate governance. (2004)

Work Experience

- Independent Consultant, Joyner Associates, Inc. (2008 – present)
- Manager, Huron Consulting Group (2007- 2008)
- Director, Barrington-Wellesley Group, Inc (2003 - 2007)
- Independent Consultant, Joyner Associates, Inc. (1987 - 2003)
- Managing Associate, Theodore Barry & Associates (1984 - 1987).
- Administrative Supervisor for capital improvement projects, Virginia Electric and Power Co. (1982 - 1984).
- Lead Engineer - Startup Planning and Scheduling Department, V.C. Summer Nuclear Plant (1980 - 1981).
- Lead Engineer - Planning and Scheduling Department, Westinghouse Hanford Fast Flux Test Facility (1979 - 1980).
- Officer, US Navy; specialized in intelligence and antisubmarine warfare (1972 – 1979)

ELIZABETH A. LEMKUL, CMC

Project Role: Consultant: Fuel and Purchased Power Adjustment Clause

Summary of Qualifications

Ms. Lemkul is a Certified Management Consultant with over 25 years of management consulting experience in the electric utilities industry. She is the owner of EAL Consulting, a women-owned business enterprise (WBE) certified in California. She has applied for MWBE certification from the State of New York. Ms. Lemkul has performed over 30 management audits of utility companies for regulators and government agencies. Her areas of expertise include power supply and resource planning, budgeting and accounting, contract oversight, and utility management and operations.

Ms. Lemkul has performed operational audits of several public power organizations, including the Los Angeles Department of Water and Power (LADWP), Lower Colorado River Authority, and Burbank Public Service Department. Most recently, she reviewed LADWP's renewable power program and fuel adjustment clause in an audit performed for the Los Angeles Controller's Office. She also has performed several reviews of utility power supply. She served as Lead Consultant for the review of the Atlantic City Electric Company's power procurement practices, and has also previously reviewed energy resource planning and power supply issues in reviews of the City of Burbank Public Service Department, Nevada Power Company, Connecticut Light and Power, and Dayton Power & Light.

Ms. Lemkul has a Sc.B. in mechanical engineering from Brown University, and an MBA in finance and marketing from the University of Chicago.

Power Supply and Power System Experience

- Lead Consultant for the reasonableness review of Atlantic City Electric Company's power procurement practices and costs, performed as part of the deferred balances (balancing account) audit for the New Jersey Board of Public Utilities. Performed a detailed examination of the utility's power procurement processes (spot market purchases and competitive solicitations) to meet forecast load requirements. Testified before the Office of Administrative Law regarding the results of this review.

- Worked with Southern California Edison (SCE) to improve its execution of its grid interconnection program. Performed a diagnostic evaluation of the organization framework against functions and performed common-cause analysis of problem areas. Identified recommended changes to the Grid Contacts organizational structure and defined roles and responsibilities for organizations involved in the program. Led an interdisciplinary Process Review Team to identify issues which impact the ability to perform tasks effectively and efficiently. Prioritized issues through a formal process and led process improvement efforts to address the identified issues.

- Performed a diagnostic assessment of project cost estimating for SCE's Transmission and Distribution business unit. Subsequently worked with SCE to improve the scoping and estimating for transmission and substation construction projects. Developed a formal estimate classification system which reflected the status of project scope development. Identified the estimate class design and documentation requirements for transmission and substation projects. Prepared a white paper on the treatment of contingencies and project risks for the Project Management Organization.

- Reviewed power systems operations and fuel supply at Nevada Power Company. Assessed the utility's purchased power strategy, dispatch process, load forecasting, fuel supply, and power system organization and provided recommendations for more economic dispatch. Reviewed power plant heat rate monitoring and outage scheduling. In a subsequent audit, assessed Nevada Power Company's compliance with these recommendations.

- Performed an assessment of operational risk exposures associated with Dayton Power & Light Company's generation, transmission and electricity trading activities.

- Assessed the generation and power supply activities at Burbank Public Service Department as part of a diagnostic audit performed for the City of Burbank City Council. Assessed asset management and construction program planning for the utility's power supply facilities, including project prioritization and capital budget development. Reviewed the management and operation of the utility's power supply resources, including power and fuel supply contracts.

- Reviewed bulk power operations, nuclear and fossil fuels management, systems operations, environmental affairs, and research and development activities in the diagnostic management audit of Connecticut Light & Power for the DPUC. The review included a detailed examination of the utility's power purchases and sales and an examination of the costs included in the fuel adjustment clause.

- Lead Consultant for an audit of Pacific Gas and Electric Company's Hourly Power Exchange Energy Credit (PX Credit) calculations to ensure compliance with CPUC orders and utility advice letters. Assessed the utility's calculation methodology and developed a PC-based price calculation model to recalculate hourly PX prices for the period 1998 through 2002 using detailed PX settlement data.

- Reviewed LADWP's renewable power program in an audit performed for the Los Angeles City Controller's Office. Examined LADWP's financial planning and reporting for its renewable power program and reviewed the costs of its renewable power supplies. Assessed DWP's renewable project financing strategy and funding sources, including federal and state renewable project financing incentives such as Clean Renewable Energy Bonds (CREBs) and Qualified Energy Conservation Bonds (QECBs), as well as pre-paid and standard power purchase agreements. Examined LADWP's RPS decisions in light of its cost recovery mechanisms and assessed the adequacy of the integration of its renewable energy and financial plans.

- Reviewed Los Angeles Department of Water and Power's management and implementation of its green power (renewable) and energy efficiency programs as part of a compliance audit performed for the Los Angeles City Controller. Assessed the utility's use of Renewable Energy Credits (RECs) and examined green power energy contract purchases and exchanges, as well as the utility's green power program controls and accounting practices. Performed a subsequent audit of the utility's compliance with audit recommendations.

- Reviewed the Connecticut Light and Power's actions to ensure system reliability in light of extended nuclear outages in a focused audit of Northeast Utilities. Assessed the utility's emergency power supply planning activities and steps to reduce reactive power transmission limitations. Also assessed the financial effects of nuclear outages on Connecticut Light & Power and its ratepayers.

- Reviewed bulk power operations, nuclear and fossil fuels management, systems operations, environmental affairs, and research and development activities in the diagnostic management audit of Connecticut Light & Power for the DPUC. The review included a detailed examination of the utility's power purchases and sales and an examination of the costs included in the fuel adjustment clause.

Regulatory Finance and Accounting Reviews

- Performed a comprehensive review of LADWP's Energy Cost Adjustment Factor in an assessment of the utility's recovery of renewable power costs. Examined actual cost types included in the adjustment factor account, and reviewed accounting classifications, journal entries and supporting documentation for the recorded costs.

- Lead Consultant for the program evaluation of Emergency Energy Efficiency and Low-Income Assistance Funds performed for the CPUC. Responsible for the Phase II audit of PG&E's SBX1 5 energy efficiency and California Alternate Rate for Energy (CARE) expenditures. Tested transactions to verify costs and accounting classifications. Reviewed CPUC administrative costs and the CARE balancing account transactions for all utility funding recipients.

- Lead Consultant in an engagement to determine the original cost of the distribution system of Commonwealth Edison Company, recorded as $12 billion in 2004. Responsibilities included the analysis of costs recorded from 1985 through 2004, the assessment of ComEd's capitalization policies, budget variance analyses, and the verification of plant asset accounting following the Company's power plant divestitures and the reclassification of assets in accordance with FERC Order 888.

- Reviewed nonresidential program expenditures as part of the review of Pacific Gas and Electric Company's demand side management (DSM) expenditures for the CPUC. Identified adjustments to the utility's DSM balancing account.

- Reviewed Pacific Gas and Electric Company's transition cost balancing account balances and headroom revenues as part of a Commission-ordered audit of the major California investor-owned utilities. Verified the company's compliance with orders of the

Commission, tested stranded costs claimed by the company for recovery and determined whether revenues were being properly applied against the recovery of stranded costs.

- Lead Consultant for the financial verification audit of the transition costs associated with Pacific Gas and Electric Company's Diablo Nuclear Power Plant for the CPUC. Assessed the appropriateness of the depreciation reserve accounting methodology.

- Lead Consultant for an assessment of the Industry Restructuring Filings of Atlantic City Electric Company for the New Jersey Board of Public Utilities. Responsible for work in the areas of utility plant, depreciation and decommissioning, including an assessment of transmission facilities that are considered generation plant for regulatory purposes.

- Managed the audit of Pacific Gas and Electric Company as part of an audit of the public goods charge revenues and costs performed for the CPUC. Reviewed energy efficiency internal controls; cost accounting, tracking, and reporting; program oversight and funds management, rate development and revenue collection; and regulatory reporting. The review entailed a detailed review of PG&E's SAP financial accounting system, overhead and indirect allocations, and an assessment of whether PG&E's costs were classified correctly.

- Lead Consultant in the attestation examination of Citizens Telecommunications Company of California's (Citizens) California High Cost Fund –B (CHCF-B) claims for the period February 1, 1997 through December 31, 2000. Assessed Citizens' compliance with regulatory directives and its controls over the claims process, and verified Citizens' claim amounts and memorandum account catch-up surcredits.

- Reviewed Southern California Edison Company's electric industry restructuring transition costs as part of a Commission ordered agreed-upon procedures audit of stranded costs of the major California investor-owned utilities. Evaluated Edison's current costs and estimated future costs resulting from existing obligations, to determine the total magnitude of overall eligible Competition Transition Costs resulting from the introduction of retail competition. Assessed transition costs associated with future plant additions, depreciation reserves, construction work in progress, decommissioning, inter-utility contracts, fuel contracts and regulatory assets.

- Reviewed generation and clean air Research, Development and Demonstration (RD&D) projects in the detailed review of Southern California Edison's RD&D transactions for the period 1988 – 1992 for the CPUC. Identified adjustments to the utility's RD&D balancing account.

Capital and O&M Budget Development

- Reviewed the City of Los Angeles' planning and management of its capital improvement program as part of a performance audit performed for the City of Los Angeles Office of the Controller. The overall objective of the performance audit was to evaluate the City processes used to identify, prioritize and plan for capital improvement projects, including an assessment of processes used to identify funding requirements and funding sources, in order to determine opportunities to improve efficiency and effectiveness.

