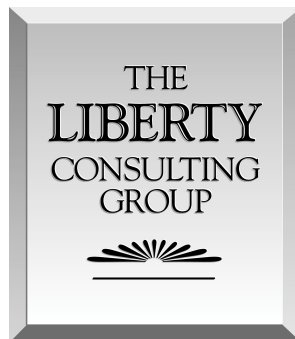


**Proposal to Conduct a  
Focused Management Audit of  
The Fuel Procurement Functions of  
Kentucky Utilities Company and  
Louisville Gas and Electric Company**

Presented to:

**The Kentucky Public Service Commission**

By:



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September 22, 2003

THE  
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September 19, 2003

Kentucky Public Service Commission  
Attn: John A. Rogness, III, Manager  
Management Audit Branch  
211 Sower Blvd.  
Frankfort, Kentucky 40601-8294

Dear Mr. Rogness:

The Liberty Consulting Group (*Liberty*) is pleased to submit this proposal to The Public Service Commission of Kentucky (*the Commission*) in response to the RFP dated August 27, 2003 to conduct a focused management audit of the fuel procurement functions of Kentucky Utilities Company and Louisville Gas and Electric Company. Liberty offers the Commission a high-caliber team of consultants to perform this audit, and a detailed audit work plan that fully meets the requirements of the RFP. The enclosed proposal details the approach, methods, and the personnel that will produce these results.

The team Liberty proposes to perform the audit includes senior consultants who have many years of experience in conducting fuel management audits of electric utilities similar to the one described in the RFP. Liberty is especially well positioned to conduct this audit because the firm's project manager and Senior Consultant for this project is Don Spangenberg. Mr. Spangenberg has managed several recent projects for the Commission and is an expert in utility fuel management with over 30 years of experience in this area of work.

Liberty's track record in successfully conducting audits of high quality, within promised budget and schedule constraints, demonstrates our ability to provide the Commission with the services it expects. If you have any questions concerning this proposal, please contact me. Liberty looks forward to the opportunity to be of service to the Commission.

Sincerely,

John Antonuk  
President

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## **I. Project Statement**

### **A. Audit Mission**

The Kentucky Public Service Commission (*Commission*) is seeking proposals for consulting services required to perform a focused management audit of the Fuel Procurement Function of Kentucky Utilities Company (*KU*) and Louisville Gas and Electric Company (*LG&E*) or collectively (*the Companies*). For both KU and LG&E, this audit applies to their Kentucky retail electric businesses only. This audit is being conducted under the auspices of Case No. 2000-00497-B. To provide for the required management audit of these Companies, the Commission has issued a Request for Proposal dated August 27, 2003.

The Liberty Consulting Group (*Liberty*) is a management and technical consulting firm that specializes in the public-utility industries. Liberty has extensive experience in conducting management and operations audits of utilities in the electric power, natural gas, and telecommunications industries. Liberty has served commissions in thirty different states and the District of Columbia in conducting the type of engagement described by the subject RFP. Liberty hereby submits this proposal in response to the RFP, for the focused management audit of the Companies.

### **B. Background**

KU and LG&E are wholly-owned subsidiaries of LG&E Energy. KU is a distributor of electricity and LG&E is a distributor of electricity and natural gas. Both Companies' business address is 220 W. Main Street, P.O. Box 32010, Louisville, KY 40232. KU sells electricity to customers in 77 Kentucky counties. KU also sells retail electricity to customers in Virginia, as well as wholesale (FERC jurisdiction) electricity to municipalities in both Kentucky and Virginia. LG&E sells electricity to customers in nine Kentucky counties.

In April 1997, LG&E Energy Corp. (*LG&E Energy*), the holding company for LG&E, offered to acquire all of the outstanding shares of KU Energy Corporation (*KU Energy*), the holding company for KU. In May 1998, following all the required regulatory approvals, this acquisition was completed with LG&E Energy as the surviving corporation and with LG&E and KU as subsidiaries of LG&E Energy. In February 2000, the decision of the Boards of Directors of LG&E Energy and Powergen plc (*Powergen*) of the United Kingdom that Powergen would acquire LG&E Energy (*the Powergen Acquisition*) was announced. In December 2000, following the necessary regulatory approvals, the acquisition was completed, with LG&E Energy becoming an indirect subsidiary of Powergen, and with LG&E and KU remaining utility subsidiaries of LG&E Energy. In April 2001, the decision of the Boards of Directors of Powergen and E.ON AG (*E.ON*) of the Federal Republic of Germany that E.ON would acquire all of the outstanding shares of Powergen (*the E.ON Acquisition*) was announced. In July 2002, following the requisite regulatory approvals, that acquisition was completed, with LG&E Energy becoming an indirect subsidiary of E.ON and with LG&E and KU remaining subsidiaries of LG&E Energy.



As a result of both the Powergen Acquisition and the E.ON Acquisition, LG&E and KU are part of a registered holding company system under the Public Utility Holding Company Act. As such, LG&E Energy Services provides services both to LG&E and KU, and to other LG&E Energy affiliates within the registered holding company.

### **Fuel Adjustment Clause History**

In the Commonwealth of Kentucky electric utilities are permitted by 807 Kentucky Administrative Regulation (*KAR*) 5:056, to establish “Fuel Adjustment Clauses” (*FAC*) to pass through changes in fuel costs without the necessity of a general rate proceeding. Adjustments, pursuant to the *FAC*, are automatic, but the Commission periodically reviews its utilities’ *FAC* filings. According to 807 *KAR* 5:056, Section 1(11), the Commission must hold public hearings every six-months to review the utilities’ past fuel procurement practices. Any adjustments found to be unjustified due to improper calculation or application of the charge or improper fuel procurement practices are disallowed. Regulation 807 *KAR* 5:056, Section 1(12) provides for a hearing every two years to review and evaluate past operations of the *FAC*, and to the extent necessary, reestablish the fuel clause charge. Again, any expense adjustments found to be improper are disallowed.

On January 28, 2003, the Commission issued an Order in Case No. 2000-00497-B; “An Examination by the Kentucky Public Service Commission of the Application of the Fuel Adjustment Clause (*FAC*) of Kentucky Utilities from May 1, 2001 to October 31, 2001.”

At issue was whether KU incurred unreasonable fuel costs as a result of fuel management practices in which KU purchased imported coal from a non-regulated affiliate. The Commission found that KU incurred unreasonable fuel costs, and subsequently directed KU to reduce its fuel cost by \$673,000 for the purpose of calculating its *FAC*. The Commission ordered a focused audit of KU’s fuel procurement functions and structure, including the organizational structure of KU’s fuel procurement management. The Commission also found that, given the joint nature of KU’s and LG&E’s fuel procurement functions along with the close integration within LG&E Energy’s fuel procurement activities, the audit should also encompass the fuel procurement function and structure of LG&E and LG&E Energy. The Companies’ fuel costs consist primarily of coal; however, all fuel procurement will be included in the audit.

### **C. Audit Scope and Objectives**

The overall objective of the audit is to examine all operational and managerial aspects of the fuel procurement functions of KU and LG&E, including the organizational structure and the operational interrelationship of fuel procurement management among LG&E Energy, KU and LG&E. Although the greatest effort is to focus on coal procurement, the procurement of natural gas and fuel oil for the Companies’ peaking units is to be included as well.

**This is not intended to be a comprehensive management audit.** Therefore, the scope of this project is limited to a review of the major functional areas and activities of KU, LG&E, and



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LG&E Energy that relate to fuel procurement. Accordingly, this review is to be highly focused on the policies and procedures governing KU's, LG&E's, and LG&E Energy's fuel procurement, as well as the general management processes related to fuel procurement. In addition, this audit is not intended to search out any specific wrong-doing. Rather, it is a review and evaluation of the Companies' current practices, policies, and organizational structure with respect to fuel procurement. All recommendations made will be forward looking and suggest reasonable ways for the Companies to improve operations and policies.

The following six areas of inquiry, as required by the RFP, are incorporated into Liberty's proposed work plan:

1. Review KU's and LG&E's monthly FAC filings, beginning in January 2001, to determine whether KU's and LG&E's fuel transactions have been disclosed in accordance with applicable regulations. Also, determine if the applicable regulations provide for adequate disclosure of all fuel transactions.
2. Review the bid solicitation and evaluation process to ensure a low cost and reliable coal supply.
3. Review the fuel vendor evaluation process to assure continued supplier quality and reliability to the maximum extent possible.
4. Appraise the organizational separation of regulated and non-regulated affiliates in relation to the fuel procurement function.
5. Review the reasonableness of fuel inventory levels and fuel inventory targets for each generating station.
6. Review the Companies' compliance with all applicable Kentucky and Securities and Exchange Commission requirements for affiliate transactions focusing only on the Companies' fuel procurement practices.

Both the Commission and the Companies expect the final audit report to be objective and balanced and to include reasonable and meaningful recommendations, if warranted. This proposal demonstrates how Liberty intends to accomplish this review and to develop recommendations that meet these criteria. This proposal will demonstrate Liberty's in-depth understanding of the electric industry and current fuel markets, particularly coal market conditions. Liberty is especially well qualified in terms of its detailed knowledge of utility coal procurement functions and practices and of utility fuel adjustment clause mechanisms. Liberty's many years of experience focused on this particular field of utility operations and understanding of these issues results in a clear understanding of how fuel management operations can affect the Companies and their customers.

#### **D. Staff Participation**

Liberty's study methods and its extensive experience in working for public-utilities commissions on management and operations audits similar in scope to the proposed audit of the Companies



make clear our firm commitment to full Commission Staff participation. Liberty has on a number of prior engagements for the Commission demonstrated its commitment to such participation, and pledges the same efforts on this audit. Staff involvement provides an important contributor to a high-quality report that serves as a true force for positive change. Liberty has also demonstrated that commitment by explicitly incorporating Commission Staff involvement into major audit steps. Liberty commits to working directly with the Commission Staff Project Officer, in the manner specified in the RFP.

Liberty has designed the initial steps in its document-creation process to give substance to its commitment to Staff participation. It permits Staff to know at all times exactly where the audit stands. This real-time knowledge permits Staff to track results and progress from quality, cost, and schedule perspectives. It also allows Staff to design whatever level of its own participation it deems appropriate.

In addition to working closely with Commission Staff, Liberty is also committed to working with the Companies and their staff. Liberty is well known for its collaborative approach to management audits, and this approach will be continued on this management audit of the fuel procurement function for both KU and LG&E.

Finally, Liberty understands the need of the Commission for ongoing and timely information regarding the conduct and progress of the subject project. Liberty's project manager for this project will communicate regularly and directly with the Staff Project Officer on both a formal and an informal basis. Therefore, Section I.F below of this proposal specifies the formal and detailed reporting steps that Liberty intends to follow during the course of this project, in addition to the informal communication mentioned above. These are the following project progress reports, as specified in the RFP:

- Weekly Informal Reports.
- Monthly Written Status Reports.
- Interview Summaries.
- Interim Written Status Reports.

## **E. Study Standards**

Liberty will provide the services proposed herein as an independent contractor. The findings, conclusions, and recommendations shall result solely from the work and judgments of Liberty's team. Liberty shall be solely responsible for them. However, Liberty will work under the oversight of the Commission Staff and its Staff Project Officer in all aspects of audit work.

In the conduct of this audit, Liberty commits to its conduct according to standards generally applicable to evaluations of this type. Specifically, Liberty commits to the application of the General Standards and Standards of Field Work prescribed in the American Institute of Certified Public Accountants (*AICPA*) Professional Standards - U.S. Auditing Standards Volume A and





the 1988 Revision of the General Accounting Office's (GAO) Standards for Audit of Government Organizations, Programs, Activities and Functions, Publication Number USGPO 020-000-00243-3. Liberty will adhere to all amendments effective at the start of audit work.

These commitments will be met through specific elements that have been built into the work plan for Liberty's conduct of this engagement. Examples of these elements are listed below.

- Staff assigned to each functional area will have direct relevant experience in the area involved, or will work directly under the supervision of personnel who do have such experience.
- Orientation activities by Liberty will include familiarization of all study team members with the evaluation's objectives and scope, the planned study method, applicable evaluation criteria, documentation creation and control methods, and the above AICPA and GAO standards applicable to study efforts.
- Liberty will issue defined rules of team member conduct and provide on-going review by senior team members and team management to assure objectivity and independence during the full course of the evaluation.
- Liberty will provide continuous supervision of team members and management of study work efforts as depicted on the team organization chart shown in Section IV of this Proposal.
- Liberty will maintain an up-to-date, detailed work plan and conduct all study activities in accord therewith, to assure a predictable, comprehensive, and thorough review of pertinent matters.
- Strict adherence to explicit criteria and evaluation standards in reviewing management performance will be maintained through continuous oversight of study efforts.
- Preparation, maintenance, and cross-referencing of all work papers will be controlled to produce detailed tracking of all significant findings and conclusions to source materials.
- Quality control will be assured through the team-management structure that will test the validity of the data, findings, and conclusions of the study on an on-going basis.
- All findings and conclusions will require sufficient, competent, and relevant evidence to support them. Liberty's project manager will corroborate the existence of such evidence for each finding and conclusion.

## **F. Study Progress Reporting**

Liberty will adhere to the following interim and final-reporting guidelines in the course of its audit:

- There will be no direct reporting to either of the Companies without prior Staff approval.



- Weekly Informal Reports. By the first of each week, Liberty will provide written notice of the interviews and site visits scheduled for the next following week to the Staff Project Officer for review and approval. Liberty will closely coordinate these schedules for interviews and site visits with Companies' coordinators and the Staff Project Officer in order to minimize disruption of daily management activities. At a minimum, ten (10) working days notice will be provided to the Staff Project Officer and the Companies' Coordinators.
- Monthly Written Status Reports. Based on the task plan submitted in Section III of this proposal, the monthly reports will consist of two parts:
  - A. General narrative briefly describing progress to date and outlining reasons for any deviations from the task plan schedule. This narrative will also contain a statement indicating the status of the project in relation to time - ahead, behind, or on schedule.
  - B. Status sheet indicating actual hours logged by category (i.e., project manager, senior analyst or auditor, junior analyst or auditor, etc.), by consultant, material and supplies cost, and other costs, showing percentage of each in relation to proposed costs.

Monthly reports will be in the hands of the Staff Project Officer and the Companies' Coordinator by the tenth working day following the month's end and shall be submitted for any month worked.

- Interview Summaries. By the fifth working day after each interview, formal summaries of each interview, including participants' conclusions and observations, data requests generated, issues identified, and follow-up required, shall be forwarded to the Staff Project Officer.
- Interim Written Status Reports. Liberty has provided details for additional periodic status reports in Section II of this proposal.
- Liberty will maintain a detailed work plan, a milestone schedule, an interview list, a data-request inventory, and list of observations to date.
- Liberty will maintain an automated index and a filing system that will permit tracking of facts, findings, conclusions, recommendations, and implementation plans to work papers, a complete set of which will be delivered with the final report. The work papers and supporting cross-referencing will be sufficient to identify information sources, and the nature and extent of work done to support conclusions and recommendations.
- Complete details on project draft and final reports are contained in Section II of this proposal.



## **G. Summary of Liberty's Experience and Capabilities**

Section IV of this proposal summarizes the relevant experience and capabilities of the consultants who will perform this audit of the Companies. A complete listing of Liberty's recent projects is included in Section VI, Experience. Liberty believes that it is useful, however, to provide some summary information in this section on the firm and the consultants who will perform the audit.

Liberty has served clients in some 200 projects involving firms or operations in almost every state, and more than two thirds of the country's public-utilities commissions. In fact, while Liberty serves both utility companies and their regulators, in the past few years Liberty's practice for commissions has been its primary focus and source of work.

Liberty's recent work for the Kentucky Public Service Commission auditing both East Kentucky Power Cooperative, and also Kentucky's five major LDCs demonstrates Liberty's ability to deliver the results it has promised to the Commission; Don Spangenberg managed those audits for Liberty, and will serve as both the project manager and lead consultant for this engagement.

The senior Liberty consultants proposed for this team to conduct the audit of the Companies have conducted multiple fuel management audits and affiliate relations reviews of electric utility retail businesses for public service commissions. Liberty is also the country's most experienced firm in providing affiliate relations and service reliability reviews for public service commissions. The depth, quality, and breadth of Liberty's work in these areas for commissions is unmatched. While specific details of this work are included in Section VI of this proposal, relevant highlights of this experience of the consultants proposed for this team include:

- Project Manager for the recently completed management and process audit of Kentucky's five major LDCs for the Kentucky Public Service Commission.
- Project Manager for the recently completed management and operations audit of East Kentucky Power Cooperative for the Kentucky Public Service Commission.
- Project Manager and lead consultant on five different coal fuels audits of the fuel purchasing policies, procurement models, and fuel management practices of four Ohio utilities for the Public Utilities Commission of Ohio (*PUCO*).
- Lead consultant on five different coal fuels audits of the fuel purchasing policies, procurement models, and fuel management practices of three Ohio utilities for the Public Utilities Commission of Ohio (*PUCO*).
- Senior consultant in the area of fuels management for Liberty's management and financial audit of the management and operations of the coal burning utility of Public Service Company of New Hampshire, for the New Hampshire Public Utilities Commission.



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- Lead consultant in Liberty's review of the fuel planning, acquisition, management, transportation and disposal as part of a comprehensive management audit of the coal burning utility West Penn Power Company for the Pennsylvania Public Utility Commission.
- Project Manager and Lead consultant for Liberty's process-improvement project for Alabama Electric Cooperative, Inc. A significant part of this project related to coal fuel management policies, practices and procedures.
- Lead Consultant for Liberty's preparation of a comprehensive set of fuel-management policies and procedures for the Fuel Department of Potomac Electric Power Company.
- Project Manager and Senior Consultant for Liberty's fuel-management/performance audit of Vectren Energy Delivery of Ohio for the Public Utilities Commission of Ohio.
- Project Manager and Senior Consultant for Liberty's fuel-management/performance audit of East Ohio Gas Company for the Public Utilities Commission of Ohio.
- Senior Liberty consultant on multiple audits and reviews of affiliate relations functions of electric power, natural gas and telecommunications utilities for public service commissions.

Liberty's experience includes commission-sponsored reviews of management and operations at several dozen utilities operating in the electricity, natural gas, and telecommunications businesses. Much of Liberty's recent business has been related to issues in the area of utility fuel management. Liberty is in an especially strong position to evaluate fuel management activities from the perspective of optimum efficiency in today's rapidly changing utility environment because of the firm's in-depth experience with utility restructuring, including rates and pricing, service quality, affiliate relationships, and achievement of merger-induced efficiencies and economies. Liberty's personnel also have extensive experience in all phases of utility executive management, planning, operations, finance, and regulatory policy.

Liberty complements the experience of its team with extensive knowledge of the civil and administrative litigation process. This knowledge will be of substantial benefit if the results of this study are used as evidence in any type of proceedings before the Commission. Liberty has already performed a large number of projects whose results have been designed to withstand the rigors of cross-examination, sometimes by well-funded opposition with its own set of experts. In addition, the Liberty consultants who will work on this audit have extensive experience in managing complex public-utility commission cases and audits involving electric-utility facilities and operations, and have testified as experts in many proceedings.