- Reviewed finance, accounting and cash management at New Jersey American Water as part of management audit performed for the New Jersey Board of Public Utilities. Assessed the development of capital and operating budgets, including participation in the budget process, budget authorization levels, prioritizations and allocations, and time horizons. Evaluated budget reporting, tracking, revision and analysis.

- Performed a diagnostic assessment of project cost estimating for Southern California Edison's (SCE) Project Management Organization. Subsequently worked with SCE to improve the scoping and estimating for transmission and substation construction projects. Prepared a white paper on the treatment of contingencies and project risks for the Project Management Organization.

- Reviewed capital project planning, design and construction as part of a management review of the Los Angeles County Department of Public Works (LADPW) performed for the Auditor-Controller of the County of Los Angeles. Assessed project identification and prioritization processes, and evaluated LADPW's project management, engineering and construction management, and contracting and contractor management for public works infrastructure projects and LA County capital projects. Assessed LADPW's provision of project management and design review services to all other LA County departments.

- Reviewed construction project management in the comprehensive management and operations audit of Delta Natural Gas for the Kentucky PSC. Assessed project prioritization and capital and O&M budget development for transmission and distribution operations.

- Assessed system operations of New Jersey Natural Gas Company for the New Jersey Board of Regulatory Commissioners. Areas of review included the design, maintenance, operation and construction of the distribution system, work force management, information systems, and capital and O&M budget and control processes. Reviewed construction program planning for the utility's distribution system.

- Assessed asset management and construction program planning including project prioritization and capital budget development for the Burbank Public Service Department as part of a diagnostic audit performed for the City of Burbank City Council.

Contract Management and Oversight

- Assessed Lower Colorado River Authority's (LCRA) oversight of transmission construction projects developed and constructed through a joint agreement with American Electric Power. Evaluated LCRA's contract controls, and oversight procedures to determine whether the controls and procedures provided assurance that LCRA paid reasonable amounts for work actually performed. Evaluated LCRA's process for payment of contract billings. Performed detailed testing of selected sample invoices to review accuracy of charges and adequacy of LCRA's invoice review. Determined whether there were adequate controls regarding work performed and costs charged to the projects.

- Assessed owner's organization and its oversight of engineering and design contracts, contract change order control, and project schedule in the cost reasonableness review of Pacific Gas and Electric Company's $850 million Pipeline Expansion Project for the California Public Utilities Commission.

- Assisted Dayton Power & Light in contract negotiations regarding its jointly-owned power plants in order to improve its competitive position.

- Reviewed Commonwealth Edison's oversight of engineering and construction contracts for Byron Nuclear Station for the Illinois Commerce Commission. Areas of review included the adequacy of project controls, work force management, construction productivity, and engineering design control.

- Assessed the management of the design and construction of a power plant for the Long Island Lighting Company. Areas of review included construction staffing and organization, work force management, construction productivity, design controls, and contract management.

- Assessed Pacific Gas and Electric Company's engineering management of the Diablo Canyon nuclear power plant in an audit for the California Public Utilities Commission.

Management Audits

- Participated in following management reviews of the utilities for regulatory commissions:

  - New Jersey American Water - New Jersey BPU (2010)
  - ComEd – Original Cost Audit – Illinois Commerce Commission (2007)
  - LCRA –Management Audit– Public Utilities Commission of Texas and LCRA (2006)
  - Energy Efficiency Operations of United Illuminating and Connecticut Light and Power – Connecticut DPUC (2005)
  - Utility PGC Program Audit – California PUC (2004)
  - Atlantic City Electric Company – Deferred Balances - New Jersey BPU (2002)
  - Citizens Utilities – CHCF-B Audit – California PUC (2002)
  - Pacific Gas & Electric – SBX1 5 Audit – California PUC (2002-2003)
  - Los Angeles Department of Water & Power – Compliance Audit (2003)
  - Pacific Gas & Electric – PX Credit - California PUC (2001)
  - SBC Ameritech – Merger Cost and Savings – Illinois Commerce Commission (2001 and 2002)
  - Nevada Power – Nevada PSC (1999)
  - Pacific Gas & Electric – Transition Cost Balancing Account and Headroom Revenue – California PUC (1998)
  - Atlantic City Electric Company - New Jersey BPU (1998)
  - Diablo Canyon Nuclear Power Station - Transition Costs - California PUC (1998)
  - Maine Yankee Atomic Power Company -- Maine PUC (1997)
  - Southern California Edison - Transition Costs -- California PUC (1997)
  - Northeast Utilities - Nuclear Operations -- CT. DPUC (1996)
  - Burbank (CA) Public Service Department -- City Council (1996)
  - Connecticut Light & Power -- Diagnostic -- CT. DPUC (1995)
  - Pacific Gas & Electric -- Pipeline Expansion -- California PUC (1995)
  - Pacific Gas & Electric DSM-- California PUC (1994)
  - Los Angeles Department of Water and Power -- LA City Council (1994)
  - Nevada Power Company -- Nevada PSC (1994)

- Peoples Natural Gas -- Pennsylvania PUC (1994)
- Southern California Edison -- California PUC (1993)
- New Jersey Natural Gas Company -- New Jersey BRC (1992)
- Delta Natural Gas Company -- Kentucky PSC (1992)
- Long Island Lighting Company -- New York PSC (1987)
- General Telephone Company of Ohio -- Ohio PSC (1986)
- Union Electric Company -- Missouri PSC (1986)
- Pacific Gas and Electric, Diablo Canyon -- California PUC (1987)
- Commonwealth Edison, Byron -- Illinois Commerce Commission (1988)
- Seabrook -- Connecticut DPUC (1988)

Testimony:

- Testified before the New Jersey Board of Public Utilities, Reasonableness of Atlantic City Electric Company's Deferred Balances (2003).
- Testified before the New Jersey Board of Public Utilities (1998).

Work Experience

- EAL Consulting (2011 - present))
- NorthStar Consulting (2006 - 2011)
- Barrington-Wellesley Group, Inc. (1992 - 2003)
- Independent Consultant (1991 - 1992, 2003 - 2006)
- Theodore Barry & Associates (1988 - 1991)
- Arthur Young & Company (1985 - 1988)
- Stone & Webster Engineering Corporation (1981 - 1983)

ALBERT J. LUCAS, CPA, CIA, CISA

Project Role: **Lead Consultant: Compliance with Debt Covenants**
Consultant: Debt Service Obligations

Summary of Qualifications

Mr. Lucas, a Principal in the assurance practice at TCBA, has more than 30 years of audit and business consulting experience with particular focus on state and local government clients and public utilities. Prior to joining TCBA, Mr. Lucas was responsible for SEC reporting and regulatory reporting for a major utility company in the Washington D.C. area which included monitoring compliance with and proper reporting of debt agreements and working with the Chief Financial Officer in projecting cash flow requirements for operations and capital. Major utility clients have included Washington Gas, Potomac Electric and Power Company, Pennsylvania Public Utilities Commission, California Public Utilities Commission, New Jersey Board of Public Utilities, DC Water, Washington Suburban Sanitary Commission, Los Angeles Department of Power and Water, and Covanta, among others. Mr. Lucas' clients also include several municipal government entities with significant debt portfolios such as the District of Columbia Government, Montgomery County and Prince George's County in Maryland, the City and State of New York and the Air Quality Management District of Los Angeles. Mr. Lucas is a Certified Public Accountant, a Certified Internal Auditor and a Certified Information Systems Auditor. He has a BS in Economics from Cornell University and an MBA in Accounting/Finance from the University of Rochester.

Representative Debt Management/Compliance Reviews

- Financial expert on TCBA's subcontract with the Barrington-Wellesley Group on the 2006 stratified and management audit of First Energy for the Pennsylvania Public Utilities Commission. Mr. Lucas was responsible for supporting the review of the financial structure and corporate governance. Task areas included evaluation of FirstEnergy's financial and information support systems, cash and debt management programs, accounting and financial controls, financial planning and communications with the investor community and assisting in the overall analysis of First Energy's corporate governance structure.

- Financial expert on the project team on TCBA's subcontract with the Barrington Wellesley Group's 2006 independent review for the City of Los Angeles of LADWP's financial condition in order to assess the need for potential rate increases. Reviewed the financial structure of both the Water Services and Energy Services Division of DWP with responsibility review of the debt structure, performing financial analysis and reviewing of the financial accounting practices including the implementation of property accounting for post employment retirement obligations.

- From 2002 through 2008, Mr. Lucas served as the engagement partner on the annual audit of the D.C. Water and Sewer Authority (WASA). WASA, a regulated utility,

provides water to over 1 million customers in the District of Columbia. WASA's operating revenues are in excess of $250 million annually with over $1.5 billion of net utility plant on the books. This annual audit includes an in-depth review of DC Water's debt management program related to its $1.2 billion in outstanding bonds used primarily to fund capital program including annual testing of:

- Management's program for identification of debt compliance requirements and monitoring compliance with all debt covenants.
- Evaluation of Debt Management program including strategies for debt refunding/defeasance to manage overall interest rates.
- Assistance, as required, for all new debt issuances planned.
- Proper disclosure and reporting of the debt in the financial statements.

- Since 2007 Mr. Lucas has served as the engagement partner on the annual audit of the Washington Suburban Sanitary Commission (WSSC). WSSC, a regulated utility, provides water to over 1 million customers in the Washington metropolitan area. WSSC's operating revenues are in excess of $450 million annually with over $4 billion of net utility plant on the books. The annual audit includes an in-depth review of WSSC's debt management program related to its $1.6 billion in outstanding bonds used primarily to fund capital program projects including annual testing of:

  - Management's program for identification of debt compliance requirements and monitoring compliance with all debt covenants.
  - Evaluation of Debt Management program including strategies for debt refunding/defeasance to manage overall interest rates.
  - Assistance, as required, for all new debt issuances planned.
  - Proper disclosure and reporting of the debt in the financial statements.

- From 2001 to 2002 Mr. Lucas was the Director of Financial Reporting responsible for SEC and regulatory reporting for a WGL Holding Corp and Washington Gas Light Company which is a regulated utility that provides natural gas to over 1 million customers in the Washington D.C. metropolitan area. Mr. Lucas prepared all SEC 10 K and Q filings and the annual consolidated financial report for the company including the management discussion and analysis. Mr. Lucas also provided advice to the Controller on complex accounting issues and was a member of the derivative accounting implementation team responsible for identifying and establishing the accounting for derivative and hedging transactions entered into by the company. Mr. Lucas monitored and reported on compliance with all debt covenants and assisted the CFO in analyzing all new debt issuances.

Other Representative Audits

- Partner on an accounting services engagement for the Pennsylvania Emergency Management Agency (PEMA) in support of their Emergency 9-1-1 deployment of technology to improve the tracking and location of wireless E 9-1-1 calls at each of the 67 Public Service Answering Points PSAPs) in the State of Pennsylvania. TCBA team records and audits all user fees collected from wireless service providers in the State and

assists PEMA in tracking and distributing the funds to the PSAPs based on their wireless deployment plan and approved budget. TCBA, under Mr. Lucas' direction, also performs a detailed reconciliation of each PSAP's use to the funds to ensure the funds were spent on the items in accordance with the approved budget request for wireless deployment including inspection and inventory of all equipment and software purchases.

- For each of the past 2 years Mr. Lucas has served as engagement partner on the agreed-upon procedures review of the annual emissions disclosure statement of Atlantic City Electric. Emission's rate and fuel mix data are verified to company records and evaluated for reasonableness in comparison to default values provided by the New Jersey Board of Public Utilities.

- In 2004 Mr. Lucas was the engagement partner for a special purpose audit of T-Mobile's statement of Emergency Telephone 911 systems costs incurred for implementation of phase 1 and phase 2 systems enhancement. Pursuant to requirements established by the Federal Communication Commission, T-Mobile was required to enhance its systems to enable more precise location of cell phone when calling E911 emergency services. The audit included all phase 1 and phase 2 costs nationwide and was used by T-Mobile as a basis for recovery of these costs from various states.

- From 1993 to 1999 Mr. Lucas annually managed over 3,000 hours of audit and accounting engagements provided to WASA. Services provided were primarily related to the management and accounting for construction activity at their waste water treatment facility and included providing construction claims audit and expert witness testimony for a $70 million delay and disruption claim; auditing and preparing final payment requests for construction costs eligible for reimbursement from the Environmental Protection Agency and assisting in evaluating and recommending improvements in the system of internal controls related to procuring and accounting for construction activity.

- Engagement partner for the a certified public accounting firm engaged by the California Public Utilities Commission (CPUC) to review the balances transferred to the transition cost balancing accounts and headroom revenues of the three major California electric utilities. This assignment was completed in March 1999 with the issuance of an agreed-upon procedures report. Mr. Lucas managed all aspects of these audits, which included issuance of reviews of Southern California Edison, and Pacific Gas and Electric Company, and San Diego Gas & Electric Company.

- Engagement partner for the firm engaged by the CPUC to review the sunk cost and future competitive transition cost filings of the three major California electric utilities. The specific objectives of the review were to 1) verify and validate the methodology used by the companies to develop their cost estimates; 2) render an audit opinion on the accuracy of reported sunk costs; 3) determine if the future competitive transition costs claimed by each company were allowable under existing legislation or past CPUC decisions; 4) identify any inconsistencies between the companies' filings; 5) identify questioned costs and propose necessary adjustments; and 6) identify key issues for consideration by the Commission.

- Manager on the project team selected by the CPUC to perform an audit of Southern California Edison's research, development and demonstration (RD&D) program for the California Public Utilities Commission. The review focused on the accounting and management of $285.4 million of capital expenditures from 1988 to 1992. The audit found that RD&D expenditures as originally recorded were overstated by about $20.5 million. Mr. Lucas was responsible for reviewing internal accounting controls and the audit of fixed asset expenditures

- Engagement manager for a review of Atlantic City Electric Company's filings for the New Jersey Board of Public Utilities in the areas of stranded costs and assessments of customer billing systems capability readiness for implementation unbundled electric rates. Filings were reviewed for compliance with the Board's filing requirements.

CHERRY E. ONG, CPA

Project Role: Consultant: Compliance with Debt Covenants
Debt Service Obligations

Summary of Qualifications

Ms. Ong is a TCBA Audit Manager with over 14 years of professional experience in financial and compliance audits, accounting, financial analysis and control, and tax preparation for audit units that belong to not-for profit, healthcare, and governmental industries. She is well-versed in all requirements of audits conducted in accordance with Government Auditing Standards, and has participated in various projects assisting clients with large debt portfolios, including the following:

- Assistance to bond issuers and underwriters in analyzing historical accounting data to develop trends used in determining the feasibility and soundness of the proposed governmental bond issuance.

- Review of management's program for identification of debt compliance requirements and monitoring compliance with all debt covenants;

- Evaluation of Debt Management program including strategies for debt refunding/defeasance to manage overall interest rates;

- Assistance for new debt issuances including review of offering statement and issuing consent and comfort letters;

- Proper disclosure and reporting of the debt in the financial statements and creating an accounting manual for Industrial Development Bonds issued by a major Development Authority.

Ms. Ong has a BS in Accountancy from the University of the Assumption, Philippines, and a BS in Mathematics from the University of Sto. Tomas, Philippines.

Relevant Experience

- City of Quincy, Florida – Revenue Bonds
- Dormitory Authority of the State of New York
- Mount Olive Baptist Church (Bond Issuance in 2003)
- Newark Housing Authority
- New York City Health and Hospitals Corporation
- New York City Department of Health and Mental Hygiene
- New York City Department of Youth and Community Development
- Universal Service Administrative Company
- Urban League of Hudson County, Inc.
- East Coast Migrant Head Start Project
- Paterson Public Schools

- Jersey City Community Charter School
- Addicts Rehabilitation Center
- Mid-Bronx Senior Citizens Council

PROFESSIONAL AFFILIATIONS

- Philippine Institute of Certified Public Accountants

ROBERT ROZANSKI

Project Role: **Lead Consultant: Debt Service Obligations**
Consultant: Compliance with Debt Covenants

Summary of Qualifications

Mr. Robert Rozanski is a specialist in utility financial operations. His expertise extends across debt management, financing, budgeting, and internal audit. Mr. Rozanski joined NorthStar Consulting Group after over 30 years of public utility experience with the nation's largest municipal utility, the Los Angeles Department of Water and Power. He has substantial background and experience formulating, reviewing, evaluating, and/or executing plans involving debt obligations, and has spearheaded major financial system projects and multi-billion dollar bond restructurings. Mr. Rozanski conducted numerous process reviews, and has direct experience establishing and monitoring compliance with debt covenants.

Previously, he served as Chief Financial Officer of the Southern California Public Power Authority (SCPPA) and Assistant Chief Financial Officer and Treasurer of the LADWP. In his capacity as Assistant CFO at LADWP, Mr. Rozanski was responsible for a $9 billion debt management and reduction plan during the transition to competitive electric markets. LADWP was facing the possibility of over $4 billion in stranded assets associated with its off balance sheet generating plants. He reduced retail electric rates from among the highest to the lowest in the State by implementing a comprehensive energy deregulation plan that involved significant cost reductions and complex restructuring of a $7.0 billion bond portfolio. Mr. Rozanski has a BSBA in Accounting from California State University in Long Beach and an MBA with Beta Gamma Sigma Honors from UCLA.

Relevant Experience

- **Chief Financial Officer and Board Member – SCPPA.**
- **LADWP Finance Committee Representative.**
- **Assistant CFO and Treasurer, LADWP.** Responsible for LADWP's debt management program. LADWP had incurred $5 billion in on balance sheet debt and $ 4 billion in off balance sheet debt.
    - Initiated and secured public, executive management, Board of Commissioners, City Council, and Mayoral support for many strategic initiatives.
    - Reduced retail electric rates from among the highest to the lowest in the State by implementing a comprehensive energy deregulation plan that involved significant cost reductions and complex restructuring of a $7.0 billion bond portfolio.
    - Implemented Wholesale Trading Credit Policies that eliminated LADWP's counterparty exposure to Enron prior to its bankruptcy.

- **Chief Administrative Officer, LADWP.** Responsible for Corporate Services, Customer Service, Employee Relations, Economic Development, Information Technology Services, and Corporate Communications. Worked closely with the public, Board of Commissioners, elected officials, investor community, and rating agencies to garner support for major strategic initiatives.

  - Secured revenue increases needed to fund vital infrastructure and environmental programs.

  - Helped shape legislation to mitigate the need for revenue increases and customer impacts.

- **Budget Manager, LADWP.** Reviewed documentation for internally and externally financed capital projects. Directed LADWP's financial planning function and reported quarterly financial performance to AGMs; designed retail rates; presented to rating agencies; participated in bond sales; and directed LADWP's budget development process, including recommending multi-year expenditure targets, leading senior management budget reviews, analyzing budget variances, developing overhead allocation rates, and performing cost/benefit studies.

Debt Management Expertise

- Led and participated in the formulation of LADWP's complex and comprehensive (on- and off-balance sheet) debt management plan; including ongoing evaluations of alternative debt management scenarios.

- Managed LADWP's debt portfolio that included a commercial paper program, variable-rate demand obligations, and fixed rate bonds, including liquidity support (i.e., stand-by bond purchase agreements, and letters/lines of credit).

- Managed LADWP's financial planning, treasury and rate functions; and integrated all debt obligations, debt covenant compliance requirements, and prospective rate actions into the long-term financial plan.

- Evaluated the potential cost-benefit of maintaining LADWP's double-A bond ratings, and ongoing opportunities to refund/restructure outstanding bonds.

- Managed and participated in the selection process for underwriters at LADWP, and participated in such process at SCPPA.

- Performed and/or reviewed ongoing analyses of debt service costs and related impacts on retail customer rates.

- Reviewed and evaluated numerous refunding/restructuring analyses with respect to LADWP, SCPPA and Intermountain Power Authority (IPA) bonds.

- Reviewed and/or prepared ongoing compliance documentation (e.g., continuing disclosure certificates, IRS regulations, Board of Commissioners, and City Council).

- Reviewed and/or participated in the development of documentation from the Finance Committees of IPA and SCPPA related to LADWP's participation in various generation and transmission projects.

- On behalf of LADWP and other member agencies, reviewed and evaluated the results of financing transactions undertaken by IPA and SCPPA in response to recommendations by their respective Finance Committees.

- Spearheaded and participated in many credit rating agency meetings and reviews of draft rating agency reports related to debt management practices. Reviewed follow-up materials, coordinated follow-up conference calls, maintained logs to ensure timely and appropriate responses, and managed the credit rating agency relationships

- Led and participated in the formulation of LADWP's complex and comprehensive (on- and off-balance sheet debt) debt management plan; including ongoing evaluations of alternative debt management scenarios given shifts in the organization's priorities, availability of new financial products, and/or changing market conditions.