Therefore, as seasoned consultants, Liberty can offer work products designed to facilitate and provide the essential foundation for work products that are correct and defensible as well. That defensibility comes from the facts that Liberty work products are:

- Produced under clear and explicit performance standards.



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- Based on analyses whose purpose and scope are clearly explained.
- From a factual record that is comprehensive and cross-referenced at a detailed level to significant findings and conclusions.
- Subject to rigorous corroboration and verification techniques.
- Written with a focus on how they will be used and attacked on the record.
- Sponsored in testimony by senior consultants with strong qualifications and excellent communications skills honed in the final environment that is pertinent here—rigorous cross-examination in public proceedings.



## **II. Work Summary**

### **A. Background and Liberty's Understanding of this Project**

This project for a focused management audit of the fuel procurement functions of Kentucky Utilities Company and Louisville Gas and Electric Company is important for a number of reasons. This project will examine all operational and managerial aspects of the fuel procurement functions of KU and LG&E, including the organizational structure and the operational interrelationship of fuel procurement management among LG&E Energy, KU and LG&E. Given the joint nature of KU's and LG&E's fuel procurement functions, and the close integration within LG&E Energy's fuel procurement activities, it will be important for this audit to examine these interrelationships to ensure that the overall fuel procurement function is being conducted most effectively. While the greatest effort of this project is to focus on coal procurement, the procurement of natural gas and fuel oil for the Companies' peaking units is included as well.

Liberty has approached the design of the work plan for this fuel procurement audit from the perspective of how buying power plant fuel, from a narrow view, fits into the broader objective for electric power utilities of how that fuel procurement influences the cost of electrical energy produced by that fuel. Liberty terms this overall process fuel management. The rationale for this approach is that there are a number of factors that directly impact fuel procurement, and that Liberty feels must be examined, in order to determine if fuel procurement itself is as effective and efficient as it can be. The factors that therefore impact fuel procurement include the following:

- Fuel transportation, and whether or not the utility maintains the optimum mix of transportation resources to ensure that the necessary fuel can be delivered reliably, and at optimum prices;
- Fuel strategies and planning, and whether or not the utility has been thorough in examining the wide range of fuels and strategies available to meet the anticipated demands for electrical energy;
- Operational optimization, and whether or not the utility has considered the operational trade-offs and cost/benefit analyses between procurement and utilization of poorer quality fuels (at lower cost) and the associated operational consequences (higher operating and maintenance costs), versus the procurement and utilization of higher quality fuels (at higher cost) and the associated operational consequences (lower operating and maintenance costs);
- Fuel combustion by-product management, and whether or not the utility has optimized the utilization of coal ash, scrubber sludge, etc. in relation to the fuel procured;
- Clean Air Act Allowance management, and whether or not the utility has optimized fuel procurement in relation to environmental mandates as well as power plant capabilities to meet these mandates.



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Liberty does not propose to conduct detailed examinations of each of these five factors that influence fuel procurement, but rather to understand the nature of each of these five inputs into the fuel procurement process and how the utility has either changed, or not changed, its fuel procurement in recognition of these inputs in order to optimize the overall production of electrical energy and reliably deliver this energy at the lowest busbar cost. This is why Liberty often refers to this project as a fuel management audit.

Liberty also realizes that fuel management involves more than simply procuring the cheapest fuel that is available, and that there are a multitude of not-so-obvious dynamics at play that can place a utility in the unfortunate position of not having the desired fuel available at the necessary time and place. For example, one such factor is the relationship that fuel managers have with the coal and transportation markets. This is a give and take business, and players on each side of the fence – the fuel producers & transporters, and the fuel buyers – have problems that must be addressed, and eventually solved through reliance on the solid and positive relationships between these entities. If the relationships are positive, problems have a good probability of being resolved in a mutually satisfactory manner. If the relationships are not positive, then one player or the other can often be placed in a position of definite disadvantage.

Other examples relate to the incentives that fuel managers have to perform in a manner that results in the lowest possible price for fuel of the desired quality that can be reliably delivered to the power plant. Further examples relate to the basic qualifications of the utility fuel managers themselves; technical and management experience is important, as well as in-depth understanding of the fuel markets and industry. But also important is how this experience is applied both in internal management of fuel organizations as well as the external dimension of management of vendor relations. Liberty fully understands the broad dimensions of fuel management because of the long experience of its project manager as both a utility manager responsible directly for fuel procurement as well as a consultant to the industry in the field of fuel management. Thus Liberty approaches this project with these critical perspectives, and these advantages.

The results of this audit will assure the Commission, the Companies, and the Companies' customers that the fuel procurement functions are operating effectively, and in accordance with the intentions of the Fuel Adjustment Clauses that pass through changes in fuel costs on a regular basis. Finally, Liberty emphasizes that this audit is not to be a comprehensive management audit, and not a retrospective audit, but rather an audit focused specifically on the fuel procurement functions as outlined above, and how these operations might be improved in the future. This is especially important to Liberty in view of the broader fuel management approach outlined above. Again, and for example, Liberty will not examine the details of such influences on fuel procurement as emission allowance management, but how the output of the Clean Air Act management process is influencing fuel procurement and how fuel managers are reacting to this information.

Therefore, Liberty has designed this project to produce a highly-focused review of the suitability and responsiveness of the Companies' policies, procedures, and management processes in light of what would constitute overall effective fuel management. Liberty does not intend to pursue a comprehensive management audit, but instead, a series of activities that focus on specifically





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identified areas relating to the essentials of electric utility fuel management, and upon the analysis of data that is critical to judging the effectiveness of this fuel management.

The six primary audit objectives as specified in the RFP make clear the intentions of this focused management audit. For emphasis, these objectives are repeated as follows:

1. Review KU's and LG&E's monthly FAC filings, beginning in January 2001, to determine whether KU's and LG&E's fuel transactions have been disclosed in accordance with applicable regulations. Also, determine if the applicable regulations provide for adequate disclosure of all fuel transactions.
2. Review the bid solicitation and evaluation process to ensure a low cost and reliable coal supply.
3. Review the fuel vendor evaluation process to assure continued supplier quality and reliability to the maximum extent possible.
4. Appraise the organizational separation of regulated and non-regulated affiliates in relation to the fuel procurement function.
5. Review the reasonableness of fuel inventory levels and fuel inventory targets for each generating station.
6. Review the Companies' compliance with all applicable Kentucky and Securities and Exchange Commission requirements for affiliate transactions focusing only on the Companies' fuel procurement practices.

The project is challenging because it requires considerable work in a short period of time. It is challenging also because of its need to make judgments about the degree to which fuel management has been changed, or should have been changed as a result of the successive ownership changes of the two utilities involved over the recent past. Care must be taken to determine if any changes made to fuel management, and results observed, are attributable to effects of the company mergers that are distinct from or incremental to those one might have expected in any case, given the increasing sophistication being observed in overall fuel management in the electric utility industry. Those changes, like all others of similar magnitude, also have the potential for causing temporary dislocations or disruptions that may mask improvements that can be expected after transition and implementation periods run their course. Thus, it will also be necessary to look not only to performance achieved to date, but what may reasonably be expected in the fairly near future. The overall emphasis, however, of Liberty's audit will be to take a forward-looking approach that suggests reasonable ways for improvement in the operations and policies of the Companies.

As Liberty approaches the work plans for each of the task areas outlined in this proposal, the team will take special efforts to identify the effect on fuel management of the merger impacts discussed above, including influences of affiliate relations. In addition, Liberty will also search for other forces, factors, and influences that that may be affecting fuel management operation or results.





It is Liberty's intention, as detailed in this proposal, to provide the Commission with a final work product that completely satisfies the objectives of this audit, and results in specific conclusions and recommendations that address the reasonable ways for the Companies to improve the operations and policies related to fuel management.

## **B. Work Scope Summary**

The preliminary work plans set forth later in this proposal provide for a focused audit of the fuel procurement functions of KU, LG&E, and LG&E Energy. These work plans are set forth in detail in Section III of this proposal, and include a complete integration of the six primary areas of inquiry from the RFP into these work plans.

At the outset of the audit, Liberty will meet with Staff to discuss areas and issues that merit particular attention at the Companies. The discussion will address the Companies' basic methods and levels of operation, considering other unique factors of concern to the Commission, and specific issues raised in prior cases. Liberty will also solicit input on Staff's experiences with data and information provided under the regular FAC filings. While Liberty intends an independent examination, Staff experience is an important outside source of data that will help to assure that all major issues are addressed. The results of this meeting will be used to establish unique allocations of audit time and effort by area for the Companies. As appropriate and as agreed to by Staff, these meetings may also produce additions, deletions, or changes in the work steps identified in the preliminary work plans that follow in Section III.

Initiating the audit in this way assures that Liberty can provide a broad, baseline review of pertinent fuel management activities at the Companies. It also assures that the knowledge and experience of Staff, and the results of prior proceedings, focus the review on the most pertinent issues at KU, LG&E, and LG&E Energy.

The general elements of the work plan will be used to perform a survey of, and reach conclusions on, major activities. Choosing from their detailed elements, consistent with established budget and schedule, will allow Liberty, in conjunction with the Staff, to determine the audit areas that should be reviewed in greater depth at each Company. A key aspect of Liberty's approach to this audit is to assure that the detailed review focuses not on matters of generic concern that may not be particularly important at the Company, but on the specific issues most important to effective and efficient performance as related to fuel management.

To facilitate its review and match study team capabilities with responsibilities, Liberty has broken the study into five general task areas, as detailed in Section III, Preliminary Work Plans. Within each of these areas, Liberty has identified tasks that provide the basis for overall conclusions about management and operations performance and possible improvement opportunities. These five task areas have been developed by Liberty as a result of over 30 years of experience of Liberty's project manager for this fuel procurement audit in the area of electric utility fuel management. More specifically, this experience includes over 15 years of work by Liberty's project manager on management audits for regulators where the objectives of those audits have closely paralleled the objectives of this audit as specified by the Kentucky



Commission. The five task areas provide a broad and comprehensive coverage of those areas of operations related to fuel management that Liberty feels are essential in order to satisfy the six primary areas of inquiry, as listed by the Commission in the RFP.

### **C. Data Collection Methods**

Successful completion of an audit of this type within time and budget constraints requires an effective and reliable process for accumulating and managing a large collection of information. An inefficient or incomplete data collection process represents the biggest risk of failure. This is especially true in a project of this nature when significant field work is to be accomplished in only a two month time period. The course of Liberty's procedural work steps, including data collection, is central to the strength of the audit approach. Liberty uses a well-defined data collection process to begin the audit.

The basic nature of data collection activities (*e.g.*, interviews and document requests) is predictable. People, documents, comparative data and direct observation of work are the sources of information. However, the focus of fact-gathering activities will depend upon the particular issues and potential opportunities for improvement that emerge.

A comprehensive set of information requests, soliciting written responses, will open the data-gathering process. The initial list of information required from the Companies is included in Section VII of this proposal. Scoping interviews with management personnel involved in fuel management functions will be pursued, recognizing that this is not a comprehensive management audit. In some situations, for clarification of information received in response to data requests, Liberty may need to interview selected individuals at lower levels in the organization.

From that point forward, fact-gathering will take a more focused approach. Liberty will gather information necessary to provide a comprehensive description of current management and operations in the fuel management area. After completion of a draft of this description, data collection will change focus. Study efforts will concentrate on the information necessary to develop and test the validity of hypotheses concerning overall fuel management, the design of the organization, its operation, and its ultimate effectiveness.

Data collection will continue until the audit's last stages. However, Liberty anticipates that the essential fact base will be established before the completion of the hypothesis development stage. In that stage, Liberty will construct hypotheses that address each of the task areas for the Companies. From that point, fact-gathering efforts will likely be limited to a narrower range of activities, including correction efforts and pursuit of information associated with implementation of recommended changes. These late-stage data collection activities will specifically include any issue areas and effort reallocations requested by the Commission Staff.

### **D. Work Products**

Liberty's study will produce the following work products:



### **Detailed Work Plan**

As the study proceeds, the schedule, budget, and listing of work steps set forth later in this proposal will be updated and the level of detail extended. Updating and adding more detailed information is intended to provide a well-defined plan for study completion. This plan, which will remain available to the Staff Project Officer on a regular basis, will form the basis for reporting study progress. Thus, the plans that Liberty uses to manage the audit will be the same as that used to keep the Staff Project Officer abreast of audit work.

### **Presentations**

Upon request, Liberty will meet with the Staff Project Officer, to present its findings, conclusions, and recommendations.

### **Draft Report**

At least thirty (30) days prior to the final-report due date, Liberty will provide four copies of a draft report for review, as well as an electronic version of the report. It will cover all work plan tasks, and a management summary. The draft report will also describe in an organized fashion all material factual findings, analyses, and conclusions reached and any tentative recommendations issued for each functional area addressed. The draft report will also address audit mission, objectives, method, and evaluation criteria, and be fully footnoted. Essentially this draft report will be in the same format as the final report to be produced later.

Input for this draft report will be based on task reports that will first be reviewed at three-party roundtable meetings between the Management Audit Branch, the Companies, and Liberty. These task reports will be submitted early enough in the project to allow for additional in-depth analyses and subsequent revisions. Following initial review of the task reports by the Management Audit Branch, the Companies will be afforded an opportunity to review the task reports. The Companies' written comments shall be submitted to Liberty and the Management Audit Branch within ten (10) working days after it receives each task report so that Liberty can make any changes of fact, conclusions, or recommendations before completing the draft report.

After review of the task reports has been completed, Liberty will prepare a draft report for review by the Management Audit Branch.

### **Final Report**

After review of the draft report by the Staff Project Officer and the Management Audit Branch, Liberty will issue a Final Report that addresses in detail all comments provided. The Final Report will be in the same form as the draft report, and presented in accordance with the following outline:

- A. General Statement and Management Summary.
- B. Findings and Conclusions with respect to the Primary Objectives of the Audit.



- C. Recommendations relating specifically to the Six “Areas of Inquiry”.
- D. Recommendations for immediate changes that management can institute involving potential cost savings, efficiency in operations, improvements in productivity, or enhancements to operational processes related to fuel procurement (“operating recommendations”). This will include a schedule listing the priority for each recommendation.

Recommendations in the Final Report will be justified, and accompanied by adequate supporting information. The Final Report will contain a chapter describing the project, a summary chapter that ties all the issues together from the Companies’ perspectives, and chapters for each Task Area. The Final Report will be balanced, in that it will include both findings of superior management and operating effectiveness, as well as opportunities for improvement. As with the Draft Report, the Final Report will be fully footnoted.

Fifty (50) bound copies, one electronic copy, and one unbound reproducible original of the Final Report will be delivered to the Commission by the date specified. Each of the Companies will also be provided with five (5) bound copies, one electronic copy, and one unbound reproducible original of the Final Report.

### **Work Papers**

Work papers utilized by Liberty during the course of this audit will be available to the Commission and the Companies during the audit, and will be turned over to the Commission concurrent with submission of the Final Report. These work papers will include interview summaries, data request responses, and any special analyses prepared by Liberty.

### **Production of Documents**

Upon request of the Staff Project Officer at any time, Liberty will immediately produce any document or information obtained or produced within the scope of the audit.

### **Testimony**

Liberty understands that there are ongoing cases in connection with this management audit. Liberty is willing to stand behind its findings, conclusions and recommendations by testifying, upon request by the Commission, in a future hearing before the Commission at Liberty’s standard compensation rates as identified in this proposal. In addition, Liberty expects to be asked its opinion regarding any testimony submitted by the Companies or any intervenors in the proceedings.

All properly identified and related costs incurred by Liberty for purposes identified under this Section will be paid by the Companies to the extent that: (a) Liberty is providing testimony directly related to the content of the final report and action plans; (b) such testimony is within two years of the final audit report completion or in each of the Companies’ next two-year FAC cases, whichever is later; and (c) Liberty is providing testimony at the request of the Commission.



## **Action Plans**

It is the understanding of the Commission and the Companies that this audit is focused on fuel procurement practices and that any recommendations will be directly related to the objectives and scope of the audit. With this in mind, it is the Commission's intent to secure a commitment from the Companies to implement Liberty's recommendations as expeditiously as possible, and to develop a dialogue between Companies and Liberty regarding the proper action steps necessary to successfully implement each recommendation. Liberty will be responsible for the development of action plans to implement each recommendation and will be required to review the appropriateness of the detailed action steps developed by the Companies. Liberty understands the format of the action plan, as included with the RFP. The process of developing action plans will therefore include the following events:

- A. Liberty will be responsible for developing draft action plans which include the background, the priority, the improvement baseline intended, and the estimated one-time and annual costs and benefits for each recommendation. This step will require Liberty's completion of Section I through Section V of the action plan format and shall be submitted with the final report.
- B. The Companies will then be responsible for reviewing Liberty's draft action plans, and shall prepare responses to all the action plans. The Companies' response shall include a statement addressing each recommendation, which either adopts the recommendation, adopts it with exception, or rejects the recommendation. The response shall detail steps (as well as the start date and completion date for each step) necessary to implement each recommendation adopted or adopted with exception by the utility. This step will require the Companies to complete Section VI through Section VIII of the action plan format which shall be submitted to Liberty and the Commission within 30 days of the release of the final report, unless otherwise mutually agreed upon by the Staff Project Officer and the Companies. For any recommendations rejected, a detailed basis for rejection shall be provided.
- C. Liberty will then be responsible for reviewing the Companies' comments and action steps and formally commenting (in the finalized action plans) on the appropriateness of the proposed implementation activities, as well as clarifying the intent of the recommendations, if necessary. This step will require Liberty's completion of Section IX of the action plan format.
- D. Liberty shall be responsible for printing the finalized action plans and shall provide the Commission with five (5) bound copies, one electronic copy, and one unbound copy-ready copy for the finalized action plans. The Companies shall be provided with five (5) bound copies, one electronic copy, and one unbound, copy-ready copy of their finalized action plans. These finalized action plans shall be submitted to the Commission and to the Companies within 45 days of the release of the final report. For the purposes of this project, finalized action plans shall require the completion of Section I through Section IX of the action plan format as described in Section 10.A through Section 10.C of the RFP.



### III. Preliminary Work Plans

#### A. Task Area Division

Liberty’s work plans have been formulated primarily from Section 3 of the RFP, Objectives and Scope of the Audit. Another input to the plans was a list of major functions and issues generally pertinent to electric fuel management audit work developed from the experience of Liberty’s personnel as utility managers, electric industry consultants, commission employees and auditors.