- Conducted scenario analyses to evaluate the financial impacts of alternative strategies, including assessments and recommendations (e.g., downsizing, reduced rate increases, increased City transfers, etc.) from the Board of Commissioners, Mayor, and City Council.

- On an ongoing basis, monitored interest rates and costs of liquidity support for opportunities to refund/restructure debt and reduce LADWP's financing costs. In addition, evaluated proposed interest rate swaps and recommended related actions to the governing Boards of IPA and SCPPA.

- Reviewed and evaluated SCPPA and IPA interest rate swap policies.

- Secured credit rating upgrades based on follow-up actions based on feedback from credit rating agency meetings and reports.

- Formulated LADWP's cash reserve policies and incorporated such polices into financial plans and revenue requirements.

- Reviewed LADWP's debt covenant requirements to increase its efficiencies, and reduce its risks and costs of debt.

- Transitioned all of LADPW's outstanding bonds to new Master Bond Resolutions. The transitions required bondholder consents and/or refundings, restructurings, defeasances, and tenders.

Representative Internal/External Audit Expertise

- Conduct of an audit involving LADWP's exchange of an ownership interest in Coronado Generating Station for an ownership interest in Palo Verde Nuclear Generating Station that required a thorough analysis of all financing transactions.

- Undertook comprehensive documentation reviews of many internal/external operational, project, and financial audit and conducted follow-up actions to ensure compliance, and documented audit responses with respect to audit recommendations for senior management reviews.

- Represented LADWP on several audits/studies conducted by the Mayor and City Council.

Employment History

- Southern California Public Power Agency, Interim Chief Financial Officer (2009-2010)
- Los Angeles Department of Water and Power (1979-2009)
  - Chief Administrative Officer (2005-2009)
  - Acting General Manager (2007)
  - Assistant CFO and Treasurer (1998-2005)
  - Director of Strategic and Financial Analysis (1996-1998)
  - Assistant Director of Finance and Budget (1989-1996)
  - Project Manager – Payroll Information System (1989)
  - Manager of Accounts Payable (1988-1989)
  - Supervisor of Internal Audit Division (1985-1986)
  - Supervisor, Financial Reporting and Taxes (1984-1985)
  - Lead/Staff Internal Audit (1983-1984)
  - Meter Reader (1979-1983)

Licenses and Affiliations

- **Certified Public Accountant**, Inactive, State of California

ROBERT DECKER

Project Role: Project Administrator/Research Support

Summary of Qualifications

Mr. Decker has over twenty-nine years of experience in industry with a focus on information technology. He will provide administrative and research support. He served as the project administrator on the NMPC and Central Hudson audits. His utility clients have also included Southern California Edison and Qwest Communications. Mr. Decker has a degree from Evergreen Valley College in Business Administration and Accounting and attended San Jose State University. He also has a B.S. in Business Accounting from the University of Phoenix.

TRACY JOHNSON

Project Role: Project Administrator/Research Support

Summary of Qualifications

Mrs. Johnson recently provided project administrative services for NorthStar's audit of JustEnergy where she also reviewed the third-party verification and customer complaint processes. Ms. Johnson provides expertise in quantitative analysis and finance. Prior to joining NorthStar, Ms. Johnson was a branch manager at Vine Street Trust, responsible for business development, client/customer relationships and loan auditing. She also worked in risk management at Liberty National. Ms. Johnson has a BBA in finance and an MBA from the University of Kentucky.

VI. SCHEDULES AND BUDGETS

NorthStar's proposed not-to-exceed cost for performing the management audit of LIPA is $1,401,834. This proposed cost includes all professional fees ($1,258,200) and expenses ($143,634) associated with performing the work and delivering the necessary draft and final reports described in this proposal. Additional appearances and testimony will be billed at the individual hourly rates shown in **Exhibit VI-1.**

Our proposed cost is based on our normal hourly fees and normal travel, lodging, and other expenses. Details of our proposed project cost, including hours by consultant by task and estimated expenses by consultant, are provided in **Exhibit VI-1**. Details of project expenses by category can be found in **Exhibit VI-2.** NorthStar's project cost information can be reconfigured in another format if desired.

Invoices will be submitted monthly in accordance with milestones and are due upon receipt. Invoices will include professional fees for hours worked to date, and will not exceed the limits shown in **Exhibit VI-1**. Invoice backup will include:

- Hours worked, professional fees, and expenses (by expense category) for each consultant.
- Copies of all expense receipts over $25.
- Percentage of work completed.

Individual consultants and the firm are reimbursed monthly for direct expenses incurred in conducting the assignment. In general, our policy provides that each consulting team member is reimbursed at the same levels, for the same expense item regardless of role, according to the following:

- Personal mileage is reimbursed at the rate allowed by the IRS.
- Travel is reimbursed to and from the consultant's home, office, or last work assignment. Travel fares are based on coach or discounted rates when available. In cases where a consultant is traveling from another assignment, the cost will be allocated (with documentation) between assignments in an appropriate manner. However, the amount will not be greater than if from the consultant's home.
- Miscellaneous expenses are charged at cost with receipts.
- Communication, copying, and mail costs are charged at cost.

NorthStar is cognizant of the need to contain expenses. Travel expenses will be reasonable and limited to only what is necessary for the conduct of the audit. NorthStar will exercise fiscal responsibility when making travel arrangements. Travel and accommodations will be booked in advance to the extent possible to minimize the cost. Change fees, upgrade fees, short-term parking at airports, one-way car rentals, and other unnecessary charges will be avoided. We will endeavor to utilize available technology to conduct meetings via videoconferencing and/or teleconferencing to the extent practical in order to achieve efficiencies throughout the audit.

Exhibit VI-1
Summary of Audit Fees and Expenses

		D. Bennett	A. Anderson	J. Ayers	C. Etter	D. Francis	E. Lemkul	M. Joyner	R. Rozanski	A. Lucas	C. Jenkins	C. Ong	Admin/RA Support	Total
Phase I: Planning and Orientation		**80**	**80**	**30**	**80**	**40**	**40**	**40**	**40**	**40**	**30**		**40**	**540**
Phase II: Technical Review														
E1.1a	Executive Management		30		50				10					90
E1.1b	Org Structure	30			10				20					60
E1.1c	BOT	10	20		30				20					80
E1.1d	Communication / Control		30		30								40	100
E1.1e	Strategic Planning	10			70						10			90
E1.1f	Outside Services	40	10		10		40	20	10				40	170
E1.1g	Enterprise Risk Mgmt				20				10	20	50			100
E1.2	System Planning	50				70		20						140
E1.3	Program / Project Planning	65	60	30		75								230
E1.4	Performance / Results Mgmt		80	60									30	170
E1.5a	Work Management		30	60				90						180
E1.5b	Customer Service		80					20					60	160
E1.5c.1	Reliability		10	20		20		60					20	130
E1.5c.2	Preventive Maintenance					20		100					20	140
E1.5c.3	Repair/Replace/Reac/Corr	35						55						90
E2.1	Industry Stds for Debt Mgmt								50	50		50		150
E2.2	Approvals for Debt Mgmt								20	30		40		90
E2.3	Debt Management Practices								20	20		20		60
E2.4	Risk Management								10	30		20		60
E2.5	Ratemaking Model				30				30		40	20		120
E2.6	Shoreham								10	30		40		80
E2.7	Cash Reserve								20		20			40
E3.1	NYISO	20	20				30							70
E3.2	Fuel and PP Contract Mgmt	10	20		30		50							110
E3.3	Supply Procurement		10		70	30	30						40	180
E3.4	Fuel and PP Adj Clause Tariff		40				50							90
E3.5	Fuel and PP Cost Recovery		30				30					50		110
E3.6	Load Forecasting		10		10	70								90
E4.1	Capital / O&M Budgeting	40								50	90			180
E4.2	Program/Proj Plng & Mgmt	30												30
E5.1	Comp w/ Debt Covenants								10	50		20		80
E5.2	Mgmt of Debt Covenant Req								20	20		20		60
	Subtotal Phase II	**340**	**480**	**170**	**360**	**285**	**230**	**365**	**260**	**300**	**210**	**280**	**250**	**3,530**
Phase III: Cost-Benefit Analyses		**50**	**50**	**25**	**25**	**10**	**25**	**25**	**25**	**30**	**25**	**0**	**0**	**290**
Phase IV: Report Development		**50**	**50**	**20**	**50**	**30**	**30**	**50**	**50**	**50**	**20**	**0**	**0**	**400**
Project Management		**75**			**150**								**200**	**425**
	Total Hours	**595**	**660**	**245**	**665**	**365**	**325**	**480**	**375**	**420**	**285**	**280**	**490**	**5,185**
	Rate (per hour)	**$ 300**	**$ 275**	**$ 275**	**$ 275**	**$ 230**	**$ 250**	**$ 275**	**$ 275**	**$ 225**	**$ 175**	**$ 150**	**$ 125**	
	Fees (USD)	**178,500**	**181,500**	**67,375**	**182,875**	**83,950**	**81,250**	**132,000**	**103,125**	**94,500**	**49,875**	**42,000**	**61,250**	**$ 1,258,200**
	Estimated Expenses (USD)	**21,420**	**21,780**	**8,085**	**21,945**	**10,074**	**9,750**	**15,840**	**12,375**	**11,340**	**5,985**	**5,040**		**$ 143,634**
	TOTAL COST (USD)	**199,920**	**203,280**	**75,460**	**204,820**	**94,024**	**91,000**	**147,840**	**115,500**	**105,840**	**55,860**	**47,040**	**61,250**	**$ 1,401,834**

Note: The lead consultant for each audit area is highlighted in yellow.