The work plans for the Companies consist of five Task Areas. These five Task Areas incorporate each of the six primary “areas of inquiry” as stated in Section 3 of the RFP, and also as listed in both Sections I.C and II.A of this proposal. Following is a table illustrating how Liberty’s five Task Areas incorporate each of the six primary areas of inquiry from the RFP:

<u>RFP Scope Area of Inquiry</u>	<u>Liberty Task Area</u>
1	5
2	3
3	3
4	2 & 4
5	5
6	4

It will be noted that there is no RFP Scope Area of Inquiry that translates directly into Liberty’s Task Area One. In preparing this proposal, Liberty has taken the position that the RFP Scope Areas of Inquiry represent the minimum level of examination expected in this audit. In Liberty’s view, there are several additional functional areas related to fuel procurement that are quite important to the overall fuel procurement process that should be included in this audit. These areas include: Fuel Planning, Task Area One; Fuel Transportation, included in Task Area Three; and Waste Disposal, included in Task Area Five. Because of this approach, Liberty often refers to this project as a fuel management audit, rather than a fuel procurement audit, since in Liberty’s view, these additional functional areas are important to the overall process of how electric utility generation fuel is managed, from the time plans are made for its procurement until there is final disposition of the coal combustion by-products.

The five task areas are listed below. The details for each are presented in the remainder of this section of the proposal.

- Task Area One: Fuels Planning**
- Task Area Two: Organization, Staffing and Controls**
- Task Area Three: Fuel Acquisition**
- Task Area Four: Affiliate Purchases**
- Task Area Five: Supply Management**



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Under each of the five Task Areas, Liberty describes the principal matters that the study will address. For each issue, Liberty lists the issue areas and the questions involved for each of the issue areas. In addition, Liberty lists the Baseline Data Sources that will be examined during the audit, the Analytical Methods to be used, and the Evaluation Criteria that Liberty will apply to the issue areas. Liberty considers it essential to begin a study of this type with such a clearly stated plan.

Liberty's conduct of each of the above five Task Areas would be in recognition of the six primary objectives of this audit. Each Task Area would be approached with the intent of satisfying these six audit objectives.

While our approach addresses all of the questions specified in the RFP, Liberty would expect to meet with Staff prior to beginning the evaluation, in order to obtain Staff's views and insights about appropriate areas of emphasis.

These preliminary plans are not intended to foreclose a search for added issues. Their purpose is to assure that the study begins in a logical, organized fashion that will permit review of the matters known in advance to be significant. Liberty designed the plans to provide a broad enough set of inquiries to promote the discovery of as-yet-unknown unique circumstances or factors that should also be investigated. The particular task areas and issues that merit most attention will be decided in conjunction with Commission Staff. As part of this prioritization process the total amount of study time budgeted will be allocated appropriately.





## Task Area One

### *Fuels Planning*

**Definition:** Identify optimum planning objectives, organization, programs, and integration.

**Description:** Fuel and bulk power supply planning should be integrated with overall corporate planning, in order to assure common assumptions and an integrated approach to meeting expected future needs and responding to deviations as they arise. This integration requires a combination of planning analyses in two of the most uncertain areas that affect electric utility costs of service - load forecasting and fuel market forecasting. Liberty will use, but will not evaluate, the companies' Long Term Forecast Reports. To the extent that those reports raise substantive issues or concerns, Liberty will consult with the Staff to assure that Liberty's use of them considers any available Staff analyses and conclusions.

Single point assumptions, however well developed, simply cannot be relied upon as the sole planning base. Some way to accommodate a range of possibilities, not mutually compatible, characterizes optimum planning in today's environment. Planning must be iterative. Load forecasts, unit costs, and fuel cost and availability are to some extent mutually interdependent. None represents a fully static input to calculations of another. For example, loads may well be sensitive to production costs (or rates). In turn, determining the incremental cost of fuel stocks (where there are inventories and long term deliveries under at least limited insulation from spot market conditions) depends on the magnitudes of load that units are required to serve.

In addition, the range of assumptions used in load and fuel forecasting must be compatible. The use of macro-economic analyses makes this need significant. Another element of planning in this area is the need to use tools that provide for rapid updating and the ability to run varying future (sometimes very short range) scenarios quickly and accurately. Models of this type represent important tools for forecasting unit needs and availability, which can be very much dependent on unexpected outages, supplier disruptions, or short-term fuel market conditions, if a significant portion of fuel supply is from spot markets.

#### *Issues*

- 1.A Integration with Corporate Plans
- 1.B Risk Analysis
- 1.C Balancing Supply Options
- 1.D Supply Planning Flexibility
- 1.E Monitoring of Key Assumptions and Plan Implementation
- 1.F Coordinating Reserve Levels With Present and Anticipated Plant Requirements and With Long-Term Supply Plans





Liberty's plans for addressing these issues in the proposed study are set forth below. These plans allow for the revision of the issues and also for the identification and investigation of additional issues that may prove merited as a result of study field work.

## **1.A INTEGRATION WITH CORPORATE PLANS**

- |                              |   |
|------------------------------|---|
| <b>Questions</b>             | <ul style="list-style-type: none"><li>• How are goals and objectives for fuels management functions established?</li><li>• What is the decision process for adopting short- and long-range fuel plans?</li><li>• What departments are involved?</li><li>• What is upper management's role?</li><li>• How are procurement efforts integrated with the planning cycle?</li><li>• How is fuels planning integrated with higher-level corporate planning?</li><li>• How do plans incorporate generating unit data such as unit start-up and cycling, fixed and variable operating costs, heat rate, planned outages, and others?</li><li>• How are maintenance needs and schedules integrated with fuel supply planning?</li><li>• How is fuel planning integrated with requirements of Clean Air Act compliance?</li></ul> |
| <b>Baseline Data Sources</b> | <ul style="list-style-type: none"><li>• Interviews with executive(s) and senior managers responsible for fuels planning activities, and selected line personnel.</li><li>• Fuel plans and relevant portions of other corporate plans.</li><li>• Written description of applicable planning processes.</li><li>• Tracking documents showing plans versus actual performance.</li><li>• The plan for compliance with the Clean Air Act.</li></ul>   |



- Analytical Methods**
- Review methodology and accuracy of fuels portion of corporate planning process.
  - Compare planning process with industry practices.
  - Assess completeness of risks explicitly treated in planning process.
  - Evaluate timeliness of planning performance by all groups directly and indirectly involved.
  - Determine adequacy of efforts to re-evaluate and revise key planning assumptions on an on-going basis.

- Evaluation Criteria**
- Involvement of all pertinent planning groups on a timely basis.
  - Sufficiency of executive-level oversight.
  - Consistency of fuels plans with related corporate planning elements.
  - Ability to revise plans timely and efficiently to meet changing circumstances.
  - Sufficiency of modeling techniques to capture major variables quantitatively.

## **1.B RISK ANALYSIS**

- Questions**
- What is the process for forecasting short and long-range fuel costs and availability?
  - How are probabilities (both as to use requirements and market uncertainties) and flexibility of supply incorporated into the fuels planning process?
  - How are possible changes in applicable environmental restrictions incorporated into the planning process?
  - Are there policies on maximum levels of reliance on a single vendor or a group of related suppliers?



- |                              |   |
|------------------------------|---|
| <b>Baseline Data Sources</b> | <ul style="list-style-type: none"><li>• Interviews with executive(s) and senior managers responsible for fuels planning activities, and selected line personnel.</li><li>• Fuel plans and relevant portions of other corporate plans.</li><li>• Written description of applicable planning processes.</li><li>• Tracking documents showing plans versus actual performance.</li></ul> |
| <b>Analytical Methods</b>    | <ul style="list-style-type: none"><li>• Evaluate completeness and timeliness of baseline forecasting process and ongoing re-evaluation and adjustments.</li><li>• Compare process with industry practices.</li><li>• Examine adequacy of sensitivity analyses performed.</li></ul>  |
| <b>Evaluation Criteria</b>   | <ul style="list-style-type: none"><li>• Involvement of all pertinent planning groups on a timely basis.</li><li>• Sufficiency of executive-level oversight.</li><li>• Consistency of fuels plans with related corporate planning elements.</li></ul>  |

## **1.C BALANCING SUPPLY OPTIONS**

- |                  |   |
|------------------|---|
| <b>Questions</b> | <ul style="list-style-type: none"><li>• What means and methods are used to assess future fuels markets conditions for purposes of optimizing supply and contract type mix?</li><li>• What values and objectives are used to determine mix between long-term and spot market fuel supplies?</li><li>• What means and methods identify the costs and benefits of fuels with varying quality characteristics, considering their possible impacts on boiler operation?</li><li>• Is diversity of suppliers for particular generating units a desired objective?</li></ul> |
|------------------|---|



- |                              |   |
|------------------------------|---|
| <b>Baseline Data Sources</b> | <ul style="list-style-type: none"><li>• Interviews with executive(s) and managers responsible for fuels planning activities, and selected line personnel.</li><li>• Fuel plans.</li><li>• Coal contracts.</li><li>• Lists of delivered amounts by suppliers by contract for past three years and projections for next three years.</li></ul>                        |
| <b>Analytical Methods</b>    | <ul style="list-style-type: none"><li>• Review changes over past three years in contract type mix.</li><li>• Determine if contract type mix objectives have responded to changes in planned fuel needs or fuel markets.</li><li>• Identify flexibility available to alter fuel mix on a short to mid-term basis.</li></ul>  |
| <b>Evaluation Criteria</b>   | <ul style="list-style-type: none"><li>• Consistency of contract type mix objectives with major elements of fuel plans.</li><li>• Flexibility to change contract mix to respond to changed conditions.</li><li>• Adequacy of systems to promote timely recognition of and response to changed circumstances that warrant adjustments to contract type mix.</li></ul> |

## **1.D SUPPLY PLANNING FLEXIBILITY**

- |                  |   |
|------------------|---|
| <b>Questions</b> | <ul style="list-style-type: none"><li>• What methods are used for short-term forecasting of fuel needs at generating stations?</li><li>• How is short-range fuel needs forecasting integrated with long-range forecasts?</li><li>• How often and under what circumstances are short and long-range fuel needs reforecasted?</li><li>• What receipt, storage or other site constraints restrict viable fuel supply alternatives?</li></ul> |
|------------------|---|



- Are there sample purchases for test burns at generating units?
- Baseline Data Sources**
- Interviews with executive(s) and senior managers responsible for fuels planning activities, and selected line personnel.
  - Fuel plans and relevant portions of other corporate plans.
  - Written description of applicable planning processes.
  - Tracking documents showing plans versus actual performance.
- Analytical Methods**
- Evaluate efforts to adjust contracted requirements through renegotiation.
  - Review efforts to remove physical constraints that affect supply options.
  - Examine decisions to alter planned supplies in the face of changed circumstances.
- Evaluation Criteria**
- Contract flexibility to meet changed circumstances.
  - Aggressiveness in pursuing changed supply options in the face of changed circumstances.
  - Timeliness of perception of changed circumstances.

## **1.E MONITORING OF KEY ASSUMPTIONS & PLAN IMPLEMENTATION**

- Questions**
- What kinds of information are regularly reported to provide a comparison of actual with projected circumstances and actual versus planned supply?
  - Who reviews and acts on that information?
  - How and how soon are major variances from forecast assumptions (such as a major, unexpected unit outage) factored into short- and long-range fuel plans?



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- |                              |  |
|------------------------------|--|
| <b>Baseline Data Sources</b> | <ul style="list-style-type: none"><li>• Interviews with executive(s) and senior managers responsible for fuels planning activities, and selected line personnel.</li><li>• Status reports.</li><li>• Correspondence to and from executive management on interim adjustments to fuel plans.</li></ul> |
| <b>Analytical Methods</b>    | <ul style="list-style-type: none"><li>• Determine level of executive involvement and review of fuel plan status and assumptions.</li><li>• Review data regularly collected and reported for thoroughness and timeliness.</li></ul>   |
| <b>Evaluation Criteria</b>   | <ul style="list-style-type: none"><li>• Completeness and timeliness of reporting of actual versus planned circumstances and plans.</li><li>• Sufficiency of executive-level review and direction to deal effectively with changed circumstances.</li></ul>   |

**1.F COORDINATING RESERVE LEVELS WITH ANTICIPATED PLANT  
REQUIREMENTS AND LONG-TERM SUPPLY PLANS**

- |                              |  |
|------------------------------|--|
| <b>Questions</b>             | <ul style="list-style-type: none"><li>• What reserves are held for long-term development?</li><li>• What plans exist for extension of operations at existing supply facilities?</li><li>• What methods are used to evaluate the economic competitiveness and feasibility of source development or extension?</li><li>• How are those evaluations tied to forecasts of demand and sales, as well as projected unit lives?</li><li>• What plans exist for sale of existing reserves or acquisition of additional ones?</li></ul> |
| <b>Baseline Data Sources</b> | <ul style="list-style-type: none"><li>• Interviews with executive(s) and senior managers responsible for fuels and generation planning management activities, and selected line personnel .</li></ul>  |



**Analytical Methods**

- Copies of studies or analyses of currently held reserves and those now being considered for sale or acquisition.
- Plans for development of reserves or extension of current operations.
- Review the methods used to value reserves currently held or considered for acquisition.
- Examine the consistency of plans for reserves with other key planning assumptions.

**Evaluation Criteria**

- Thoroughness of methods for valuing reserves.
- Accuracy of valuations of reserves.
- Consistency of plans for developing reserves with other key planning assumptions.
- Adequacy of efforts to identify and properly assess possibilities for disposal of existing reserves or acquisition of others.



## **Task Area Two**

### *Organization, Staffing and Controls*

**Definition:** Identify optimum organization, staffing and operational controls systems considering applicable needs and overall structure of corporate systems within which fuels management functions must be performed.

**Discussion:** Establishing clear organizational responsibilities for fuels-related functions is important primarily because of the need for cross-departmental interrelationships and senior management involvement in fuels planning and acquisition. Often power plant, corporate planning, procurement, and engineering resources must work together to solve problems in fuel selection, acquisition, transportation, storage, use and waste disposal. The blend of procurement, planning and engineering talents involved have led to a number of different approaches to organizing fuels-related functions. Similar, though not identical, considerations have also led to different management structures for planning and approving bulk power sales and purchases. Finally, fuel procurement transactions are often among the highest cost transactions routinely carried out by utilities.

Organizational relationships are particularly important in this audit because of the affiliate issues at play. Clearly, several of the RFP areas of inquiry relate to the need for examination of these affiliate relationships, and how they may be impacting fuel procurement and management. It is especially important to ensure that there is distinct separation between the regulated and the non-regulated affiliates, in relation to the fuel procurement function. Inappropriate transfers of information must not occur between these two entities, and the regulated portion of the business must not be subsidizing the non-regulated portions of the business. These relationships will be examined here, and also in Task Area Four.

It is necessary to design an organizational structure that brings all the required talents to bear, without fractionalizing decision-making responsibility and accountability. The basic structure adopted directly bears on the ease and speed of communications flow, the types of controls over decisions that must be maintained, and the capabilities and experience required of the personnel filling various roles.

Liberty recognizes that organizational structure sets the basic framework for managing and conducting activities. Therefore, this proposal sets out organization as a discrete task, so that this important overlay can be examined early in the study.

Fuels management activities involve particular skills in the planning, engineering, and operational areas. They also require specific knowledge and experience in the fuels market, which is a distinct and complex one. In addition, new perspective and approaches are needed to address challenges and opportunities unique to the fuels market today. Proper functioning in the fuels area requires a trained and capable staff. Staffing efficiency also requires efforts to avoid duplication of effort among different departments and to combine related responsibilities within single individuals or groups. Basic background and experience, as well as ongoing training are required, particularly in a market characterized by wide swings since the mid-1970s. Liberty's





review will examine the background and experience of company personnel. Liberty will also examine efforts to streamline and consolidate staff and functions in areas where it may be appropriate to do so. Liberty will also evaluate efforts to provide proper training on a continuing basis.

The adoption of comprehensive goals and objectives for the functions and activities under study here are important means for providing overall control of management and operations. Large costs and potential cost savings may be at stake. Therefore, top management should devise measurable targets. On a more detailed level, policies and procedures provide added definition and control to the management and conduct of activities in the functions pertinent here. These types of tools should cover fuel planning, short- and long-term procurement, establishment of pre-approved vendor lists, bidding procedures, documentation of contract term negotiation, specification development, contract accounting and administration, inventory practices, and receipt measurement and sampling, among other items.

Other written process definition and control measures, such as job descriptions, also evidence the degree of comprehensiveness and clarity management has provided for key activities and functions.

Liberty's audit will evaluate how these types of control mechanisms are developed, communicated and used. Liberty will also review the various reporting tools designed to give visibility to the performance of fuels-related activities.

### ***Issues***

- 2.A Organization Structure
- 2.B Staffing
- 2.C Approval Authorities
- 2.D Work Process Definition and Control
- 2.E Documentation Requirements
- 2.F Auditing

Liberty's plans for addressing these issues in the proposed study are set forth below. These plans allow for the revision of the issues and also for the identification and investigation of additional issues that may prove merited as a result of study field work.

## **2.A ORGANIZATION STRUCTURE**

### **Questions**

- What elements of the organization are responsible for fuels matters either directly or via approval authorities?
- What are those responsibilities?



- What defines and communicates those responsibilities?
- What other organization elements interact with fuels management activities, *e.g.*, corporate planning, corporate purchasing, power production, *etc.*?
- What is the normal process for making and approving key fuels management decisions? Who is involved and how?
- What are the formal and actual reporting relationships of all persons with significant fuels procurement or management responsibilities?
- What changes, if any, have been made to the organization as a result of the recent ESM audit of LG&E conducted by BWG?

**Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for fuels activities, and selected line personnel.
- Organization charts.
- Documentation trail of Liberty-selected, sample decisions in fuels acquisition and management.
- Written descriptions of operations related to fuels management directly and indirectly.
- Results of past internal and external audits.
- Recent ESM audit of LG&E conducted by BWG.

**Analytical Methods**

- Evaluate the consistency and completeness of efforts to assign clear organizational responsibility for all fuels-related activities.
- Determine whether personnel at different management levels commonly perceive and clearly understand organization structure and responsibilities.
- Determine if identified departmental interface points are clearly defined and if priorities of all departments support overall priorities needed to carry out fuels management functions in a timely fashion.



- Evaluation Criteria**
- Clarity of organization structure.
  - Commonality of understanding of roles and responsibilities across all involved elements of the corporate organization.
  - Consistency of organization structure with established mission, goals and objectives of fuels-related groups.
  - Closeness of control over points of contact with other corporate departments involved in or supporting fuels activities.
  - Usefulness of written descriptions of responsibilities, authorities and contact points to establish clear guidelines for dealing with all routine activities and major predictable transient conditions.

## **2.B STAFFING**

- Questions**
- Who performs key fuels-related functions?
  - What are their training and experience levels?
  - How is their performance measured?
  - Are reward systems integrated with performance measurement systems?
  - How is personnel budgeting performed?
  - What outside expertise is retained as a regular part of fuels management activities?
  - What staff training programs have recently been offered and are currently planned?
  - What succession planning takes place in fuels related areas?

- Baseline Data Sources**
- Resumes, job descriptions and personnel files.
  - Interviews with executive(s) and senior managers responsible for fuels activities, and selected line personnel.
  - Documentation trail of Liberty-selected, sample decisions in fuels acquisition and management.