Table VI-2
Estimated Expenses

Expense Category	Amount	Total
Transportation and Lodging		
Hotel (est. 260 hotel nights)	$ 52,154	
Air Transportation (est. 53 trips)	34,489	
Meals/Per Diems	19,137	
Ground Transportation	20,189	
Miscellaneous	10,094	$ 136,063
Supplies and Materials		
Telephone, Teleconference	5,047	
Office supplies	2,524	$ 7,571
Total Expenses		**$ 143,634**

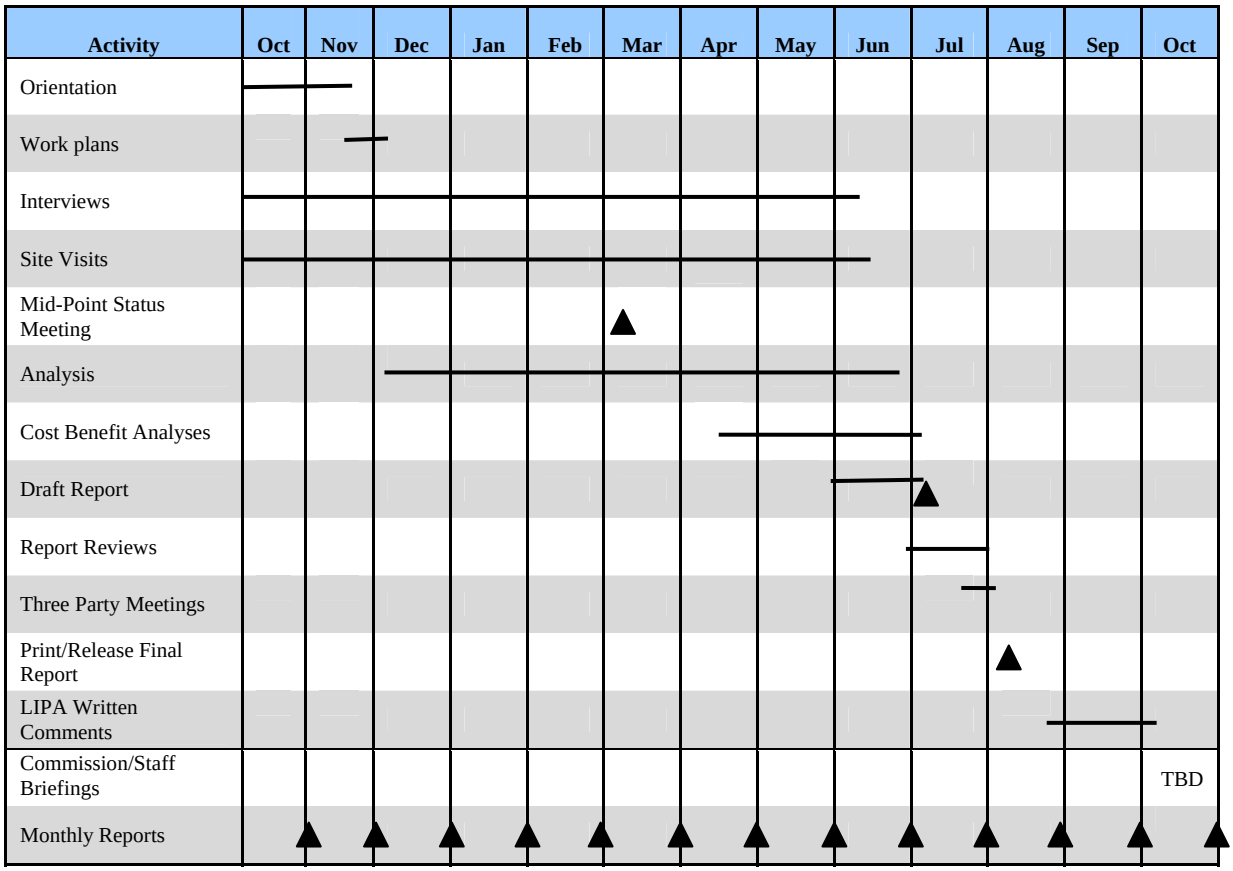
Our estimate of project expenses includes travel to New York, report preparation, developing quantification of savings, responding to Staff and company comments on draft reports and participating in three-party meetings.

Key milestones/deliverables can be found in **Exhibit VI–3**. **Exhibit VI-4** shows the proposed schedule for completing the audit. The final schedule will be developed in consultation with the Department. Assuming a start date of October 8, 2012, the draft report would be completed and submitted to staff by July 5, 2013 and the final report submitted on or before August 2, 2013.

Exhibit VI-3
Key Milestones/Deliverables

Key Milestone/Deliverable	Date
1. Begin Audit	October 8, 2012
2. Submit draft work plan to Staff	November 9, 2012
3. Detailed work plan approved (Phase I complete)	November 16, 2012
4. Technical audit begins	November 19, 2012
5. Mid-point status meeting/emerging issues	March 4-8, 2013
6. Develop preliminary findings and recommendations	April 12, 2013
7. Begin cost-benefit analyses	April 15, 2013
8. Complete detailed audit investigation and CBA	June 7, 2013
9. Submit draft report to staff	July 5, 2013
10. Submit draft report to LIPA for factual accuracy	July 12, 2013
11. Comments back from LIPA	July 19, 2013
12. Submit revised draft report to Staff/LIPA	July 26, 2013
13. Issue final report (Phase IV complete)	August 2, 2013
14. LIPA submits written comments on final report	August 16, 2013

Table VI-4
Proposed Project Schedule (2012 - 2013)



VII. EXPERIENCE AND QUALIFICATIONS

This chapter provides the statement of qualifications for NorthStar Consulting Group and TCBA Watson Rice. We provide summaries of engagements similar to the scope of work on this assignment and a listing of references. Qualifications and resumes of individual consultants can be found in **Chapter V – Project Team and Responsibilities**.

This chapter is organized as follows:

A. Overview
B. NorthStar Utility Expertise
C. Representative Management Audit Experience
D. Other Utility Consulting Projects
E. NorthStar Client References
F. TCBA Watson Rice

A. OVERVIEW

NorthStar is a full service management consulting firm specializing in services to the utility, transportation, and public service industries. NorthStar's clients include regulatory commissions, investor-owned electric, gas, water and telecommunications utilities, municipal governing bodies, and municipal electric and water utilities. NorthStar focuses on providing its clients with the understanding, knowledge, training, and tools necessary for them to manage and overcome challenges, improve performance, and provide cost-effective service to their customers and stakeholders. NorthStar's consultants have provided services to the utility industry since the mid-1970s, working with clients to adapt, reorganize, and comply with a changing regulatory and operating environment.

Founded in 1999 and incorporated in the State of California, NorthStar's partners and staff have served clients throughout the United States and Canada. While NorthStar is continually serving new clients, a substantial portion of its practice consists of providing consulting services to organizations that its partners and staff have established relationships with over the years.

NorthStar provides a broad array of management services, including:

- **Management Audits.** Comprehensive audits of the management and operations of electric, gas, water and telephone utilities aimed at developing more effective and efficient policies and procedures. These projects include extensive investigation in areas such as executive management, financial management, customer services, human resources, field operations, and support services.

- **Affiliate Transaction Audits**. Process and financial-based audits of transactions between regulated utilities and their holding companies and unregulated affiliates. The purpose of these audits is to determine if a utility's ratepayers are subsidizing

unregulated businesses or if the unregulated affiliates are leveraging their relationship with its regulated affiliate to obtain a market advantage.

- **Operations Management.** Comprehensive studies in distribution and customer operations including quality assurance procedures, work management, scheduling, work standards, manpower utilization, methods engineering, equipment maintenance, inventory controls, and cost reduction.

- **Work Force Management.** Comprehensive and focused programs to increase worker productivity and reduce labor expenses. Strengths and improvement opportunities of current systems are evaluated and the utilization of the existing work force is established. A baseline for service level, quality and productivity is defined for an implementation program consisting of orientation sessions, training of supervisory personnel, measurement of work, and development of performance indicators.

- **Project Management.** Examination, evaluation and development of the overall engineering, procurement and construction management processes including: organization of engineering and construction functions; reporting relationships within client and external contractors; selection of architect/engineer or engineering/ construction firm and/or general contractors and subcontractors; evaluation of contracts; processes of planning, scheduling estimating, and reporting progress and expenditures; site management; accounting; materials tracking and control; work force productivity; quality assurance; and document control.

- **Construction Program Management.** Design and implementation of management processes and working materials that enable client management and staff to effectively manage and control large scale construction and development programs. Developing project management organization, control tools, reporting systems, training modules, and performance measurement techniques for use by client personnel.

- **Business Planning.** Assessment of organization capability for anticipating and responding to changes in demand, market demographics, environmental factors, government regulations, cost factors, availability of capital, and those factors which affect operations and performance.

- **Performance Benchmarking and Process Re-Engineering.** Definition and quantification of basic indicators by which management, regulators and financial institutions can judge the performance of the company or specific functional unit; thus providing a common basis for reviewing management. Identifying key measures of performance, establishing appropriate benchmarks to evaluate how well the company is being managed, and providing a tool for continuous measurement of such performance.

- **Best Practices and Operations Improvement.** Comprehensive programs covering the overall effectiveness of management, organization structure, policies, decision

processes, and critical operating procedures. NorthStar consultants have conducted numerous management and operations improvement programs - ordered by public utility commissions and company-authorized - because of the need to develop an improved understanding of company operations beyond those provided through routine processes.

NorthStar maintains offices in Las Vegas, Nevada, New London, New Hampshire, and Santa Maria, California. NorthStar professionals are recognized specialists in the utility industry and possess substantial experience in business process re-engineering and best practices, organizational planning and development, strategic planning, corporate performance, operations and maintenance management, work force management, engineering and construction, plant operations, financial planning, and supply chain management.

B. UTILITY EXPERTISE

NorthStar consultants are utility experts who have successfully completed numerous challenging assignments for private- and public-sector clients. We have performed a significant number of project assignments for various federal, state and municipal government agencies, utility companies, boards and commissions. An important element of our approach to consulting engagements is developing and maintaining a close working relationship with the clients for whom we have performed work over the years. It is our goal to develop long-term client relationships by providing valuable counsel and assisting clients to achieve the benefits of our recommendations. We believe that achieving real, tangible and sustainable results for our clients generates the primary value added from consulting. Many of our projects have involved analyzing situations, identifying problems and developing solutions, as well as detailed implementation, planning and assistance.

We are committed to implementing the results of our analytical work and we are proud of our reputation of producing results for our clients. We believe that the strong implementation focus of our practice, combined with our experience in facilitating the change process in a variety of client environments is unique in the consulting profession and the key to our success. It is the hallmark of our consulting profession and the driving force behind our selection of staff and organizational structure.

We feel that our qualifications, as discussed below, optimally position us to effectively perform the management and operations audit of LIPA's utility operations.

1. **Independent, Unbiased and Objective Approach** - NorthStar is able to offer our services without the hindrance of any issues or concerns that might be raised about our independence and objectivity. .

2. **Extensive Utility Industry Consulting Experience** - NorthStar consultants have worked with more than 50 clients during the last 30 years, including many reviews to evaluate management effectiveness.

3. **Subject Matter Expertise** – NorthStar consultants provide expertise in all areas of utility operations and management.

4. **Strong Project Management Capabilities** - NorthStar personnel have a proven track record of managing large, complex projects on time and within budget, while providing high quality work products. We have successfully managed numerous projects of scope and complexity similar to this audit.

5. **Extensive Testimony Experience** - Most of the members of our project team have experience with the preparation and/or presentation of testimony to public service commissions, state legislatures, and others.

NorthStar consultants have worked with many public and private utilities, municipal government departments, and regulatory bodies in the U.S. Some of clients we have served are listed below.

Regulatory Commissions	California Public Utilities Commission	New York PSC
	Connecticut PURA	Ohio PUC
	Illinois Commerce Commission	Pennsylvania PUC
	Massachusetts PUC	Texas PUC
	Nevada PSC	US Dept. of Commerce
	New Jersey Board of Public Utilities	US Environmental. Protection Agency
Municipal Organizations	Los Angeles Bureau of Engineering	Los Angeles Dept. of General Services
	Phoenix Sky Harbor International Airport	Port of Los Angeles
Municipal Utilities	Colorado Springs DPU	Memphis Light Gas and Water
	East Bay Municipal Utility District	Nebraska Public Power District
	Glendale Public Utilities	New York Power Authority
	Ketchikan Municipal Utilities	Omaha Public Power District
	Los Angeles Dept. of Water and Power	Seattle City Light

Investor-Owned Public Utilities	Alliant	New Jersey American Water
	Arizona Public Service Company	New Jersey Natural Gas Company
	Boston Edison Company	New York State Electric & Gas
	Central Vermont Public Service Corp.	Niagara Mohawk
	Cilcorp	NICOR
	CMS Energy	Northeast Utilities
	Columbia Gas Ohio	Northern Indiana Public Service
	Consolidated Edison Company	Oklahoma Gas & Electric
	Dominion Energy Ohio	Pacific Bell
	Duke Power	Pacific Gas and Electric Company
	Elizabethtown Gas Company	Peoples Energy
	Enbridge Consumers Gas	Public Service Co. of New Mexico
	Exelon	Public Service Electric and Gas
	General Public Utilities Corporation	Public Service Oklahoma
	Great Plains Energy	QWEST Communications
	Jersey Central Power & Light	San Diego Gas and Electric
	Kentucky Utilities Company	Southern California Edison
	KeySpan	Southern California Gas Company
	MDU Resources	Southern New England Telephone
	MidAmerican Energy	United Illuminating Company
	Montana Power Company	US WEST
	Mountain Fuel Supply Company	Vectren Energy Delivery
	Nevada Power Company	WE Energies

C. REPRESENTATIVE MANAGEMENT AUDIT EXPERIENCE

Central Hudson Gas and Electric (Central Hudson)

NorthStar performed a comprehensive management audit of Central Hudson for the New York PSC. Central Hudson is an independent regulated natural gas and electric distribution utility serving approximately 300,000 electric and 74,000 gas customers in New York's Mid-Hudson River Valley. The audit focused on Central Hudson's construction program planning, operational efficiency and performance including reliability, and affiliate transactions. The audit also included a review of Central Hudson's affiliate transactions. Doug Bennett, Angela Anderson, Carol Etter, Dawn Francis and Robert Decker worked on this engagement. (2010)

Niagara Mohawk Power Corporation d/b/a National Grid Electric Business

NorthStar completed a comprehensive management audit of National Grid's (NG) Upstate New York electric business for the New York PSC. NG has over 1.5 million electric customers in Upstate New York. The audit focused on NG's construction program planning, operational efficiency and performance including reliability. Doug Bennett, Carol Etter, Dawn Francis, and Robert Decker worked on this engagement. (2009)

Just Energy Illinois Corporation – Management and Compliance Audit

NorthStar performed an audit of the sales and marketing practices of Just Energy, an alternative natural gas supplier marketing in Illinois. The primary objective of the audit was to substantially reduce customer complaints. The audit was initiated in response to a lawsuit filed by the Illinois Attorney General and a complaint filed by various parties with the

Illinois Commerce Commission alleging unfair and deceptive sales and marketing practices by Just Energy. Angela Anderson directed this engagement and Dawn Francis served as Lead Consultant. Tracy Johnson assisted in the reviews of customer complaints and sales verification processes and also provided administrative support. The final audit report was submitted on January 4, 2012 and is available at:

http://www.icc.illinois.gov/docket/files.aspx?no=10-0398&docId=175735

Contact: Mr. Peter Muntaner
Project Manager, Illinois Commerce Commission
160 N. LaSalle, Suite C-800
Chicago, IL 60601
(312) 814-6074

Illinois American Water Company (IAWC) - Service Company Fee Audit

NorthStar performed an audit of the fees assessed to IAWC by its affiliate service company for the ICC. IAWC, a wholly-owned subsidiary of American Water Works, has 200,000 customers and is the largest water utility in Illinois. Doug Bennett, Angela Anderson, Carol Etter, Dawn Francis and Robert Decker worked on this engagement. The final audit report was submitted on January 11, 2012 and is available upon request.

Contact: Mr. Daniel G. Kahle, CPA
Project Manager, Illinois Commerce Commission
527 East Capitol Avenue
Springfield, IL 62701
(217) 782-4710

Los Angeles Department of Water and Power – Renewables Performance Audit

NorthStar conducted a performance audit of LADWP's Renewable Portfolio Standard (RPS) program, performed for the Controller's Office. The primary objective of the audit was to determine whether LADWP had efficient and effective processes for implementing the City's RPS to increase the use of wind, solar, geothermal, biomass and small hydroelectric power and meet the goal of achieving 20 percent of the City's electricity needs from clean, renewable sources in 2010 and for the future. Doug Bennett, Angela Anderson, Elizabeth Lemkul and Dawn Francis worked on this engagement. The audit report is available on the City's website at:

http://controller.lacity.org/stellent/groups/electedofficials/@ctr_contributor/documents/contributor_web_content/lacityp_014034.pdf

Contact: Mr. Farid Saffar, CPA
Director of Auditing, City of Los Angeles Controller's Office
200 North Main Street, Suite 460
Los Angeles, CA 90012
(213) 978-7392

New Jersey American Water (NJAW) - Comprehensive Management Audit

NorthStar conducted a comprehensive management audit of NJAW for the New Jersey BPU. The audit focused on numerous functional areas including organizational structure, customer service, finance and accounting, strategic planning, support services, operations and work management, and affiliate transactions. NJAW is a regulated affiliate of American Water Works, Inc., the largest investor-owned water company in the US. NJAW has 640,000 water and wastewater customers and $560 million in annual revenue. The audit included a detailed assessment of the relationships between NJAW, its holding company, the service company, and the unregulated affiliates. Doug Bennett, Angela Anderson, Carol Etter, Dawn Francis, Elizabeth Lemkul and Robert Decker worked on this engagement. (2010)

Contact: Mr. Dennis Moran
Director – Division of Audits, New Jersey Board of Public Utilities
Two Gateway Center
Newark, NJ 07102
(973) 648-7664

Southern Connecticut Gas (SCG) - Comprehensive Management Audit

NorthStar completed a comprehensive management and audit of Southern Connecticut Gas Company for the Connecticut DPUC. The audit focused on numerous functional areas including executive management, support services, system operations, financial operations, supply management, and affiliate transactions. SCG has 180,000 natural gas customers. SCG has numerous interfaces with its affiliates resulting in transactions between SCG and the Energy East (EE) service company, a liquefied natural gas plant owned by an affiliated marketer, the EE management company, shared contracts with its sister Connecticut utility, Connecticut Natural Gas, and a shared asset management contract with all of the EE companies. Angela Anderson, Carol Etter and Dawn Francis worked on this engagement. (2009-10)

Contact: Mr. Robert Palermo
Public Utilities Regulatory Authority (formerly DPUC)
10 Franklin Square
New Britain, CT 06051
(860) 827-2760

Ohio Gas Utilities – Credit and Collections Audit

NorthStar performed a review of the credit and collection policies and procedures of the four natural gas utilities for the Ohio PUC. The audits were performed simultaneously, completed under an aggressive schedule and provided numerous recommendations for performance improvement. Angela Anderson directed this engagement. Carol Etter and Dawn Francis served as Lead Consultants. The public version of NorthStar's audit report was issued on May 3, 2010, and is available on the PUCO's website at:

http://dis.puc.state.oh.us/TiffToPDf/A1001001A10E03B64021D26087.pdf

Contact: Ms. Barbara Bossart
Manager of Audits, Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215
(614) 466-0793

Duke Energy of Ohio – Gas Supply Management Audit

NorthStar performed a gas supply management/performance review of Duke Energy of Ohio for the Ohio PUC. Carol Etter directed this engagement and Dawn Francis served as Lead Consultant. (2009)

Contact: Mr. Roger Sarver
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215
(614) 466-7647

Southern California Edison – 1990, 2000, 2001, and 2006 Affiliate Transaction Audits

NorthStar Consulting Group performed the annual affiliate transaction audit for calendar years 1990, 2000, 2001, and 2006 in compliance with the California Public Utility Commission (CPUC) Affiliate Transaction Rules. The Rules require the utility to conduct an independent annual audit and file the audit results with the CPUC. The objective of these audits was to express an independent opinion on the degree and extent of SCE's compliance with the CPUC's rules governing affiliate transactions and relationships, and with SCE's own compliance plans. NorthStar reviewed utility compliance in areas such as organizational structure, non-discrimination, information disclosure, separation, internal controls, cost allocations, and competitive services. NorthStar completed the last SCE audit in April 2007. Doug Bennett and Dawn Francis worked on these engagements. A copy of this document can be found at:

http://www.sce.com/NR/sc3/tm2/RPA/Reg_Info_Ctr/AffiliateAuditReport/2006_affiliate_transactions_audit_report.pdf

Contact: Mr. Michael Unland
Southern California Edison Company
Regulatory Policy & Affairs
2244 Walnut Grove Avenue
Rosemead, CA 91770
(626) 302-6638

Southern California Gas Company and San Diego Gas and Electric – 2000, 2001, 2002, and 2004 Affiliate Transaction Audits

NorthStar conducted the 2000, 2001, 2002, and 2004 affiliate transaction audits of Sempra Energy's two regulated utilities, San Diego Gas and Electric and Southern California Gas Company. The annual audits are a requirement of the State of California's Affiliate Transaction Rules. The purpose of this audit was to provide a professional opinion as to each utility's relative compliance with the California Affiliate Transaction Rules. Doug Bennett and Dawn Francis worked on these engagements.