- Results of past internal and external audits.
- Direct observations of work activities.
- Historical and projected staffing levels by function.

**Analytical Methods**

- Review resumes of key staff members.
- Review staffing level changes by specific function for past three years.
- Review staffing projections for next five years.
- Compare job description requirements with incumbents qualifications.
- Compare internal development with recruitment of personnel from departments outside fuels and outside the company.

**Evaluation Criteria**

- Consistency of job descriptions with incumbent skills.
- Comparison of key managers' experience levels with those generally found in the industry in similar positions.
- Quality of performance as identified under internal measurement systems.
- Consistency of reward system application with performance evaluation system.

**2.C APPROVAL AUTHORITIES**

**Questions**

- Is there executive review and approval of annual fuel plans and amendments thereto?
- With respect to individual commitments, is there a clear and definitive system delineating approval authority by: type of commitment, value of commitment, level of approval required, stage at which approval is required, and documentation of approval?



- Do all personnel involved in fuel department activities clearly understand the approval process?
- Does the approval process apply to commitment amendments and extensions as though they were the same as initial commitments?

**Baseline Data Sources**

- Corporate-level and fuel department procurement procedures.
- Interviews with executive(s) and senior managers responsible for fuels acquisition activities, and selected line personnel.
- Documentation trail of Liberty-selected, sample decisions in fuels acquisition.
- Results of past internal and external audits.

**Analytical Methods**

- Examine approval process requirements for thoroughness and clarity.
- Compare approval requirements with industry practice.
- Determine from file review if approval requirements are fully met.

**Evaluation Criteria**

- Consistency of approval process with that applicable to other corporate commitments of similar magnitude.
- Consistency of approval process with that applicable under industry practices.
- Verification through file review that applicable approval requirements are met.
- Timeliness of approvals to support acquisition process within appropriate time constraints.

**2.D WORK PROCESS DEFINITION AND CONTROL**

**Questions**

- What policies and practices control fuels-related activities?



- How well are they understood?
- Are they consistently applied?
- Are they regularly reviewed and updated?
- What major tools (*e.g.*, vendor lists, market surveying, computer systems) are used to carry out fuels activities?

**Baseline Data Sources**

- Corporate level and fuel procurement procedures.
- Interviews with executive(s) and senior managers responsible for fuels management activities, and selected line personnel from each key functional area involved.
- Documentation trail of Liberty-selected, sample decisions in fuels acquisition.
- Direct observations of work activities.
- Results of past internal and external audits.

**Analytical Methods**

- Review completeness of procedures and consistency with work requirements and objectives.
- Determine if there are significant unwritten practices or policies.
- Verify through interviews that policy and procedure requirements are well understood.
- Verify that policy and procedure requirements are regularly and properly applied.
- Compare policies, procedures and tools with those currently being used in the industry.

**Evaluation Criteria**

- Consistency of policies and procedures with work requirements and fuels-related objectives.
- Clarity and thoroughness of policies and procedures.



- Adequacy of tools to support timely and efficient accomplishment of fuels-related work activities.

## **2.E Documentation Requirements**

### **Questions**

- What major reports concerning performance of fuels-related activities are regularly kept?
- How are communications concerning development and evaluation of acquisition alternatives documented and maintained?
- How are negotiations documented?
- What are the required and the typical contents of contract administration files?
- What controls exist to assure the integrity of the documentation system?
- What information that is kept is not available for review by regulatory authorities?

### **Baseline Data Sources**

- Review of regular reports, lists, logs and similar documents.
- Review of Liberty-selected sampling of contract administration files.
- Review of special reports and correspondence for selected time frames to and from executive management responsible for fuels-related activities.
- Interviews with executive(s) and senior managers responsible for fuels management activities, personnel responsible for document system operation and selected line personnel from each key functional area involved.
- Documentation trail of Liberty-selected, sample decisions in fuels acquisition.
- Results of past internal and external audits.



**Analytical Methods**

- Judge adequacy of regularly maintained documentation to support major, regular fuel-related activities.
- Determine adequacy of documentation for Liberty-selected sample of major decisions or commitments.
- Compare documentation maintained and systems to retrieve it with industry practices.
- Evaluate the adequacy of information available to regulatory agencies to support agency objectives and functions.
- Verify that documentation required to be kept is actually kept as and when required.

**Evaluation Criteria**

- Existence of well-defined document creation and maintenance objectives and requirements.
- Adequacy of measures to assure compliance with such requirements.
- Adequacy of systems to support accurate and timely retrieval of important information.
- Degree of actual compliance with established documentation system requirements.
- Adequacy of documentation to support regulatory oversight and review.

**2.F AUDITING**

**Questions**

- What is the policy on frequency and scope of internal auditing reviews of fuels-related activities?
- What is the policy on use of outside experts in helping to improve management and operation of fuels-related groups?
- What internal auditing or outside consultant reviews of fuels-related functions have taken place in the past five years?





- What have been their major findings?
  - What has been the record in implementing changes to meet findings and conclusions?
- Baseline Data Sources**
- Documentation trail of Liberty-selected, sample decisions in fuels acquisition.
  - Interviews with executive(s) and senior managers responsible for fuels management activities auditing.
  - Results of past internal and external audits, including action plans and implementation status reports.
  - Review of systems and direct observation of work activities covered by past audit findings and conclusions.
- Analytical Methods**
- Review follow-up to past findings to determine level of implementation of prior recommendations.
  - Determine overall plans for future reviews of fuels-related activities.
  - Compare past audit issue coverage with issues discerned through data gathering and analytical phases of this audit.
- Evaluation Criteria**
- Overall management commitment level to outside review and to implementing improvement plans.
  - Consistency of past audit issue coverage with the major issues concerning effectiveness and efficiency.
  - Adequacy of scope and frequency of outside reviews to comprise an effective source of improving management and operations.



### Task Area Three

#### *Fuel Acquisition*

**Definition:** Identify optimum program to assure full and timely identification of alternative suppliers and to choose logically from among them to meet identified supply requirements at the lowest possible evaluated delivered fuel cost.

**Discussion:** It is necessary to fully evaluate options like contract type and vendor alternatives thoroughly. This process includes regular market intelligence, pre-qualification and verification of supplies for various vendors, in order to assure an adequate complement of alternatives when purchase commitments are required. It also includes a sound bidding process and alternative means of assuring an optimum balance of quality, reliability and cost of supply where bidding cannot or is not employed.

Additionally, it is now more common for utilities to extend the range of acceptable coal quality characteristics (*e.g.*, ash, moisture, BTU content) beyond the narrower ranges established by boiler manufacturers. Sometimes significant economies can be achieved, when the costs and benefits of using coal with technically non-conforming characteristics are properly modeled (for example, by balancing the costs of changed heat rates or increased maintenance requirements against possibly lower delivered costs per BTU).

Clean Air Act considerations also impose important considerations for fuel supply. The availability and price of allowances, for example, should form an integral element of economic analysis of differing fuel options.

Another important element of the procurement process is renegotiation of long-term contracts executed when the market was less favorable to buyers like utilities. With continuing softness in the market, many utilities have been able to renegotiate pricing, quality, minimum tonnage or other provisions in contracts to assure coal suppliers of a continuing market for their products. Success in improving terms under existing legal obligations is very much dependent on all the circumstances of both the buyer and seller in a given transaction. However, it remains pertinent to determine whether fuels management personnel have taken all reasonable steps to secure contract changes.

Liberty will review the full cycle of fuel procurement, from the establishment of specifications, to the pre-approval of vendors, to solicitations, to proposal evaluations, to supplier selection, to contract negotiation and renegotiation. Liberty will also review the quality of documentation supporting fuels acquisition processes and decisions. Documentation provides management assurance that processes and decisions have taken place in accord with policies and procedures. In the case of public utilities, documentation also supports regulatory oversight by assuring that tangible evidence remains concerning transactions with very large cost of service implications.

Transportation costs can represent a significant portion of the cost of fuel. Effective consideration of transportation costs is a necessary element of prudent procurement decisions.



For utilities like those that are the subject of this audit, a wide range of transportation alternatives are available, including rail, barge and truck deliveries of coal. Examinations under this task area will determine the appropriateness of the transportation mode, or modes, utilized and the range of options considered in order to achieve the optimum economics and reliability of fuel deliveries.

***Issues***

- 3.A Vendor Certification and Qualification
- 3.B Identification of Acquisition Needs
- 3.C Solicitations for Supply
- 3.D Solicitations for Transportation
- 3.E Negotiation and Renegotiation of Contracts
- 3.F Contract Terms and Conditions

Liberty's plans for addressing these issues allow for the revision of the issues and also for the identification and investigation of additional issues that may prove merited as a result of field work.

### **3.A VENDOR CERTIFICATION AND QUALIFICATION**

**Questions**

- What market surveying is done to identify a wide range of supply sources of all fuel types that may be required?
- What pre-qualification of suppliers is done?
- How is such information maintained and kept current?
- What steps are taken to ensure continued evaluation of vendors in terms of quality and reliability of supply?
- Are there any procedures relating to vendor qualification and continuing evaluation?

**Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for procurement activities, and selected line personnel.
- Lists of industry information surveyed to identify suppliers.
- Solicitations of vendors to identify potential sources.



- Pre-qualified vendor lists.
  - Procedures for vendor qualification and continuing evaluation.
- Analytical Methods**
- Review sufficiency of market information sources.
  - Review number and variety of pre-qualified vendors.
  - Determine adequacy of categories of information selected in advance from pre-qualified vendors.
  - Review vendor qualification and evaluation compared to existing procedures.
  - Assess efforts to keep information current.
- Evaluation Criteria**
- Sufficiency of number of vendors pre-identified and pre-qualified to meet likely short-term or emergency needs.
  - Adequacy of quantity and quality information maintained for pre-identified and pre-qualified vendors.
  - Existence of measures to assure that information is kept current.
  - Compliance of process with existing procedures.
  - Verification that information is used when needed to prepare solicitations for actual supply.

### **3.B IDENTIFICATION OF ACQUISITION NEEDS**

- Questions**
- What links exist between overall fuel plans and commencement of solicitations for actual supplies?
  - Who is responsible for initiating and approving solicitations?
  - How is the process documented?
  - How does the process differ for short- and long-term needs?



<b>Baseline Data Sources</b>	<ul style="list-style-type: none"><li>• Interviews with executive(s) and senior managers responsible for procurement and selected line personnel.</li><li>• Files that document initiation of actual acquisition processes.</li></ul>
<b>Analytical Methods</b>	<ul style="list-style-type: none"><li>• Assess consistency between supply plans and acquisition processes.</li><li>• Determine approvals required and actually received.</li><li>• Evaluate whether market conditions prevailing at the time of actual procurements are considered in determining whether plans need to be revised to take maximum advantage of changed circumstances.</li></ul>
<b>Evaluation Criteria</b>	<ul style="list-style-type: none"><li>• Consistency between current, overall fuel plans and individual acquisition processes.</li><li>• Plan flexibility to meet changed market conditions at the time of actual acquisitions.</li><li>• Adequacy of approval mechanisms to assure executive level oversight.</li><li>• Sufficiency of documentation to establish control where plans must be or are deviated from in individual acquisitions.</li></ul>

### **3.C SOLICITATIONS FOR SUPPLY**

<b>Questions</b>	<ul style="list-style-type: none"><li>• What are the required procedures for solicitation of suppliers for long-term, intermediate-term, spot and emergency purchases of fuel?</li><li>• What controls exist to assure compliance with those procedures?</li><li>• How are solicitations made?</li><li>• How are bids evaluated?</li></ul>
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- Are there specific procedures that detail the bid evaluation process?
- How are contract negotiations handled?
- When are competitive bids required/used?
- What vendor characteristics are considered material (*e.g.*, reserves, quality, transportation alternatives, prior history with the company, financial integrity, price per ton/BTU, delivery flexibility)?
- What means are used to evaluate capital requirements and risks associated with opening new production facilities to supply fuel needs?
- Are outside experts ever used to evaluate possible suppliers?
- What is the process for determining whether to acquire coal by contract versus acquisition of mining operations directly?

**Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for procurement and selected line personnel.
- All quotes or bids for Liberty-sampled selection of major procurements.
- Files documenting individual acquisitions.
- Procedures documenting the process for solicitations and evaluation of bids received.
- Comparative analyses of bids submitted in response to major solicitations.
- Comparison of fuel plans with actual acquisitions.
- Correspondence demonstrating level of executive involvement in alternative identification, negotiation and contract execution.

**Analytical Methods**

- Examine thoroughness of all steps in solicitation process.



- Perform mirror analyses of sampling of actual bids.
- Compare process with industry practices.
- Compare process with Fuel Department procedures.
- Establish what documentation on recent purchases shows about the implementation of procedures.

**Evaluation Criteria**

- Thoroughness of process for identifying sufficient number of alternative suppliers.
- Adequacy of process for ranking alternatives.
- Timeliness of performance of all steps to support supply needs.
- Adequacy of information gathered and used to evaluate alternatives.
- Propriety of values (like reliability, diversity, support for development of new sources, *etc.*) used to evaluate alternative suppliers.
- Verification that all significant cost, reliability and quality variables (including related factors like transportation and affect on boiler performance) are considered.
- Verification that a process exists to adequately consider all variables in order to arrive at an evaluated lowest cost fuel supply.
- Sufficiency of controls over emergency purchases where normal procurement steps may be waived.
- Consistency of acquisitions with current fuel plans and current and projected market circumstances.

**3.D SOLICITATIONS FOR TRANSPORTATION**

**Questions**

- What constraints (site and local transportation market) affect fuel delivery options?



- How does the Company evaluate transportation options that would require capital or related investments (such as lease or purchase of rail cars or addition of new unloading facilities)?
- What efforts are underway to evaluate alternative carriers and alternative modes of delivery (such as water vs. rail vs. truck)?
- What efforts have been made to reduce demurrage penalties in transportation agreements?
- How are transportation reliability and costs factored into fuel purchase decisions?
- What vendor qualification and bidding requirements apply to transportation agreements?
- What efforts have been made to use alternative transportation options in bargaining with fuel suppliers in order to obtain the lowest possible delivered fuel supply costs?

**Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for carrier selection and selected line personnel.
- Lists of pre-qualified carriers.
- Files documenting carrier selections.
- Records of any analyses conducted to optimize the mode of transportation utilized.
- Lists detailing all significant movements of fuel, including transportation type, costs, route miles, carriers involved, interchange points and types, volumes per car, barge or vehicle, frequency, deviations from schedule or amounts.

**Analytical Methods**

- Examine thoroughness of all steps in solicitation process.
- Compare process with industry practices.
- Establish what documentation on recent purchases shows about the implementation of procedures.





- Evaluation Criteria**
- Thoroughness of process for identifying sufficient number of alternative suppliers and gathering information needed to compare them fully.
  - Adequacy of process for ranking alternatives.
  - Timeliness of performance of all steps to support supply needs.
  - Sufficiency of controls over emergency purchases where normal procurement steps may be waived.
  - Evidence that maximum use has been made of transportation options in arranging for the lowest possible delivered price of fuel.

### **3.E NEGOTIATION AND RENEGOTIATION OF CONTRACTS**

- Questions**
- Are negotiations with multiple bidders pursued on major contracts?
  - Has there been renegotiation of any long-term fuel purchase agreements, in light of changed market conditions?

- Baseline Data Sources**
- Interviews with executive(s) and senior managers responsible for procurement and selected line personnel.
  - Files documenting negotiations for individual acquisitions and for renegotiation of existing contracts.
  - Correspondence demonstrating level of executive involvement in negotiation and renegotiation of contracts.

- Analytical Methods**
- Evaluate strategies and level of detail pursued in negotiations.
  - Compare final results obtained with initial offers.

- Evaluation Criteria**
- Aggressiveness with which negotiations are pursued.



- Clarity and propriety of objectives set in advance for negotiations.
- Extent to which negotiations are pursued with more than one supplier.
- Adequacy of executive-level oversight in negotiations.
- Experience levels of personnel involved in negotiations.

### **3.F CONTRACT TERMS AND CONDITIONS**

#### **Questions**

- What elements are required in the fuel purchase agreements (price per BTU, ash fusion temperature, ash content, moisture content, delivery conditions and locations, testing requirements, delivery schedule, sulfur content, grindability, escalation, *force majeure*, consequential damage limitations)?
- Are there basic form agreements for various fuel agreement types?
- Is there advance prescription of the forms and types of agreements that are considered adequate to protect buyer interests?
- Do contracts reflect a proper balance among cost, quality and reliability objectives?
- Are lawyers and outside consultants used properly to provide added insight to the process?

#### **Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for document system operation and selected line personnel from each functional area involved.
- Files documenting negotiations for individual acquisitions and for renegotiation of existing contracts.
- Contract files.
- Correspondence demonstrating level of executive involvement in negotiation and renegotiation of contracts.



- All major and a sampling of other contracts.

**Analytical Methods**

- Evaluate adequacy of standard forms.
- Compare contracts with industry experience.
- Determine whether current major contracts resulted from an adequate procurement processes.

**Evaluation Criteria**

- Competitiveness of cost.
- Consistency of contracts with quality and reliability objectives.
- Adequacy of use of outside expertise.
- Use of current industry approaches on common contract issues.



## Task Area Four

### *Affiliate Purchases*

**Definition:** Review the Companies' compliance with all applicable Kentucky and Securities Exchange Commission requirements for affiliate transactions focusing only on the Companies fuel procurement practices. Appraise the organizational separation of regulated and non-regulated affiliates in relation to the fuel procurement function.

**Discussion:** Associated closely with the primary objective of this Task Area, as stated directly above, will be Liberty's verification that affiliate purchases are subject to the same controls and are competitive with purchases from non-affiliates. The examination will also verify that affiliate purchases are competitive with those in prevailing industry segments in order to assure that any differences in treatment of affiliate purchases result from defensible circumstances and not the absence of arms-length bargaining.

Captive or affiliated operations can serve as a major source of cost reduction to a major coal user. They provide added leverage and knowledge of the underlying circumstances of fuel related operations and the marketplace circumstances that are strong determinants of the bottom line prices that will be required to close a fuel deal. In addition, they can provide a strong hedge against supply disruptions, depending on the particular circumstances involved. On the other hand, affiliate relationships can complicate the normal set of issues that exist between buyer and potential seller, since there is financial gain or loss potential to the same entity at both ends of the transaction. Financial and operational entanglement can make it more difficult to walk away from a poorly performing operation. Therefore, it is important to assure that the advantages that can come from affiliated influences on fuel supply are not outweighed by possible disadvantages to customers in particular circumstances. One way is to provide essentially even-handed treatment of internal and external sources of supply. This is particularly important in considering acquisition of new sources. Another is to assure that fixed versus variable costs of supply for already affiliated operations are categorized properly in making decisions about the current use of affiliate controlled reserves.