NorthStar completed the last Sempra audit in May 2005. NorthStar's audit results were recognized by the CPUC in D.06-12-029, pages 11-12. A copy of the decision can be found at: http://www.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/63087.PDF.

Contact: Mr. Jack Fulcher
California Public Utility Commission
505 Van Ness Avenue
San Francisco, CA 94102
(415) 713-1711

Lower Colorado River Authority (LCRA) – Cost Allocation Audit

NorthStar performed an audit of the transmission cost of service of LCRA for LCRA and the Public Utility Commission of Texas. The audit encompassed five subject areas: direct transmission charges, allocation of overhead charges, FERC reporting, administration of capital expenditure transmission projects, and transmission cost-of-service. LCRA is a Texas reclamation and conservation district operating in Central Texas. LCRA, through its wholly owned subsidiary, LCRA Transmission Services Corporation (TSC), provides wholesale transmission services throughout the ERCOT region. TSC has gross revenues of approximately $170 million annually and assets in excess of $1.2 billion. Angela Anderson, Dawn Francis and Elizabeth Lemkul worked on this engagement.

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QWEST Communications – 2003 and 2004 Compliance Audit

NorthStar was selected by the Colorado PUC to conduct the 2003 and 2004 Colorado Performance Assurance Plan Audits of QWEST Communications. The objective of the audits was to determine QWEST's overall compliance in providing parity in service to its competing local exchange carriers.

In order to evaluate Qwest's service levels a number of service metrics were developed and specified in the Colorado Performance Assurance Plan. NorthStar was responsible for

verifying that the service metrics were accurately calculated and reported and that all resulting penalties were paid. This audit required significant quantitative analysis to demonstrate Qwest's overall level of compliance. Doug Bennett and Dawn Francis worked on this engagement

SCE Energy Efficiency Program Management Audit

The CPUC performed a management audit of SCE's utility public goods charge fund revenue collection and energy efficiency program expenditures from January 1, 1998 through December 31, 2002. The management audit was conducted over a period of nearly one year from mid-2003 to mid-2004. The audit included 15 recommendations for SCE that addressed management/financial controls, increased competitive procurement and energy efficiency program process improvements. SCE retained NorthStar to conduct a high level review of the critical aspects of energy efficiency program management within the control of SCE and evaluate the progress that the Energy Efficiency organizational unit within CSBU has made in addressing CPUC audit concerns. Doug Bennett and Dawn Francis worked on this audit.

Public Service Electric & Gas

NorthStar conducted an audit of PSE&G's compliance with New Jersey's affiliate transaction rules for the New Jersey Board of Public Utilities. The audit identified any cross-subsidization of non-regulated competitive services offered by the utility or its affiliates. The audit began in early July and was completed in October 2000. Doug Bennett and Dawn Francis performed this audit.

D. OTHER UTILITY CONSULTING PROJECTS

SCE - Grid Interconnections Process Improvement

In 2009, NorthStar was engaged by SCE to review its internal processes for generator interconnection projects, from the application stage to the signing of an interconnection agreement and project execution. In 2009, there was a dramatic increase in SCE's number of transmission and distribution interconnection requests as a result of California's Renewable Portfolio Standard (RPS). The grid interconnection process at SCE involves over twenty organizations, from system planning and engineering to licensing and legal. NorthStar reviewed the management and business process relationships and project management and controls processes and identified several recommendations for improvement. In 2010, NorthStar assisted SCE with implementation. Elizabeth Lemkul performed this review. (2009-2010)

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SCE - Project Scoping and Estimate Process Improvement

In 2008, NorthStar performed a diagnostic assessment of SCE's processes to develop, revise and distribute capital project estimates for its Transmission and Distribution business unit (TDBU). Following the diagnostic assessment, SCE engaged NorthStar to improve the project scoping and estimate delivery processes for transmission and substation projects. As part of this effort, NorthStar established an annual capital planning timeline, developed a formal estimate classification system, and developed automated estimating and scoping checklists to be used by engineering, construction, project controls, and estimating organizations to develop estimates for transmission and substation projects. NorthStar also assisted SCE with the treatment of contingencies and risk allowances in cost estimates, including the treatment of regulatory uncertainties. Elizabeth Lemkul performed this engagement.

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Southern California Edison TDBU Management & Organization Review

NorthStar completed a management and organization review of SCE's Transmission and Distribution Business Unit (TDBU). TDBU faced a number of challenges after the California Energy Market restructuring. Electric demand was forecast to increase requiring the development of new transmission facilities after many years of dormancy. TDBU had the task of staffing and training to develop this new infrastructure. The scope of this program included:

- Evaluate the organization structure and determine staffing levels.
- Establish effective resource planning.
- Provide quantitative manpower planning and work reporting.

NorthStar performed a top-down review of the TDBU organization and its current operating practices. The TDBU organization and responsibilities were evaluated for strengths and weaknesses, appropriateness to the TDBU mission, and against other similar organizations in the industry. Organizational missions, products, and services were evaluated

to ensure that they support the work management philosophy. Activities were categorized into tasks, project or time category work and then analyzed for efficiency utilizing standard industry engineering methodology. Recommendations were developed to match resource requirements with workload levels, defined management requirements, work management reporting systems, and defined management processes. The last step of the project was planning for implementation of long term recommendations. Doug Bennett and Elizabeth Lemkul performed this engagement.

E. NORTHSTAR REFERENCES

Client: Illinois Commerce Commission **Project:** 2011 Management and Compliance Audit of Just Energy **Contact:** Mr. Peter Muntaner 160 N. LaSalle, Suite C-800 Chicago, IL 60601 (312) 814-6074	**Client:** Public Utility Commission of Ohio **Project:** 2010 Credit and Collections Audit **Contact:** Ms. Barbara Bossart Manager of Audits 180 East Broad Street Columbus, Ohio 43215 (512) 473-3273
Client: Southern California Edison Company **Project:** Affiliate Transaction Audits 1999 through 2006 **Contact:** Mr. Michael Unland Regulatory Policy & Affairs 2244 Walnut Grove Rosemead, CA 91770 (626) 302-6638	**Client:** City of Los Angeles Controllers Office **Project:** Performance Audits of LADWP, General Services, and City Administrative Office 2008 through 2011 **Contact:** Mr. Farid Saffar, CPA Director of Auditing 200 North Main Street, Suite 460 Los Angeles, CA 90012 (213) 978-7392
Client: New Jersey Board of Public Utilities **Project:** 2010 Management and Affiliate Transaction Audit of New Jersey American Water **Contact:** Mr. Dennis Moran Director – Division of Audits Two Gateway Center Newark, NJ (973) 648-7664	**Client:** California Public Utility Commission **Project:** Affiliate Transaction Audits from 1999 through 2006 of SCE, SDG&E, and SoCalGas **Contact:** Mr. Jack Fulcher Regulatory Analyst 505 Van Ness Avenue San Francisco, CA 94102 (415) 713-1711

F. TCBA WATSON RICE

Founded in 1971, TCBA Watson Rice LLP ("TCBA Watson Rice" originally Watson Rice) is one of the nation's oldest and largest culturally diverse, full-service public accounting firms, with offices in New York, NY, Rutherford, NJ, Washington, DC, Cleveland, OH, and Miami, FL. The ownership and management of TCBA Watson Rice LLP is comprised entirely of culturally diverse individuals, currently certified in the State of New York as an MBE. TCBA Watson Rice has over 39 years of experience in providing auditing services to employee benefit plans, not-for-profit, and government clients. TCBA Watson Rice is an independently owned certified small business with annual revenues of less $7.5 million. The firm is certified by the federal government and by several state and local government entities primarily in the markets where are office are located.

In 2007, the firm added TCBA to its name to acknowledge the firms affiliation with Thompson, Cobb, Bazilio & Associates (TCBA). TCBA is a minority based firm founded in 1983 in the District of Columbia. TCBA Watson Rice and Thompson, Cobb, Bazilio & Associates are separate entities that are owned and controlled by separate and distinct ownership. The firms partner on opportunities and share resources that build on the unique expertise of each of the firms.

TCBA Watson Rice is also an independently owned member of an affiliation of 96 national accounting, tax and consulting firms. This affiliation gives TCBA Watson Rice access to a professional knowledge base that is unmatched in the areas of audit & accounting, wealth management, consulting, tax services, and industry expertise. We are also able to support international efforts as a correspondent member of an affiliation of independent accounting firms in 70 countries around the globe.

These relationships allow TCBA Watson Rice to call on professionals who have mastered a broad range of disciplines to augment its service teams including financial management, human resources, operations, and marketing. This puts TCBA Watson Rice in the unique position to offer the full-service approach of a large firm and the personalized service of an independently owned small firm.

Governmental and Municipal Bond Experience

To meet the needs of its government clients, TCBA Watson Rice has established a specific practice group -- the largest division within TCBA Watson Rice's audit practice -- the Government Audit Division. The professionals in this division have a comprehensive understanding of government and industry regulations and guidelines pertaining to the performance of government audits, including Government Auditing Standards; OMB Circulars A-102, Uniform Administrative Requirements for Grants-in-Aid to State and Local Governments, A-123, Internal Controls Systems, and A-133, Audits of States, Local Governments, and Non-Profit Organizations; Single Audit Act of 1984 and amendments; and auditing standards as prescribed by the American Institute of Certified Public Accountants, Government Accounting Standards Board, and the General Accounting Office.

TCBA Watson Rice has extensive experience conducting financial audits in accordance with Generally Accepted Auditing Standards and Government Auditing Standards. Many of the financial and compliance audits it has conducted for state and local government agencies have included single audits in accordance with the provisions of OMB Circular A-133. It also conducts single audits for its nonprofit clients who receive federal funding.