In the case at hand with KU, LG&E and LG&E Energy, there has already been a Commission decision related to the inappropriate procurement by KU of Polish coal from an affiliated entity, Western Kentucky Energy Corporation (WKE). While the purpose of this audit is not a retrospective examination, it will nevertheless be important for Liberty to examine the facts surrounding this situation to ensure that appropriate steps have been taken to prevent the reoccurrence of this type of situation, and specifically the procurement of fuel from an affiliated entity that is not in accordance with PSC regulations governing such transactions.

The Companies are subject to both Kentucky and U.S. Securities and Exchange Commission (*SEC*) requirements regarding the allocation of costs and the pricing of transactions between the regulated utility companies and their non-regulated affiliates.

As indicated in the RFP, The SEC has regulatory authority over the affiliate relations of the Companies under the Public Utility Holding Company Act (*PUHCA*). Liberty's experience is



that while the SEC has jurisdiction over affiliate relationships under PUHCA, the scrutiny that it applies is limited. Holding companies typically comply with the SEC's regulations by setting up service companies and pricing rules, and filing various reports.

The Kentucky requirements stem from the Commission's regulations that implemented House Bill 897, which was enacted as law in July 2000. These regulations include a general prohibition against utility subsidization of non-regulated businesses, a requirement for separate accounting for non-regulated businesses and allocations of costs in compliance with either the Commission's regulations or those imposed by a federal agency, and the development and maintenance of a cost-allocation manual (CAM).

While the Companies are part of E.ON AG, they have their own non-regulated businesses, which, while substantial, are nonetheless considerably smaller than what they had a few years ago. The current investments include:

- 50 percent ownership interests in a generating plant in Texas and another under construction in Georgia.
- Ownership interests in three gas-distribution companies in Argentina.
- Western Kentucky Energy, which operates and leases four coal-fired plants owned by Big Rivers Electric Corporation.
- LG&E Operating Services, which operates power plants in six states.
- CRC-Evans, which sells equipment and services used in building and rehabilitating pipelines.
- A wind turbine in Spain.

All of these are energy business, and are close to the electric power generation lines of business of the companies.

As of the end of 2002, the last year for which statistics are available, LG&E Energy Services is a little larger than the operating companies in terms of employee populations. LG&E Energy Services provides services to the utilities and their non-regulated affiliates *at cost* according to the Companies' latest report to the SEC on Form 10-K.

The relationship between regulated utilities and their non-regulated affiliates has been one of considerable interest to regulatory authorities for decades. For electric utilities the growth of their non-regulated businesses came from the combination of having money to invest as the construction programs of the 1970s and 1980s ended while opportunities to put the money to work increased with federal and state deregulation and restructuring initiatives.

Affiliate relationships are not necessarily bad. For some operations, the economies of scale and the greater buying power attained through association with affiliated companies may more than offset any overhead which the utility operations are required to bear in connection with the affiliate relationship. Whether the affiliate relationships impose extra costs on the utilities which



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they would otherwise not bear is the key general question, which is answered by examining several specific questions about who bears what costs and how those costs are distributed.

The most-directly relevant question to this audit is how fuel procurement practices are impacted by the Companies compliance (or non-compliance) with all applicable Kentucky and Securities and Exchange Commission requirements for affiliate transactions. Liberty's analysis will consider this question.

Liberty's evaluation will begin with a careful examination of current Kentucky and SEC requirements for affiliate transactions. The purpose of this examination will be to establish the requirements for affiliate transactions relevant to this audit. Next, Liberty will examine the compliance of the Companies with these requirements. This examination will be broad based, and consider a number of different aspects of affiliate relationships. Thus, the sub steps of this Task Area are designed to accomplish this type of examination.

Compliance determinations are important elements in quantifying the effects of affiliate relations on the costs and revenues that may or should affect customers, and to be more specific, the Companies' fuel management practices. In addition to pure compliance determinations, Liberty will also examine the organizational separation that either does, or does not, exist, between the regulated and the non-regulated affiliates in relation to the fuel procurement function. Liberty will evaluate the different aspects of fuel management with this in mind, and with the objective of determining that affiliate transactions related to fuel management area not adversely impacting ratepayers.

To answer the questions that Liberty delineates below, this task will be completed by reviewing documents and interviewing personnel in the Companies' organizations having the most frequent dealings between affiliates. However, it is important to note that Liberty realizes that this is NOT a comprehensive management audit, and that therefore our approach to this task area will begin with only interviews with the top level personnel involved in affiliate activities related to fuel management.

Finally, Liberty realizes that the Barrington-Wellesley Group, Inc. (BWG) has just completed the ESM audit of LG&E, and that included in the scope of work for that project was an examination of affiliate relations. While BWG did not examine fuel procurement specifically, they did report on improvements possible in organizational relationships and responsibility for regulated and unregulated portions of the business. BWG also recognized that the FAC mechanism does not provide direct incentive to minimize fuel costs. Thus, as Liberty approaches this task area on affiliate relations, we will be mindful of the work that BWG has already done and make no attempt to duplicate it; we will build on that work, but we will also take the next step to examine affiliate relations more specifically from the perspective of fuel management. We will consider BWG's work, and we will also consider the problems related to procurement of Polish coal from the affiliate that in some measure led to the need for this current audit, and determine, looking to the future, if appropriate action has been taken to guard against a repeat of these previous problems, from an affiliate point of view.



***Issues***

- 4.A. Identification of Affiliate Requirements
- 4.B. Company Compliance with Requirements
- 4.C. Applicability of Normal Acquisition Controls
- 4.D. Costs of Fuel
- 4.E. Profitability of Sales to Affiliates
- 4.F. Comparison of Contract Terms With Purchases from Non-Affiliates

Liberty's plans for addressing these issues in the proposed study are set forth below. These plans allow for the revision of the issues and also for the identification and investigation of additional issues that may prove merited as a result of study field work.

**4.A IDENTIFICATION OF AFFILIATE REQUIREMENTS**

- |                              |  |
|------------------------------|--|
| <b>Questions</b>             | <ul style="list-style-type: none"><li>• What Commission regulations and other guidance are germane to the area of affiliate transactions?</li><li>• What SEC regulations govern the structure of affiliate transactions?</li></ul>   |
| <b>Baseline Data Sources</b> | <ul style="list-style-type: none"><li>• Interviews with executive(s) and senior managers responsible for fuel procurement and selected line personnel.</li><li>• Kentucky regulations and orders related to affiliate transactions, as they may impact fuel management.</li><li>• SEC regulations related to affiliate transactions, as they may impact fuel management.</li></ul> |
| <b>Analytical Methods</b>    | <ul style="list-style-type: none"><li>• Evaluation of both Kentucky and SEC orders and regulations as they may be related to fuel management activities.</li></ul>   |
| <b>Evaluation Criteria</b>   | <ul style="list-style-type: none"><li>• Applicability of regulations and orders to fuel management activities.</li></ul>   |



## 4.B COMPANY COMPLIANCE WITH REQUIREMENTS

- Questions**
- Have the Companies complied with applicable rules and guidance for the pricing of goods and services provided between affiliates, as related to fuel management?
  - Have the Companies complied with the affiliate transaction regulations that apply to them regarding the pricing of transfers of assets between affiliates, as related to fuel management?
  - Does the Companies' CAM comply with both the SEC's and the Commissions rules for affiliate transactions as related to fuel management?
- Baseline Data Sources**
- Interviews with executive(s) and senior managers responsible for fuel procurement and selected line personnel.
  - Kentucky regulations and orders related to affiliate transactions, as they may impact fuel management.
  - SEC regulations related to affiliate transactions, as they may impact fuel management.
  - The Companies CAM.
  - Company records of transactions related to affiliate relations, in the fuel management area.
- Analytical Methods**
- Evaluation of Company transactions for compliance with both Kentucky and SEC orders and regulations as they may be related to fuel management activities.
- Evaluation Criteria**
- Compliance of Company transactions with regulations and orders related to fuel management activities.

## 4.C APPLICABILITY OF NORMAL ACQUISITION CONTROLS

- Questions**
- How must affiliated sources compete with non-affiliate purchases in supplier selection decisions?





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- What organizational controls exist, in terms of separation of regulated and non-regulated affiliates in relation to the fuel procurement functions?
- Are applicable contract administration controls applied to affiliate purchases?
- Do deviations from projected cost trends in affiliate purchases lead to revisions in overall acquisition plans?
- What changes have been made, if any, to fuel procurement policies and procedures with respect to affiliate relations as a result of the ESM audit of LG&E conducted recently by BWG?

**Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for procurement and selected line personnel.
- Contract files for major affiliate purchases and a sampling of smaller affiliate purchases.
- Comparisons between price, quality, reliability, terms and conditions of affiliated and non-affiliated supplies.
- Organization charts and definitions of organizational responsibilities.
- Recent ESM audit of LG&E conducted by BWG.

**Analytical Methods**

- Comparison of affiliate and non-affiliate contracts and contract administration files.
- Evaluation of cost trends in affiliate purchases.
- Comparison of organizational structure with structure necessary for separation of regulated from non-regulated affiliates.

**Evaluation Criteria**

- Competitiveness of cost, quality, reliability and other terms and conditions of affiliate acquisitions with non-affiliated purchases.
- Consistency of treatment between affiliate and non-affiliate purchases.



- Consistency of affiliate terms and conditions with those prevailing in comparable industry segments.
- Determination that there is proper organizational separation of regulated and non –regulated affiliates in relation to the fuel procurement function.

#### **4.D COSTS OF FUEL**

##### **Questions**

- Is there a direct relationship between the cost of fuel to an affiliate and the price to the purchaser?
- What are the trends in costs of any procurement of fuel from an affiliate?

##### **Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for procurement and selected line personnel.
- Five-year historical and projected cost of fuel price trends for purchases from affiliate operations.
- Five-year historical and projected price trends for affiliate versus non-affiliate acquisitions.

##### **Analytical Methods**

- Compare affiliate and non-affiliate price trends.
- Identify principal sources of any increase in affiliate fuel costs.
- Compare cost of fuel price trends from affiliates with industry patterns.

##### **Evaluation Criteria**

- Consistency between affiliate cost of fuel price trends and non-affiliate price trends.
- Consistency between affiliate cost of fuel price trends and price trends for comparable industry segments.



#### 4.E PROFITABILITY OF SALES TO AFFILIATES

- Questions**
- Does affiliate pricing follow cost of production changes, market price changes, or other factors?
  - Are affiliate price and cost trends consistent with each other?
  - Does affiliate pricing create incentives to improved performance from the ratepayer point of view?
- Baseline Data Sources**
- Five-year trends and projections of affiliate profits.
  - Price and cost trends for comparable industry segments.
- Analytical Methods**
- Compare affiliate cost of fuel versus profit trends.
  - Compare affiliate price and profit trends with comparable industry segments.
- Evaluation Criteria**
- Consistency of profits with risks.
  - Comparability of affiliate prices with those of comparable industry segments.

#### 4.F COMPARISON OF CONTRACT TERMS WITH PURCHASES FROM NON-AFFILIATES

- Questions**
- Are the terms and conditions of contracts with affiliates similar to those with non-affiliates?
  - Are any differences justified by unique circumstances, or do they appear to have resulted from less than arms-length bargaining?
- Baseline Data Sources**
- Interviews with executive(s) and senior managers responsible for procurement and production and selected line personnel.
  - Terms and conditions of affiliate and non-affiliate agreements.



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- Contract files for major affiliate and non-affiliate purchases.
- Affiliate versus non-affiliate purchase costs, quality parameters, reliability provisions and other terms and conditions.

**Analytical Methods**

- Compare costs, quality, reliability and other contract terms and conditions for affiliate and non-affiliate acquisitions.

**Evaluation Criteria**

- Consistency of contracts and contract performance expected from affiliated and non-affiliated suppliers.
- Justification for apparent inconsistencies.
- Consistency of affiliate contract costs, terms and conditions with those prevailing in comparable industry segments.



## Task Area Five

### *Supply Management*

**Definition:** Determine optimum means for managing supply from transportation to inspection, to inventory, to consumption, to waste disposal, and assure that contract administration systems and processes maximize ability to accomplish established cost, quality and reliability objectives for supply.

**Discussion:** In most major, ongoing purchase relationships, the performance aspects of quality, reliability and costs are the three most important attributes of vendor performance. They are the most critical to utility fuel purchases as well. In complex transactions, especially those of long duration, deviations in performance often occur. It is necessary to adopt programs, processes and systems that (a) identify any variances on a timely basis, (b) evaluate the contract rights and the business sense of demanding corrective actions, (c) assure that corrective actions are supported by proper records and an organized system for pursuing relief, and (d) provide for follow-up sufficient to determine if corrective actions have eliminated any ongoing cost, reliability or quality problems involved.

Liberty will review each of these links, in order to determine whether there exists a closed end process of assuring that suppliers meet commitments. This review will include tracking efforts to assure that quantity, cost, quality, and timing requirements are adequately met. The review will also investigate what the Company does when significant contract or purchase order requirements are not satisfied. Invoice processing, delivery sampling and analysis, freight bill review, utility audits of vendor cost adjustment clauses, backcharge accounting and other related activities will be reviewed.

Scheduling of fuel deliveries is also important to maintaining proper cost control and assuring power plant availability. Handling at the site must also receive adequate attention to assure that constraints that add costs or produce delays are effectively removed. Reluctance to make even small capital expenditures has caused some companies to suffer net dis-economies through added personnel or equipment costs for unnecessary unloading, sorting, or storage steps.

Inventory policies obviously have substantial cost significance. The balance between the direct costs of overly large inventories and operations restrictions due to inadequate stocks must receive ongoing attention in an atmosphere where load changes and market or transportation disruptions have been frequent. Striking this balance requires close coordination of personnel from fuels, plant operations, and planning. Verification of book inventories by physical measurement of some kind on a periodic basis can also help avoid the problems of low stocks or the costs of oversupply.

While each of the issues within this Task Area touch on information contained in monthly FAC filings, one of the issues specifically addressed in this Task Area is the first area of inquiry of the RFP – Review of the Companies monthly FAC filings beginning in January 2001. This will be examined as part of Issue 5.H, Regulatory Compliance. The advantage of examining FAC filings as part of this Task Area Five is that, in order to determine the adequacy of fuel management, the



foundation for this Task Area is based on an examination of data related to fuel contracts, supplier performance, fuel quality, fuel quantities, inventories, etc that is the same general data that is also included within the FAC filings.

***Issues***

- 5.A Contract Administration Responsibility
- 5.B Receipt Inspections
- 5.C Information Monitored
- 5.D Historical Supplier Performance
- 5.E Disputes and Backcharges
- 5.F Inventory Practices
- 5.G Waste Management
- 5.H Regulatory Compliance

Liberty's plans for addressing these issues in the proposed study are set forth below. These plans allow for the revision of the issues and also for the identification and investigation of additional issues that may prove merited as a result of study field work.

**5.A CONTRACT ADMINISTRATION RESPONSIBILITY**

- |                              |  |
|------------------------------|--|
| <b>Questions</b>             | <ul style="list-style-type: none"><li>• What are the defined requirements for assuring vendor compliance with contract or purchase order terms and conditions?</li><li>• Who has responsibility for tracking each such requirement?</li><li>• How is performance tracked and documented vis-a-vis each applicable requirement?</li></ul> |
| <b>Baseline Data Sources</b> | <ul style="list-style-type: none"><li>• Applicable policies and procedures.</li><li>• Contract terms and conditions.</li><li>• Interviews with executive(s) and senior managers responsible for contract administration and selected line personnel.</li><li>• Contract administration files.</li></ul>                                  |



- Analytical Methods**
- Verify that all material aspects of contract administration responsibility have been identified, defined, and logically apportioned.
  - Verify that all personnel involved have a sufficient understanding of their roles, tasks and points of contact with other personnel involved.
  - Review contract administration files to determine if documentation supports conclusion that all material contract administration tasks are routinely, timely and thoroughly performed.

- Evaluation Criteria**
- Clarity and thoroughness of division of responsibility for material contract administration functions.
  - Adequacy of understanding of roles by all personnel.
  - Completeness of documentation of all material aspects of performance by all suppliers.
  - Adequacy of summary-level reporting of information for management oversight.

## **5.B RECEIPT INSPECTIONS**

- Questions**
- How are weight and quality samples taken at receiving points (including accuracy testing of measuring equipment, conformance of sampling and analysis to the American Society for Testing and Materials, verification of testing or sampling and analysis done by the supplier, other)?
  - What do sampling, analysis, weighing and testing records show about the conformance of deliveries to agreement requirements?
  - How are deviations reported initially and tracked to successful conclusion?

- Baseline Data Sources**
- Inspection procedures.



- Interviews with all managers responsible for inspections and selected line personnel.
- Liberty-selected sampling of inspection records.
- Sampling of detailed inspection records.
- Summary level inspection results information used by management to track performance.

**Analytical Methods**

- Sample inspection records to verify that all applicable tasks are performed on a timely and complete basis.
- Determine how variances discovered during inspections are pursued under contract administration programs.

**Evaluation Criteria**

- Recognition of applicable requirements under all contracts.
- Performance of all required actions as and when specified.
- Adequacy of follow-up mechanisms to dispose of deviations discovered during inspections.

**5.C INFORMATION MONITORED**

**Questions**

- Are contract files kept up to date with respect to all current terms, conditions, delivery schedules, and pricing?
- Do contract files contain a complete payment history, tracking any adjustments for discrepancies in deliveries or quality, and showing details of the current price under any applicable adjustment formulae?
- How do fuels management personnel coordinate with accounts payable personnel to assure proper payments and normal retentions or withholdings for non-conformance?
- How does the Company assure that payment flow is managed to take maximum advantage of the time value of money and agreement discounts?
- Who audits supplier performance on a regular/special basis?





- Baseline Data Sources**
- Is monitoring of affiliated acquisitions as rigorous?
  - Interviews with executive(s) and senior managers responsible for contract administration and selected line personnel.
  - Review of Liberty-selected sampling of contract administration files.
  - Sampling of detailed information regularly monitored.
  - Summary-level reports used for management oversight and trend analysis.
- Analytical Methods**
- Determine if information on all material aspects of cost, quality, reliability and schedule performance are adequately and timely monitored.
  - Trace sample documentation to assure accuracy of reported data.
  - Trace sample documentation to assure proper coordination between contract administration and accounting personnel.
- Evaluation Criteria**
- Clarity and thoroughness of information collection and maintenance requirements.
  - Timeliness, completeness and accuracy of data collection.
  - Adequacy of efforts to summarize information in a format that is useful for management oversight.
  - Access to needed information by contract administration, accounting and management personnel.

## 5.D HISTORICAL SUPPLIER PERFORMANCE

- Questions**
- What has been the past three-year performance history (including all cost, quality, quantity, delivery schedule and administrative elements required by the contract or purchase order) of each major current fuel supplier at each generating station?



- What *force majeure* claims have occurred/been allowed in the past three years?
- What price or cost adjustment mechanisms have come into play over the past three years?
- What has been the delivery performance of each major fuel vendor and where has non-delivery required purchase of replacement fuel at higher prices in the past three years?
- What has been the impact of major plant outages during the audit period on fuel costs?
- How does affiliate performance compare with the performance of non-affiliates?
- Who monitors transportation contractor performance versus contract requirements?
- Who reviews and approves transportation contractor invoices (including auditing of pass-through expenses, such as maintenance of rail cars)?

**Baseline Data Sources**

- Records documenting performance record of major suppliers in past three years.
- Coal acquisition agreements.
- Contract administration files.
- Interviews with executive(s) and senior managers responsible for contract administration and selected line personnel.

**Analytical Methods**

- Review files to determine sufficiency of investigation and disposition of supplier claims for relief.
- Compare price, quality, quantity, reliability, and schedule data with contract requirements on major purchases.
- Compare price, quality, quantity, reliability, and schedule data among suppliers.



- Evaluation Criteria**
- Identify required supply replacements that resulted from deliveries later or less than nominal contract amounts.
  - Consistency of deliveries with contract requirements for quality, quantity and schedule.
  - Sufficiency and timeliness of documentation of all deviations from material requirements.
  - Adequacy of follow-up to major single point deviations or persistent negative performance trends.
  - Consistency of affiliate and non-affiliate performance trends.

## **5.E DISPUTES AND BACKCHARGES**

- Questions**
- What programs are used to trigger review of possible actions to recover from suppliers?
  - How are events associated with potential backcharges or other requests for relief documented and tracked by management?
  - What is done to correct for substandard performance by affiliates?
  - What actions have been taken to remedy performance that did not meet requirements?
  - How successful has the utility been in securing relief?
- Baseline Data Sources**
- Interviews with executive(s) and senior managers responsible for contract administration and selected line personnel.
  - Backcharge and claims files.
  - Records comparing actual with nominally required contract performance.
- Analytical Methods**
- Identify major cost, quality, reliability and schedule deviations from nominal contract requirements for the past three years.



**Evaluation Criteria**

- Trace documentation on major disputes.
- Evaluate adequacy of recovery obtained from suppliers in major disputes over the past three years.
- Adequacy of programs to trigger consideration of backcharges and other claims.
- Sufficiency of efforts to secure outside advice where necessary to identify and evaluate claims.
- Success in achieving remediation in substantiated claims.
- Ability to recognize and account for business relationship aspects of dispute settlement (*i.e.*, taking a long run view of what is to be gained or lost from suppliers as a result of the posture taken in individual disagreements).

**5.F INVENTORY PRACTICES**

**Questions**

- What are the overall inventory policy and the plans for each station?
- How often is inventory policy reviewed?
- What efforts have been made to optimize fuel inventories, through cost/benefit studies, utilization of industry optimization programs, etc?
- What is the management process for establishing target inventory levels and authorizing deviations therefrom?
- How have actual inventory levels compared with planned ones?
- How have actual physical inventory levels compared with book inventory levels?
- How are potential market or internal disruptions or contingencies incorporated into inventory planning and fuel acquisition decisions?
- How are possible and actual variations from expected load dispatch conditions factored into inventory planning?



- How are shipments scheduled and controlled to assure availability of transportation facilities, and timely and efficient unloading and handling?
- What efforts have been made to increase transportation "free time" (or reduce demurrage) in order to improve inventory management?
- What are the levels of unusable fuel supplies currently in inventory?
- What efforts are taken to confirm that booked or recorded inventory levels are accurate?
- What documentation of additions to and withdrawals from inventory locations is maintained?
- What are the different sulfur levels of coal in inventory and how are they controlled?
- How are regular and special deliveries dispatched and expedited?

**Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for setting or managing inventory levels and selected line personnel.
- Inventory objectives, policies and plans.
- Results of aerial surveys of coal piles.
- Inventory optimization models and studies.
- Actual versus planned inventory levels by station for the past three years.
- Inventory levels planned for each station for the next three years.

**Analytical Methods**

- Compare actual with projected inventories by station.



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- Compare projected inventory levels with station plans, constraints affecting delivery and criticality to electricity supply reliability.
- Compare book inventory with results of physical inventory measurements.
- Compare predicted versus actual occurrence of recognized contingencies.
- Determine if there is a specific model or spreadsheet process used to optimize fuel inventory levels.
- Determine if affiliated supplies receive any undue preference in inventory planning or implementation.
- Determine relationship between supply factors (e.g., minimum contract takes or pre-set output levels of affiliated mines) with inventory policies and objectives.

**Evaluation Criteria**

- Station-by-station consistency of inventory policies with unit plans and criticality to service reliability, as well as vendor delivery or operation requirements and contingencies.
- Adequacy of supply contingency predictions.
- Achievement of minimum differential between book inventory and physical inventory.
- Balance of economies from contract delivery or minimum supply requirements with predicted unit needs and contingencies.
- Consistency of treatment between affiliated and non-affiliated supplies.
- Indication that appropriate effort has been made to optimize level of fuel inventories, such as use of models or spreadsheets.

**5.G WASTE MANAGEMENT**

**Questions**

- What storage and disposal methods are used?



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- What others have been considered?
- How are alternatives evaluated to select the preferred methods?
- How have waste management decisions, economics and constraints been factored into optimization of fuel procurement?
- What environmental regulatory constraints are currently the most significant?
- What new constraints are considered most likely in the next ten years?
- What contracts are in place related to waste transportation and disposal?
- What organization has responsibility for waste management?
- What steps are taken to assure the continuing competitiveness of waste management contracts and operations?
- What future actions in the waste management area have the potential to impact fuel procurement?

**Baseline Data Sources**

- Interviews with executive(s) and senior managers responsible for waste management and selected line personnel.
- Capital and operating cost records for waste disposal during past three years.
- Projections of capital and operating costs records for waste disposal for next ten years.
- Documented evaluations of alternatives.
- Existing contracts for waste management services.

**Analytical Methods**

- Examine completeness of identification and evaluation of waste management alternatives.



- Determine sufficiency of consideration of current environmental regulatory requirements and possible future ones.
  - Review waste management historical cost trends and projections.
  - Review of waste management contracts.
- Evaluation Criteria**
- Completeness of consideration of environmental and economic impacts of waste management alternatives.
  - Adequacy of contingency planning to meet potential future environmental regulatory requirements.
  - Maximization of sale and reuse possibilities for waste products (*e.g.*, ash as paving component).
  - Adequacy and competitiveness of waste management contracts.
  - Evidence that waste management activities have been factored into fuel procurement planning and decision-making.

## **5.H REGULATORY COMPLIANCE**

- Questions**
- Have the monthly FAC filings of KU and LG&E, beginning in January 2001, been disclosed in accordance with applicable regulations?
  - Do the applicable regulations provide for adequate disclosure of all fuel transactions?
- Baseline Data Sources**
- Monthly FAC filings for the Companies, beginning in January 2001.
  - Applicable regulations pertaining to FAC filings.
  - Interviews with executive(s) and senior managers responsible for FAC filings, and selected line personnel.
  - Fuel procurement records and files.





- The results of Liberty’s associated examinations of the fuel procurement process for this audit.
- Analytical Methods**
- Review all material aspects of fuel transactions compared to the requirements of the applicable regulations.
  - Review the applicable regulations from the perspective of their coverage of all necessary fuel transactions.
- Evaluation Criteria**
- Verify that all material aspects of fuel transactions have been disclosed in accordance with the applicable regulations.
  - Verify that the applicable regulations provide for adequate disclosure of all fuel transactions.

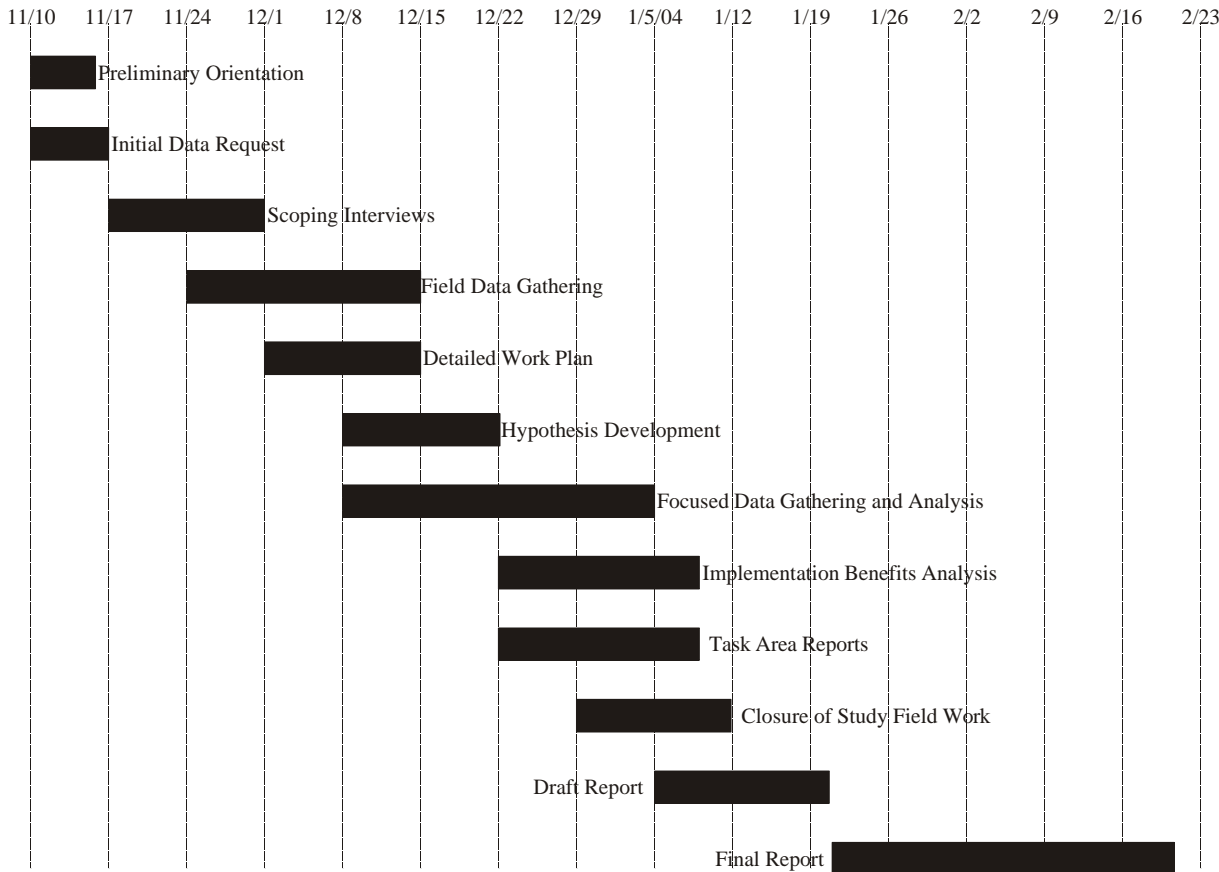


**B. Schedule**

The following schedule shows the duration of the fuel procurement audit of KU and LG&E on an audit step-by-step basis. Several points related to this schedule are important. First, Liberty is prepared to begin this project on November 12, 2003, as requested in the RFP. Second, the schedule is tight and requires significant work to be conducted on a simultaneous basis. Finally, the schedule is dependent upon full cooperation of the Companies in providing prompt responses to requests for information and interviews.

Liberty has staffed this project with senior individuals who are uniquely qualified in the areas to which they have been assigned, such that the necessary work can be conducted in each of the task areas simultaneously.

**Schedule for the fuel procurement Audit of KU & LG&E**



## **C. Study Methods**

Liberty will carry out the proposed audit of the Companies under a well-defined work plan that consists of three principal phases: Project Definition, Analysis, and Report Completion. In turn, these phases will permit:

- Proper orientation to acquaint Liberty team leaders with the Staff Project Officer and other Staff members who will play an audit role.
- Identification of the priority issues that need to be addressed.
- Preparation of a revised plan, schedule, and estimate for addressing them.
- The gathering of sufficient information to describe current management and operations as relevant to the work scope to identify potential improvement opportunities.
- Qualitative and quantitative analysis of such opportunities.
- Formulation of concrete conclusions and recommendations and presentation of them in a final report that identifies the factual and analytical basis for, and the judgments supporting, all conclusions and recommendations.
- Provision of a work plan that will serve the Commission and Staff in the future for similar audit activities.

The following steps detail how Liberty will carry out the audit to provide these results:

### **1. Project Definition Phase**

#### **Step 1: Preliminary Orientation**

This essential first step acquaints the Liberty team leaders with the Staff Project Officer and other Staff members who will play an audit role. The request for proposal identifies clear review and approval points for Commission Staff. However, Liberty welcomes added participation. The preliminary-orientation step will provide an opportunity to begin the interchange that will lead to common understandings of the details of Liberty's work methods, and of the full extent of Staff's intended participation in audit activities. The request for proposal sets forth requirements, which Liberty is committed to meeting. Moreover, Liberty also wishes to meet the Staff's expectations.

The principal work product from this step will be the tailoring of the preliminary work plans (set forth earlier in this proposal) to the particular circumstances of the Companies. In conjunction with Staff, Liberty will make the adjustments necessary to assure that the detailed review of the Companies addresses any important prior case and management audit issues as well as current circumstances.

This audit step will also establish the necessary protocols for communications, document exchange, advance notice of particular task steps, and other similar activities. Should the Staff identify (a) particular areas where it will actively participate or (b) specific, substantive matters of interest, Liberty will incorporate them into its detailed work planning. Liberty's team



leadership also realizes that, at a later stage of the project, Commission Staff may identify additional areas where its active participation in the audit has become appropriate.

The Liberty team will require access to Companies' resources. This will include access to documents, computer models, Companies' facilities, and Companies' employees. Liberty expects that each Company will have an organized system of contact for the audit, to effectively address these requirements without unduly disrupting normal business.

### **Step 2: Initial Data Request**

Liberty's first data-gathering steps are designed to collect the basic information that describes management and operations in the areas to be evaluated. Acquiring standard information at the outset of the audit helps to avoid missteps and delays. Section VII of this proposal lists the initial set of baseline information that will provide background essential for understanding the nature of management and operations at each of the Companies. It also provides a strong basis for generating more-specific data requests or interview plans.

The preliminary work plans for each of the defined task areas, set forth earlier in this proposal, will guide the development of the initial data request. In addition to the baseline data sources noted under each task area, the initial data request will address more general matters, such as the following:

- A description of the major functions covered.
- A discussion of how these major functions are coordinated with activities of related operational areas of the Company. For example, to which other functions do the ones being studied supply significant resources? Which others supply them with resources?
- The current organization structure used to execute the functions and perform the operations, and any known planned changes in structure.
- Current and projected staffing levels supporting these functions and operations.
- Current budget and projected budgetary changes for these operations.
- Current objectives for each major functional area.
- Major areas of current management emphasis and concern.
- Major organizational, procedural, staffing, activity, and cost changes.

### **Step 3: Scoping Interviews**

These interviews are designed to build on the information that comes from the initial data request. Depending on the nature of that information, Liberty anticipates conducting between 5 and 10 interviews at each of the Companies. The scoping interviews are intended to fill in any gaps or explain any important details in the response to the initial data request and from current issues of concern that have arisen at recent proceedings, from past audits, or are the special



issues identified by the Commission. These interviews will also verify information gleaned from other sources and determine whether that information is held in common by all the key personnel affected by it.

#### **Step 4: Field Data Gathering**

The first part of this step will include data requests, direct observations of facilities and work activities, and the scoping interviews noted previously. Following these basic data-collection activities, the working tools of this audit will include (a) issue-based interviews, (b) focused but comprehensive document requests, (c) uniquely-tailored quantitative models, (d) data bases, (e) direct observation of work processes, and (f) comparative analyses. Liberty will use these tools to develop a broad understanding of the current status and working of each pertinent organizational, functional, and operational element of each Company. This step will also catalog Companies' plans for change and improvement. Identifying them early in the audit avoids later confusion and assures proper audit attention on their merits.

This step will produce an understanding of current management at the senior level and of the nature, scope, and breadth of information systems and reports relevant to the project. These are strictly matters of fact, not judgment. Liberty believes that fact-checking at this stage, while substantial project budget remains, is important to producing a comprehensive, accurate final report. Liberty will accomplish this verification through a series of interviews and data requests. These activities may be supported by appropriate summary lists or diagrams of key activity work flows that will facilitate the verification process without jeopardizing the confidentiality of the task reports being developed.

#### **Step 5: Detailed Work Plans**

Liberty will use the information gathered by this point to prepare detailed work plans to govern the remainder of study work. They will be based on Liberty's preliminary identification of areas that warrant continued or expanded study. Proposed detailed work plans will itemize the specific inquiries and analytical processes, schedules, and cost estimates categorized according to each area proposed for investigation.

## **2. Analysis Phase**

#### **Step 6: Hypothesis Development**

At the start of this second audit phase, Liberty will use the information gathered in the project-definition phase to prepare working hypotheses about areas for potential management and operations improvement. Formulated as propositions, these hypotheses will address the areas where Liberty believes that significant, beneficial change may be possible, based on information and analysis in hand at that point. Liberty will also note areas where current performance in the



areas relevant to fuel management are strong. These hypotheses will be used as the basis for following audit steps.

These initial hypotheses will not be the only ones explored. As new information is developed, new ones will be added, existing ones will be restated, and some will be discarded. The purpose of the initial set of hypotheses is not to limit the analytical work, but to instigate it early and in an organized way.

Liberty's audit process is designed to produce, from a number of different sources, a substantial pool of potential opportunities for improvement. All proposed improvement opportunities will receive further review, analysis, and screening. The team will organize and group them into related sets for which common implementation plans may be developed. Liberty will perform a preliminary screening of each potential opportunity. If this screening process shows that particular opportunities demonstrate no significant likelihood of net savings to the member cooperatives, they will be dropped from further consideration.

Remaining hypotheses will be structured so that their ultimate merits can be determined through objective analysis and verification of sound factual support. Liberty team sessions will test these hypotheses against known facts and the team's experience. This process will identify those hypotheses that bear further investigation. This step and the following one will be carried out on an iterative basis.

### **Step 7: Focused Data Gathering and Analysis**

The hypotheses that survive preliminary screening will then undergo focused data-gathering efforts intended to verify or disprove their essential accuracy. This verification process may include a range of different techniques, as prove appropriate to each one. The means used will include activities like the following, among other study efforts appropriate to the circumstances:

- Visits to facilities and work locations.
- Focused interviews of a cross-section of management and line personnel in major functional areas.
- Observations of work in process.
- Rechecking of the details of Liberty's understanding of operations at the detailed level.
- Comparisons with similar operations at other utilities.
- Team meetings for detailed analysis of the likely effects of proposed changes.
- Discussions with key managers about how certain changes would influence related operations or activities.
- Other study efforts appropriate to the circumstances.

Liberty will formulate first drafts of its findings and conclusions in the priority areas during this stage. These drafts will evolve as increasingly-narrowed study produces more information and



analytical results. The fact and analytical-refinement stage described here will provide the information to test the validity of hypotheses, and to revise, supplement, or delete them, as appropriate.