Another area in which TCBA Watson Rice has significant experience is in bonds. TCBA Watson Rice has worked with some of Wall Street's major firms, including First Boston, Bear Sterns, Merrill Lynch, Goldman Sachs, and Citigroup, and many of its clients issue rated public debt, including New York City, the new York State Dormitory Authority, the Government of the District of Columbia, Prince George's County, Maryland, the District of Columbia Water and Sewer Authority, District of Columbia Tobacco Settlement Financing Corporation, Baltimore City Public Schools, and several school districts in California. While it is important for an agency's auditor to understand the accounting and disclosure

requirements related to public financing, it is equally important that the rating agencies have confidence in the qualifications of the auditor. For clients with significant debt portfolios we perform an in depth review debt compliance and management programs related including annual testing of:

- Management's program for identification of debt compliance requirements and monitoring compliance with all debt covenants
- Evaluation of the debt management program including strategies for debt refunding/defeasance to manage overall interest rates
- Assistance, as required, for all new debt issuances planned
- Proper disclosure and reporting of the debt in the financial statements

Some of TCBA Watson Rice clients with significant debt portfolios include the following.

Client	Client Details	Services Provided
D.C. Water and Sewer Authority	$3 billion in assets $2 billion bonds outstanding	Financial and compliance audits
Washington Suburban Sanitation Commission	$4.1 billion in capital assets $2 billion bonds outstanding	Financial and compliance audits
Prince George's County, Maryland	$3.4 billion in assets $2 billion bonds outstanding	Financial and compliance audits
D.C. Government	$5 billion in expenditures $2 billion bonds outstanding	Financial and compliance audits
New York State Dormitory Authority	$1.2 billion operating budget $5 billion bonds outstanding	Financial and compliance audits
South Coast Air Quality Management District	$497 million in assets $1 billion bonds outstanding	Financial and compliance audits
Los Angeles County Metropolitan Transportation Authority	$1.41 billion in revenues $2 billion bonds outstanding	Financial and compliance audits
Metropolitan Washington Airports Authority	$3 billion construction project financed by 2 billion in revenue bonds	Internal Audit Services
Prince George's County ,Maryland	$1.2 billion million operating budget	Internal audit services

Utility Qualifications

A major segment of TCBA Watson Rice's Government Audit Services practice is utility companies of all types. It serves water, air, natural gas, telephone, and electric utility companies throughout the United States. Its utility clients include the following:

PEPCO	Washington Gas Light
Pennsylvania Public Utility Commission	City of Newark
South Coast Air Quality Management District	Los Angeles Department of Water and Power
T-Mobile	Sprint Nextel
DC Water and Sewer Authority	Washington Suburban Sanitary Commission
First Energy	DC Public Service Commission
Pennsylvania Emergency Management Agency	City of Norfolk Department of Utilities

The following provide descriptions of TCBA Watson Rice's recent utility qualifications:

- **District of Columbia Water and Sewer Authority** - Since 2001, TCBA has performed the annual audit of the D.C. Water and Sewer Authority (WASA). WASA provides water and sewer services to District of Columbia residents, businesses, federal and municipal customers and operates a regional wastewater treatment Plant and interceptor trunk line that carries wastewater to the Plant from surrounding jurisdictions. WASA has net assets of $833 million, operating revenues of $264 million, operating expenses of $228 million and collects over $200 million of water and wastewater user charges annually. WASA has capital assets of over $1.7 billion and related long debt. WASA's service territory includes over 2 million people in the District and certain counties in Maryland and Virginia. WASA and the other participants have entered into an Inter-Municipal Agreement (IMA), which among other things provides for the allocation of capital, operating and maintenance costs of WASA's wastewater treatment plant according to the terms specified in the IMA.

- **Washington Suburban Sanitary Commission** - Since 2007, TCBA has performed the annual audit of the Washington Suburban Sanitary Commission (WSSC). WSSC provides drinking water and wastewater services to over 1.3 million residents located in Montgomery and Prince George's County in the State of Maryland. WSSC also provides these services to business, federal, and municipal customers located in these counties. WSSC has net assets of $2.9 billion, operating revenues of $458 million, operating expenses of $346 million and collects over $360 million of water and wastewater user charges annually. WSSC has capital assets of over $4.1 billion and related long debt, principally bonds of approximately $1.5 billion.

- **Pennsylvania Public Utilities Commission** – In 2006 TCBA subcontracted to the Barrington-Wellesley Group (BWG) to perform the 2006 stratified and management audit of First Energy. TCBA was responsible for supporting the project team's review of the First Energy's financial structure, corporate governance, human resource practices and information systems. Task areas included evaluation of FirstEnergy's financial and information support systems, cash management systems, accounting and financial controls, financial planning and communications with the investor community and assisting in the overall analysis of First Energy's corporate governance structure. TCBA team members also assisted the review of human resource management including review of staffing levels, compensation practices, personnel policies and procedures, training program and current labor agreements and labor relations strategy. Information systems were also evaluated by the TCBA team to determine if the information systems provided were adequate for the current and future needs of the Pennsylvania operating companies.

- **Los Angeles Department of Water and Power** – In 2006 TCBA subcontracted to the BWG for the 2006 independent review for the City of Los Angeles (City) of the financial condition of the Department of Water and Power (DWP or Department) in order to assess the need for potential rate increases. TCBA provided staff to assist in

all aspects of the review including gathering and analysis historical and comparative financial data and review of the cost assumptions and resulting rate impact. TCBA specifically reviewed the financial structure of the both the Water Services and Energy Services Division of DWP with responsibility for review of the current financial structure including review of the debt structure, performing financial analysis and reviewing of the financial accounting practices including the implementation of proper accounting for post-employment retirement obligations.

- **Pennsylvania Emergency Management Agency** – TCBA is currently providing accounting and reconciliation services to PEMA in support of their Emergency 9-1-1 program for deployment of technology of wireless E 9-1-1 technology at each of the 67 Public Service Answering Points (PSAPs) in the State of Pennsylvania. TCBA team records and audits all user fees collected from wireless service providers in the State and assists PEMA in tracking and distributing the funds to the PSAPs based on their wireless deployment plan and approved budget. TCBA also performs a detailed reconciliation of each PSAP's use to the funds to ensure the funds were spent on the items in accordance with the approved budget request for wireless deployment including inspection and inventory of all equipment and software purchases.

- **South Coast Air Quality Management District** – TCBA conducted an engagement to perform financial and compliance audits of cities and other entities receiving South Coast Air Quality Management District (AQMD) funds. Under Assembly Bill 2766, the AQMD is authorized to impose a motor vehicle registration fee to be used by AQMD and local governments to reduce air pollution. TCBA conducted audits of recipients of these funds to determine how the revenues were being spent and whether the activities were in compliance with program requirements.

  TCBA served as the prime contractor on this engagement, which included audits of more than 40 cities and unincorporated areas in Los Angeles, Orange, Riverside, and San Bernardino counties as well as regional authorities and commissions in these counties. In addition to these cities, TCBA and its subcontractor also audited AB 2766 funds allocated to the San Bernardino Associated Governments, Riverside County Transportation Commission, East San Gabriel Valley Integrated Waste Management, Orange County Transportation Authority, MTA, and Los Angeles and Orange counties. To complete this engagement on time, TCBA sent teams of auditors to multiple cities simultaneously. In all, 56 entities were audited.

  Noncompliance findings for the AB 2766 audits of local governments and transportation commissions totaled over $1.3 million in questioned costs. Key findings included the ineligible use of funds to purchase prisoner transport buses, failure to allocate interest income to AB 2766 funds on a reasonable basis, administrative costs in excess of the 5 percent limit, and unsupported program expenditures and labor costs. Based on TCBA's recommendation, AQMD revised its program guidelines for AB 2766.

- **Washington Metropolitan Area Transit Authority** – TCBA conducted a review of over $300 million of federal grant expenses and draws of cash to assist the

Comptroller's Office of the Washington Metropolitan Area Transit Authority in closing out Federal grants received for the construction of the subway system. These audits included the reconciliation of obligations, expenditures and cash draw-downs, test of the underlying accounting records and transactions, evaluation of the adequacy of documentation supporting grant and appropriation costs, and test of compliance with Federal Transit Administration regulations. TCBA also prepared and reconstructed records and other documentation required to support the close out of grants. Results of this review were presented to the U.S. Department of Transportation.

- **Washington State Auditor's Office Performance Audit of Three Public Utility Districts (PUD's) in the Columbia River Basin** – TCBA is currently conducting a performance audit of the Chelan, Grant, and Douglas County PUD's for the Washington State Auditor's Office. Chelan County PUD is a utility system that provides local water, wastewater and wholesale fiber-optic services in addition to electricity for rural as well as urban residents. The PUD operates three hydro projects that deliver clean, renewable, low-cost energy to local residents and to other utilities that serve million residents of the Pacific Northwest. Grant and Douglas County PUDs are Public Utility Co-operatives in north central Washington that each operates two hydroelectric projects.

  TCBA's audit includes:

  - Assessing the effectiveness of the governance structure, policies and practices at each PUD.
  - Evaluating organizational management including strategic planning, performance measurement and reporting, organizational structure, and human resource management.
  - Assessing the extent to which the PUD's achieved effective, efficient, and economical planning, designing, and construction management.
  - Determining how effective the PUD's have been at soliciting, procuring, and managing their engineering, consulting, and construction management contracts.
  - Determining how economically and efficiently PUD's have managed administrative operations, administrative costs, administrative salaries, travel and administrative staffing levels.
  - Determining how efficiently and economically PUD's have managed operational expenses (includes operational costs associated with power generation, power transmission, facilities and power-lines

Certifications and Affiliations

To stay abreast of changes in the accounting industry, TCBA Watson Rice professionals all meet or exceed requirements for continuing education. The firm and its senior personnel are active participants in industry organizations, and have professional affiliations with the following groups:

- American Institute of Certified Public Accountants (AICPA)

- AICPA Employee Benefit Plan Quality Center
- AICPA Government Audit Quality Center
- Peer Review Program of the AICPA
- Public Company Accounting Oversight Board
- District of Columbia Board of Accountancy
- Board of Accountancy, State of Maryland
- Board of Accountancy, State of California
- Board of Accountancy, State of Virginia
- Board of Accountancy, State of Pennsylvania
- Board of Accountancy, State of Texas
- Board of Accountancy, State of Michigan
- Information Systems Audit and Control Association
- Association of Certified Fraud Examiners
- Greater Washington Society of Certified Public Accountants
- Maryland Association of Certified Public Accountants
- Association of Government Accountants
- Institute of Internal Auditors
- Government Finance Officers Association

References

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