Liberty team sessions will present forums for group discussion of hypotheses. The sessions will provide the benefits of different experiences, perspectives, and insights before anyone begins to take *ownership* of a concept that later should be discarded. These sessions will involve role playing or *devil's advocacy* to assure that working hypotheses can withstand close scrutiny and challenge.

### **Step 8: Implementation-Benefits Analysis**

Forming detailed recommendations and investigating their likely qualitative and quantitative impacts are a concurrent process. This process actually improves the understanding of the basic need in many cases. Curtailing the investigation before completing the fine-tuning of recommendations is ill-advised. Liberty will meet with Staff to describe and review tentative recommendations and the work estimated to complete the evaluation of them. Liberty will then undertake the effort necessary to complete its analysis of the costs, schedule, and benefits of implementation. This step will update quantitative analyses to reflect the now fully-developed audit fact-base.

## **3. Report-completion Phase**

### **Step 9: Task Area Reports**

Liberty will prepare task area reports upon completion of base work in each task area. These drafts will present (a) an overview, (b) any recommendations for change, (c) supporting findings and conclusions, and (d) quantitative and qualitative justification for each recommended action. Liberty will solicit comments from both the Management Audit Branch and each Company to assure accuracy of facts. After Staff approval of the task area reports, the Liberty study team will focus on closing the analytical steps needed for final verification and in identifying with more specificity the implementation requirements associated with the reports.

Input for these task area reports will be based on information that will first be reviewed at three-party roundtable meetings between the Management Audit Branch, each Company, and Liberty. These task reports will be submitted early enough in the project to allow for additional in-depth analyses and subsequent revisions. Following initial review of the task reports by the Management Audit Branch, the Companies will be afforded an opportunity to review the task reports. Companies' written comments shall be submitted to Liberty and the Management Audit Branch within ten (10) working days after it receives each task report so that Liberty can make any changes of fact, conclusions, or recommendations before completing each task area report.



### **Step 10: Closure of Field Work**

Liberty will conclude the fact-finding necessary to resolve comments, finish analyses, and refine implementation requirements, including estimates of implementation time, costs, and benefits. Looking at major changes too microscopically can produce recommendations that solve smaller problems only to produce larger ones.

### **Step 11: Draft Final Report**

At least thirty (30) days prior to the final-report due date, Liberty will provide four copies of a draft report for review. It will be a combined report for both Companies, and will cover all work plan tasks, and a management summary. The draft report will also describe in an organized fashion all material factual findings, analyses, and conclusions reached and any tentative recommendations issued for each functional area addressed. The draft report will also address audit mission, objectives, method, and evaluation criteria, and be fully footnoted. Essentially this draft report will be in the same format as the final report to be produced later.

To support the recommendations properly, the draft report, and subsequently the final report will specify:

- The study's mission and objectives.
- An explicit statement of the criteria applied to evaluate each area examined.
- A description of approach and method.
- A delineation of data-collection and analytical processes performed.
- A description of current management and operations in areas relevant to fuel management.
- An analysis of those areas considered not subject to meaningful improvement.
- A listing and description of opportunities for improvement that are likely to result in improved execution of fuel management.
- Full factual and analytical support for all recommendations.
- An executive summary of the recommendations presented.
- Any recommendations appropriate for further study.
- Cross-references to supporting documentation in Liberty's working papers.

Liberty will resolve comments from the Management Audit Branch and the Companies so that they may be incorporated into the final report. This step will include acquisition of any final data that may be needed to close factual issues.





### **Step 12: Final Report**

The Final Report will be a combined report for both Companies. Upon Staff approval of the draft report, Liberty will prepare and issue one (1) reproducible original, one (1) electronic copy, and 50 bound copies of the Final Report for the Commission. Each Company shall be provided with five (5) bound copies, one electronic copy, and one unbound, copy-ready copy of the final report.

Recommendations in the Final Report will be justified, and accompanied by adequate supporting information. The Final Report will be balanced, in that it will include both findings of superior effectiveness, as well as opportunities for improvement.

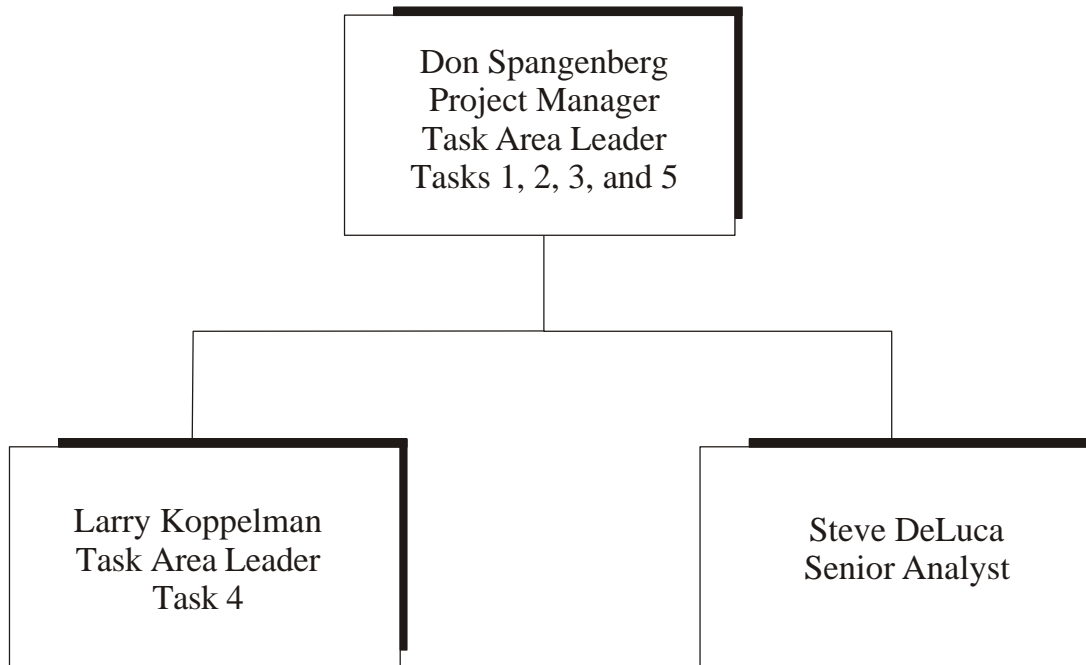
Liberty personnel have extensive experience in preparing formal reports for eventual use in administrative proceedings requiring pre-filed testimony and hearings. Liberty will produce a Final Report that meets applicable requirements for admissibility. As with all its work products, Liberty will stand behind its results if questioned in any public forum or proceedings.



## IV. Study Team Staffing

### A. Team Organization

Liberty proposes a highly qualified team for the Focused Management Audit of Fuel Procurement of Kentucky Utilities Company & Louisville Gas and Electric Company. The project team will be organized as shown in the chart below:



Don Spangenberg and Steve DeLuca are employees of Liberty. Larry Koppelman is a subcontractor to Liberty.

One of the distinctive features of Liberty's team is its extraordinary strength in the area of electric utility power generation fuel management. The capability that Liberty offers the Commission starts at the top, with the Project Manager and Senior Consultant, Don Spangenberg, whose entire career of over 30 years has been in the area of utility fuel management, first with direct fuel procurement responsibility for a large gas and electric utility, and now as a consultant offering fuel management consulting services to many commissions and utilities.

Liberty's team also brings exceptional strength in the area of affiliate relations. All of the Ohio fuel management audits conducted by Don Spangenberg over the years have included a task area with specific focus on affiliate relations. In addition, Larry Koppelman has been a major



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contributor to essentially all of Liberty's affiliate relations work since it began almost ten years ago.

Don will be supported in this effort by a team whose history of service to commissions cannot be challenged. While the Commission's Staff has worked with Messrs. Spangenberg and Koppelman on previous engagements and is familiar with their qualifications, it has not yet been exposed to the talent that Steve DeLuca can bring to this audit. Mr. DeLuca has intense recent experience with Liberty as a Senior Analyst in the area related to analysis of utility compliance with regulatory requirements. As a team that has worked together before on other engagements, these three Liberty consultants have the experience and knowledge of electric utilities in their respective areas of expertise that will make this audit as valuable as Liberty's previous work has been for the Commission.



## **B. Study Team Members**

**Donald T. Spangenberg, Jr.**

*Project Manager & Senior Consultant*

*Task Area Leader, Tasks One, Two, Three & Five*

Mr. Spangenberg has significant experience as a Project Manager and in working for public utility commissions. He has managed a number of projects for Liberty, and has had lead roles in a number of management audits of utility operations. Recently, he has been the project manager for two separate projects for the Kentucky Public Service Commission. He was the Project Manager on the audit of Kentucky's five major gas local distribution companies, and on the audit of East Kentucky Power Cooperative. Just recently, he was Project Manager and Senior Consultant, in the recently completed Liberty audit of Vectren Energy Delivery of Ohio for the Public Utilities Commission of Ohio.

Mr. Spangenberg's long-term strength is in the area of utility fuel management, and he has been Liberty's principal contributor in this area. He has personally conducted Liberty's fuel management audits on twelve separate management/performance audits of Ohio utilities for the Public Utilities Commission of Ohio. Of importance to this fuel procurement audit for the Commission is the fact that all of these Ohio fuel audits included a task area for examination of affiliate relations issues. Mr. Spangenberg has had similar fuel management assignments in other states for other commissions. He has rewritten fossil fuel procurement procedures for major purchasers of coal, gas, and oil. He has also led different task areas in more comprehensive management audits. These investigations have given him first-hand experience with the role of public authorities in representing a variety of interests.

A summary of Mr. Spangenberg's relevant accomplishments includes the following:

- Currently serving as Liberty's Project Manager for the management/performance audit of Vectren Energy Delivery of Ohio for the Public Utilities Commission of Ohio.
- Served as Liberty's Project Manager for the recently completed audit of Kentucky's five major gas local distribution companies for the Kentucky Public Service Commission.
- Served as Liberty's Project Manager for the audit of East Kentucky Power Cooperative for the Kentucky Public Service Commission.
- Served as Project Manager and Senior Liberty Consultant for multiple task areas—related to fuels planning, organization, purchases from affiliates, acquisition, supply management, and system dispatch and bulk power transactions—for ten of Liberty's fuel-cost audits of Columbus Southern Power Company and Ohio Power Company (subsidiaries of American Electric Power Company), Cincinnati Gas and Electric Company, Monongahela Power Company, Ohio Edison, Cleveland Electric Illuminating Company and Toledo Edison for the Public Utilities Commission of Ohio.



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- Served as Task Area Leader for Liberty’s audit of the transmission and distribution revenue requirements of the Commonwealth Edison Company for the Illinois Commerce Commission.
- Served as Task Area Leader for Liberty’s audit of the management and operations of the New York Power Authority for the New York State Office of the State Comptroller.
- Served as Project Manager for Liberty’s review of the natural gas purchasing policies, procurement models, and fuel management practices at The East Ohio Gas Company for the Public Utilities Commission of Ohio.
- Over 30 years' experience in the energy industry, concentrating primarily on fuels, fuel supply evaluation, fuel management, fuel marketing, fuel contract negotiation, transportation, organization, staffing, information systems, procedural controls systems, and power plant operations.

Mr. Spangenberg received a BSE degree in Chemical Engineering from Princeton University and a Master’s Degree in Business (MBA) from Stanford University.

**Lawrence N. Koppelman**  
*Executive Consultant*  
*Task Area Leader, Task Four*

Larry Koppelman has been an Executive Consultant with The Liberty Consulting Group for many years, and works from the firm’s office in Baltimore, Maryland. Larry will contribute his many years of experience in the electric utility industry to this project for the Kentucky Commission. He has been a management consultant for 15 years, all in the energy and utilities (electricity, natural gas, and telephone) industries, served in a corporate-staff position at MCI Communications, and as director of marketing for Gulf+Western’s Advanced Fuels Technology Division. His experience is wide ranging, but his areas of specialization include analysis of affiliate activities, the analysis of market behavior, reviews of the management structures and business processes in many different kinds of organizations, from the largest electric utilities through small utilities and technology companies; and analyzing the support functions of utility organizations.

As a trained economist, Mr. Koppelman has been a major contributor to essentially all of Liberty’s affiliate relations work since it began almost ten years ago. He managed Liberty’s assessment of affiliate structure, cost assignment, and cost allocations involving ConEd/Northeast Utilities, Arkansas Western Gas Company, Southern Connecticut Gas Company, and Connecticut Natural Gas Company. He also led Liberty’s evaluation of the actual savings obtained as a result of the PSNH/Northeast Utilities merger. He has been a lead consultant in the review of affiliate and service company costs in Liberty’s affiliate organization and cost audits of Bell Atlantic, NYNEX, and GTE. He has served Liberty as project manager in many engagements for public service commissions.



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A summary of Mr. Koppelman's relevant accomplishments includes the following:

- Lead Consultant in Liberty's audits of the competitive service offerings of New Jersey's four electric distribution companies for the New Jersey Board of Public Utilities. Primary area of work was to assure that there is no form of cross-subsidization of competitive services by utility operations or affiliates with which they are associated.
- Task Area Leader for Liberty's audit of the transmission and distribution revenue requirements of the Commonwealth Edison Company for the Illinois Commerce Commission.
- Project manager for Liberty's financial audit of the operations of Verizon New Hampshire for the New Hampshire Public Utilities Commission, including any services provided by affiliates, and the allocation of costs between regulated and non-regulated activities, including investigating all management services contracts and affiliate relationships to ensure a fair allocation of cost-sharing. This audit was conducted in the context of the company and Commission considering a change from traditional ratemaking.
- Task Area Leader for Liberty's audit of the management and operations of the New York Power Authority for the New York State Office of the State Comptroller.
- Task Area Leader for Liberty's management audit of East Kentucky Power Cooperative for the Kentucky Public Service Commission.
- Lead consultant in the comprehensive financial review of Verizon New Jersey Inc. (VNJ), under the plan for Alternative Regulation, for the New Jersey Board of Public Utilities responsible for the review of merger costs and savings.
- Team Leader in monitoring Public Service Company of New Hampshire's (PSNH) divestiture of its power plants, for the New Hampshire Public Utilities Commission (NHPUC). Also, Lead Consultant in on-going restructuring and rate-case support to the NHPUC's Staff.
- Lead Consultant in Liberty's management audit of GTE South - Kentucky for the Kentucky Public Service Commission, responsible for the review of the human resources and compensation areas.
- Team Leader for Liberty's comprehensive management and affiliate-relations audit of Bell Atlantic-Pennsylvania and BA-DC for their respective commissions. Managed or performed the reviews of customer service, pay telephones, billing and collection, operator services, human resources, compensation and benefits, labor relations, EEO/AA, directory publishing, and information systems.
- Team Leader in Liberty's retrospective management audit of the affiliate transactions of New York Telephone Company (NYT) for the New York Public Service Commission



(NYPSC). Responsible for analysis of affiliates involved in marketing and sales, real estate, finance, and leasing. Review topics included allocations, reasons for the existence of new affiliates, profitability of affiliates, and purchases and leases made by regulated companies of goods and services provided by non-regulated affiliates.

- Team Leader in a management audit for the Maryland Public Service Commission (MPSC) of the affiliate interests of C&P Telephone of Maryland, responsible for analysis of the provision of centralized services to the company. Studied re-organizations and changes in governance of Bell Atlantic's centralized-services organizations and reviewed C&P's monitoring of the performance of centralized-services providers. Witness in the rate case that considered Liberty's recommendations.
- Liberty's Project Director in its competitive assessment engagement with Alabama Electric Cooperative.
- Liberty's Project Director in its re-engineering and re-organization assignment with Belize Electricity Limited, the electric utility of Belize.
- Senior Consultant and Task Area Leader on multiple fuel management audits for the Public Utilities Commission of Ohio.

Mr. Koppelman received bachelor's and masters degrees in resource economics from The Johns Hopkins University, and his masters of science in management (MBA) from the Massachusetts Institute of Technology.

**Steven C. DeLuca**  
*Senior Analyst*

Steve DeLuca has had recent and focused experience with Liberty working on various utility industry projects as both an analyst and an assistant project manager. The focus of Steve's work has been evaluation of utility regulatory filings as related to regulatory policy where he has combined his analytical abilities and his computer skills to provide Liberty with clear assessments of regulatory compliance of the utilities that he has examined. Steve's keen analytical work, combined with his strong background in industry research and data analysis have made him an important contributor to a number of recent Liberty management audits conducted for regulatory authorities.

A summary of Mr. DeLuca's relevant accomplishments includes the following:

- Assistant Project Manager on Liberty's focused audit of NUI Corporation and its regulated utility affiliates. Assisted in the corporate governance, affiliate relationships, and executive compensation examinations as they pertain to specific regulatory standards in order to determine regulatory compliance.



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- Consultant on Liberty's audit of customer communications issues on audits (for the New Jersey Board of Public Utilities) of New Jersey's four major electric companies. Assisted on analysis of the competitive services for Public Service Gas & Electric (PSE&G) and Atlantic City Electric (ACE). Specifically responsible for the examination of PSE&G's Appliance Service Business to determine compliance with the New Jersey *Energy Competition Standards*.
- Principal analyst supporting activities designed to examine ComEd maintenance practices in Liberty's work for the Illinois Commerce Commission. Specifically examined historical O&M expenditure levels, service reliability statistics, maintenance programs, open and backlogged maintenance item levels over time, and resource levels applied and efficiency achieved in performing maintenance activities.
- Assisted in Liberty's compliance review of the monthly performance reports and associated incentive plan payment reports of Verizon-New Jersey for the NJ Board of Public Utilities.

Mr. DeLuca received a B.S. in Business Administration, Economics Minor, from Bucknell University.





### **C. Consulting Hours**

The charts below shows the hours that Liberty has budgeted for the fuel procurement audit of KU and LG&E. Liberty has created the budget for this project on the assumption that the time devoted to this project will be spent equally between KU and LG&E. Therefore, a budget allocating time by consultant and/or project task area between KU and LG&E has not been created.

#### **Consulting Hours for Fuel Procurement audit of KU and LG&E**

Consultant	Spangenberg	Koppelman	DeLuca	Total	Total	On-site
				Hours	Dollars	Hours
Rate	175	195	100			
On-Site Hours	148	50	40			238
Orientation	8	4		12	2180	
Task Area 1	20			20	3500	15
Task Area 2	24	8		32	5760	26
Task Area 3	60		24	84	12900	70
Task Area 4	8	48		56	10760	41
Task Area 5	60		48	108	15300	86
Draft Report	30	12		42	7590	
Final Report	20	8		28	5060	
<b>Total Hours</b>	<b>230</b>	<b>80</b>	<b>72</b>	<b>382</b>		<b>238</b>
<b>Total Dollars</b>	<b>40250</b>	<b>15600</b>	<b>7200</b>		<b>63050</b>	

- 1 = Fuels Planning
- 2 = Organization, Staffing & Controls
- 3 = Fuel Acquisition
- 4 = Affiliate Purchases
- 5 = Supply Management



## **D. Expert Testimony**

Liberty will provide expert testimony, as necessary, to support the findings and conclusions of its audit. The Project Manager has the project role and the demonstrated competence and skills to sponsor testimony on the study as a whole. Furthermore, the two lead consultants on the team are senior consultants in their areas of expertise. Each can testify to matters within his responsibility on the projects. Further, in many cases, hypotheses and final conclusions will result from group analysis sessions, thus positioning each team member to take sufficient responsibility to support broader (and perhaps all) areas of the study on the witness stand. Liberty gives this type of role to a number of senior team members in order to give the client an opportunity to select from a number of witnesses, depending on how the issues and facts that emerge fit the particular strengths of each team member.

Any testimony presented in conjunction with the work outlined in this proposal would be by any of the consultants on the project team, as required by the subject matter in question. The hourly rate of pay for any testimony would be at those rates listed in Section V of this proposal, Cost Analysis. Related costs of testimony would include normal travel and subsistence charges, at cost.

Should such expert testimony be required, other terms and conditions associated with such testimony would be as described in Section 9, Testimony, of the RFP, and also as outlined in Section II.D of this Proposal.



## **V. Cost Analysis**

The following table provides a delineation of the costs associated with the proposed fuel procurement audit of KU and LG&E. If expert testimony is required, Liberty will submit bills for time and expenses on the same basis as for the audit, and in accordance with Section 9, Testimony, of the RFP.

### **Fuel Procurement Audit Costs**

<b>Consultant</b>	<b>Title</b>	<b>Rate</b>	<b>Hours</b>	<b>Dollars</b>
Spangenberg	Project Manager	\$175	230	\$40,250
Koppelman	Executive Consultant	\$195	80	\$15,600
DeLuca	Senior Analyst	\$100	72	\$7,200
	<b>Sub-total</b>			\$63,050
	Travel and Subsistence		\$11,300	
	Copies		\$ 1,100	
	Communications		\$ 1,100	
	<b>Cost Sub-Total</b>		\$ 13,500	
	<b>Total Estimated Cost</b>			<b>\$76,550</b>

Liberty will perform this project for a total not-to-exceed cost of **\$76,500**.



## **VI. Experience**

### **A. An Overview of the Firm**

The Liberty Consulting Group is a management and technical consulting firm made up of professionals with experience in planning, operations, finance, accounting, engineering, construction, economics, regulation, law, human relations, and general management. Liberty provides consulting services to senior managers and executives in business, government, and the legal profession. Liberty's experience and demonstrated consulting capability span a wide range of industry, corporate, project, and plant management environments. The primary focus of Liberty's consulting practice has been the energy and public utility industries. In the utility sector, Liberty has worked in the electric, gas, and telecommunications businesses. The firm's utility industry practice is balanced between assignments for utilities and the public utility commissions that regulate them. Liberty maintains its headquarters in Quentin, Pennsylvania, and several other smaller offices.

Liberty has provided a wide range of planning, technical, analytical, and problem-solving services to organizations confronted by changing or uncertain economic, business, technical and regulatory environments. The firm has established itself as a dependable source of high quality, cost-effective and timely assistance for entities in the utility, energy, and legal businesses. Liberty has a track record of providing distinct, practical, and valuable assistance to its clients. Moreover, Liberty has a reputation for integrity and professionalism. Liberty responds to challenging requests rapidly and effectively, producing competent analyses, providing useful advice, and developing credible, professional work products.

Some of the services that Liberty has provided include:

- Comprehensive management and operations audits of public utilities.
- Focused fuel management audits of public utilities.
- Advice and recommendations for improving fuel procurement practices and performance.
- Auditing of utility affiliate transactions and costs.
- Independent studies, economic analyses, diagnostics, and assessments of management performance.
- Expert witness testimony in administrative proceedings and civil disputes.
- Assistance in achieving measurable improvements in safety, reliability, and cost-effectiveness at operating power plants.
- Evaluation of the effectiveness of quality assurance programs in helping to achieve goals and objectives.



- Advice and recommendations for improving cost and schedule monitoring systems used in managing power plant outages.

The following summarizes Liberty's recent consulting engagements on topics relevant to this proposed project:

- Management and process audit of Kentucky's five major LDCs for the Kentucky Public Service Commission.
- Management and operations audit of East Kentucky Power Cooperative for the Kentucky Public Service Commission.
- Seven separate focused coal fuels audits of the fuel purchasing policies, procurement models, and fuel management practices of Ohio utilities for the Public Utilities Commission of Ohio (*PUCO*), including Cleveland Electric Illuminating, Toledo Edison, Ohio Edison, Monongahela Power, Cincinnati Gas & Electric Company, Ohio Power, and Columbus Southern Power.
- Fuels management audit as part of Liberty's management and financial audit of the management and operations of the coal burning utility of Public Service Company of New Hampshire, for the New Hampshire Public Utilities Commission.
- Review of the fuel planning, acquisition, management, transportation and disposal as part of Liberty's comprehensive management audit of the coal burning utility West Penn Power Company for the Pennsylvania Public Utility Commission.
- Process-improvement project for Alabama Electric Cooperative, Inc. A significant part of this project related to coal fuel management policies, practices and procedures.
- Preparation of a comprehensive set of fuel-management policies and procedures for the Fuel Department of Potomac Electric Power Company.
- Fuel-management/performance audit of Vectren Energy Delivery of Ohio for the Public Utilities Commission of Ohio.
- Fuel-management/performance audit of East Ohio Gas Company for the Public Utilities Commission of Ohio.
- Audits of the competitive service offerings of New Jersey's four electric distribution companies for the New Jersey Board of Public Utilities. Primary area of work was to assure that there is no form of cross-subsidization of competitive services by utility operations or affiliates with which they are associated.
- Financial audit of the operations of Verizon New Hampshire for the New Hampshire Public Utilities Commission, including any services provided by affiliates, and the allocation of



costs between regulated and non-regulated activities, including investigating all management services contracts and affiliate relationships to ensure a fair allocation of cost-sharing.

- Comprehensive management and affiliate-relations audit of Bell Atlantic-Pennsylvania and BA-DC for their respective commissions.
- Management audit of the affiliate transactions of New York Telephone Company (NYT) for the New York Public Service Commission (NYPSC).
- Management audit for the Maryland Public Service Commission (MPSC) of the affiliate interests of C&P Telephone of Maryland.

## **B. Liberty's Staffing Philosophy**

Liberty's professional consulting staff is the key to the high-quality, cost-effective services that the firm has consistently delivered. Liberty considers the fundamental key to consulting success to be the people on the job. Liberty has assembled a core group of senior personnel who have many times demonstrated their competence and abilities as management consultants. Liberty's senior personnel, the firm's principal assets, have substantial utility management, consulting, and management auditing experience. Liberty's consulting teams offer leaders with significant experience in running diagnostic evaluations and audits of utility management and operations. Liberty's consultants bring significant expertise in their functional areas. They have applied their experience in management consulting to:

power plant operations	system planning	capital program planning
demand-side management	fuels management	fuel procedures
work force management systems	financial planning	depreciation
customer service	energy supply	division operations
organizational effectiveness	engineering management	cost of capital
staffing effectiveness	construction management	utility diversification
cost monitoring systems	operations analysis	change management
performance measurement	information systems	quality management
productivity improvement	marketing resources	affiliate transactions
human resources	administrative and support functions	finance and accounting
compensation and benefits	fleet and facility management	performance management
Clean Air Act planning	affirmative action	maintenance practices

## **C. Liberty's Management Audit Services Practice**

Liberty has made a significant commitment to the utility management audit field. The firm's steadily growing list of work assignments demonstrates its strong capabilities. Liberty has performed or is performing both general and focused management audits of 27 utilities for 13 public service commissions. These assignments have included prospective and retrospective (*prudence*) reviews.



Liberty's combination of utility management knowledge, regulatory experience, balanced utility/commission practice, and strong commission auditing background sets Liberty's work apart from that typical of classic management audits. It reflects the perspective of a strong management team with the know-how to conduct a formal review of complex operations. Liberty's distinctive ability permits it to get to the heart of issues promptly. The firm's senior consultants have significant experience as managers in the areas they are assigned to review. Liberty's skills and experience translate directly into work products that (a) deal with the right issues, (b) provide concise recommendations with clear objectives, (c) offer concrete, practicable action plans for implementation, and most important (d) are more likely to earn full acceptance by the company being reviewed.

A significant feature contributing to Liberty's success in this field has been the collaborative approach to this type of work which Liberty has pioneered and used successfully in a number of jurisdictions. Liberty's study methodology, which has been developed through the experience gained on over 27 audit assignments, and which is described in Section II, provides for early testing of possible suggestions for improvement. This approach demonstrates to the company that audit work is oriented toward constructive change, rather than after-the-fact criticism.



## **D. Project Summaries and References**

A list of recent Liberty clients and a summary of the work performed follows. Liberty's strong rate of growth in customer base demonstrates Liberty's ability to provide cost-effective, timely work products for its clients.

### **1. Electric Utility and Combination Company Fuel-Purchasing and Management-Audit Projects**

Client: Kentucky Public Service Commission (*auditing East Kentucky Power Cooperative, Inc.*)  
Client Contact: Charles Bright, Staff Project Officer

**Summary:** Liberty completed the 2001 management and operations audit of East Kentucky Power Cooperative, Inc. (*EKPC*). EKPC is a 2300 MW not-for-profit generation and transmission cooperative supplying electric power to 17 member distribution cooperatives and non-member utilities. The overall objective of this project was to perform a detailed, focused review of EKPC's efforts to prepare itself to effectively compete in deregulated energy markets and its efforts to enhance the quality and delivery of services offered to its member cooperatives and their customers.

Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40601  
(502) 564-3940

Client: Public Utilities Commission of Ohio (*auditing Columbus Southern Power Company and Ohio Power Company - both subsidiaries of AEP*)  
Client Contact: Raymond Strom, EFC Supervisor

**Summary:** Liberty performed the 1999 management and performance audit of fuel-related policies and practices of Columbus Southern Power Company and Ohio Power Company, both subsidiaries of American Electric Power Company, Inc. This audit sought to determine whether fuel-management practices and policies were reasonably designed to assure availability of sufficient fuel supplies of adequate quality to permit efficient operation of electric-generating stations at the least cost. Important to the audit were the coal related transactions with affiliated coal mining operations. The audit also sought to determine whether bulk-power system dispatch, economy sales, and emergency and reliability transfers were conducted to promote least-cost operation, and whether plans and activities for compliance with the Clean Air Act Amendments were reasonably designed and cost-effective. The audit resulted in a report used in the Public Utilities Commission of Ohio's EFC hearing.

Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43215-3793  
(614) 466-7707





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Client: Public Utilities Commission of Ohio (*auditing Cincinnati Gas & Electric Company*)  
Client Contact: Raymond Strom, EFC Supervisor

**Summary:** Liberty performed the 1999 management and performance audit of fuel-related policies and practices of Cincinnati Gas & Electric Company. This audit sought to determine whether fuel-management practices and policies were reasonably designed to assure availability of sufficient fuel supplies of adequate quality to permit efficient operation of electric-generating stations at the least cost. The audit also sought to determine whether bulk-power system dispatch, economy sales, and emergency and reliability transfers were conducted to promote least-cost operation, and whether plans and activities for compliance with the Clean Air Act Amendments were reasonably designed and cost-effective. The audit resulted in a report used in the Public Utilities Commission of Ohio's EFC hearing.

Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43266-0573  
(614) 466-7707

Client: Public Utilities Commission of Ohio (*auditing Monongahela Power Company*)  
Client Contact: Raymond Strom, EFC Supervisor

**Summary:** Liberty performed the 1997 and 1998 management and performance audits of fuel-related policies and practices of Monongahela Power Company. These audits seek to determine whether fuel-management practices and policies are reasonably designed to assure availability of sufficient fuel supplies of adequate quality to permit efficient operation of electric-generating stations at the least cost. The audits also seek to determine whether bulk-power system dispatch, economy sales, and emergency and reliability transfers are conducted to promote least-cost operation, and whether plans and activities for compliance with the Clean Air Act Amendments are reasonably designed and cost effective. The audits resulted in reports used in the Public Utilities Commission of Ohio's EFC hearings.

Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43266-0573  
(614) 466-7707

Client: Public Utilities Commission of Ohio (*auditing Ohio Edison Company*)  
Client Contact: Raymond Strom, EFC Supervisor

**Summary:** Liberty performed the 1995 management and performance audit of fuel-related policies and practices of Ohio Edison Company. This audit sought to determine whether fuel management practices and policies were reasonably designed to assure availability of sufficient fuel supplies of adequate quality to permit efficient operation of electric generating stations at the least cost. The audit sought to determine whether bulk power system dispatch, economy sales, and emergency and reliability transfers were conducted to promote least-cost operation and to determine whether plans and activities for Clean Air Act Amendments compliance were reasonably designed and cost effective. This audit resulted in a report used in the Public Utilities Commission of Ohio's EFC hearings.

Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43266-0573  
(614) 466-7707



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Client: Public Utilities Commission of Ohio (*auditing Cleveland Electric Illuminating Company and Toledo Edison Company*)  
Client Contact: Raymond Strom, EFC Supervisor

**Summary:** Liberty performed the 1993 and 1994 fall series management and performance audits of fuel related policies and practices of Cleveland Electric Illuminating and Toledo Edison. These audits seek to determine whether fuel management practices and policies are reasonably designed to assure the availability of sufficient fuel stocks of adequate quality efficiently and at least cost, and whether bulk power system dispatch, economy of sales and emergency and reliability transfers are conducted to promote least cost operation and to determine whether plans for Clean Air Act Amendments compliance are designed to capture the most reasonable and cost effective manner. These audits resulted in reports used in the Public Utilities Commission of Ohio's EFC hearings.

Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43266-0573  
(614) 466-7707

Client: Illinois Commerce Commission  
Client Contact: Roy Buxton

**Summary:** Liberty conducted a comprehensive investigation into the reliability of Commonwealth Edison's transmission and distribution systems. This year-long project involved all aspects of the design, planning, management, operation, and maintenance of T&D systems and components.

There are two follow-on projects to this original project. The first is an ongoing audit to assess ComEd's compliance with Liberty's recommendations from the first audit.

The second project is Liberty's audit of the transmission and distribution revenue requirements of ComEd with respect to the proper revenue requirements associated with ComEd's reliability programs, as analyzed in the first referenced project.

Illinois Commerce Commission  
527 E. Capitol Avenue  
Springfield, IL 62706  
(217) 785-5424

Client: New Hampshire Public Utilities Commission (NHPUC)  
Client Contact: Thomas B. Getz, Executive Director

**Summary:** Liberty performed a management and financial audit of Public Service Company of New Hampshire (*PSNH*) for the Commission. This audit was conducted during the course of the Commission's review of a rate filing by the company. A significant component of this investigation was an examination of the fuel management practices and procedures of the utility that burned a mix of coal, fuel oil and natural gas. The examination of such costs was of material assistance to the Commission in examining the projected profitability of the various business segments under a range of assumptions about the future regulatory and market environments in which those segments would operate.

Liberty assumed a principal role in negotiating outstanding restructuring issues and litigation between the NHPUC and PSNH, and is supporting the settlement in testimony before the Commission and the New Hampshire legislature.



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Liberty also provided on-going oversight of PSNH's preparations to sell its fossil-fueled and hydroelectric power plants through an auction, on behalf of the NHPUC. Monitoring activities included: meeting with PSNH and its investment banker and counsel to check on preparation progress, reviewing draft descriptive memoranda, providing comments to PSNH about terms and conditions of the proposed divestiture, and reporting on progress and issues to the NHPUC's senior Staff.

New Hampshire Public Utilities Commission  
8 Old Suncook Road  
Building No. 1  
Concord, New Hampshire 03301-7319  
(603) 271-2431

Client: Office of the State Comptroller (*auditing the New York Power Authority*)  
Client Contact: Gerald Tysiak, Audit Manager

**Summary:** Liberty conducted the 2001 management audit of New York Power Authority (NYPA), the nation's largest non-federal public-power organization in the United States. NYPA operates 10 generating facilities that produce one quarter of the electricity consumed in the state of New York.

The purpose of the audit was to evaluate the actions taken by NYPA in preparing to operate in a more competitive environment, as well as other selected aspects of NYPA operations. Liberty concluded that a number of actions need to be taken by NYPA management if NYPA is to be in a position to compete effectively in the newly deregulated power industry.

Office of the State Comptroller  
State of New York  
A. E. Smith State Office Building  
Albany, New York 12236  
(518) 473-6015

Client: The New York Public Service Commission (*auditing Central Hudson Gas & Electric*)  
Client Contact: James Lyons, Management Audit Section

**Summary:** Liberty performed a management and operations study of Central Hudson Gas & Electric, focusing on the designated areas of human resources, construction program planning, corporate budgeting, consumer services, computerized information systems, and economic development.

New York Public Service Commission  
Three Empire Plaza  
Albany, New York 12223  
(518) 486-2480

Client: New York Public Service Commission (*auditing New York State Electric & Gas Corp.*)  
Client Contact: Ron Pelinski, Management Audit Section

**Summary:** Liberty performed a comprehensive management and operations audit of all areas of the company affected by a major corporate reorganization. Additional, special focus areas included business unit restructuring, change management, performance planning and measurement, human resources, construction program planning, affiliate transactions, and central services for multiple utility and non-utility units.



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New York Public Service Commission  
State of New York  
Three Empire Plaza  
Albany, New York 12223  
(518) 486-2480

Client: Pennsylvania Public Utility Commission (*auditing West Penn Power Company*)  
Client Contact: Glenn Bartron, Bureau of Audits

**Summary:** Liberty performed a broadly-based management and operations audit of all areas of the company, including activities of the Allegheny Power System of which West Penn Power Company is a part. Additionally, special focus areas included affiliate costs, staffing and compensation, management information services, bulk power transactions, engineering and construction, transmission and distribution, Clean Air Act Amendment planning, and power interruptions.

Pennsylvania Public Utility Commission  
P.O. Box 3265  
Harrisburg, Pennsylvania 17120  
(717) 783-5000

Client: Illinois Commerce Commission (*auditing Illinois Power Company*)  
Client Contact: Michael Adams, Manager, Management Studies Division

**Summary:** Liberty conducted an independent review of Illinois Power Company's plans to comply with the Clean Air Act Amendments of 1990 by installing pollution control devices at the Baldwin Station. The investigation assessed the reasonableness of IPC's selected technology, plans and estimates to ensure that IPC provides reliable, efficient, utility service at the least-cost to customers. Liberty's work contributed to the utility's decision to alter its plans and change to a more cost effective approach.

Illinois Commerce Commission  
527 East Capital Avenue  
Springfield, Illinois 62794-9280  
(217) 782-0595

## **2. Gas Distribution Company Gas Purchasing and Management Audit Projects**

Client: The Kentucky Public Service Commission (*auditing 5 major Kentucky LDCs*)  
Client Contact: John A. Rogness III, Manager, Management Audit Branch

**Summary:** Liberty is in the process of completing a focused management and process audit of the gas supply and procurement functions of Kentucky's five major gas local distribution companies (collectively referred to as "LDCs") conducted for the Kentucky Public Service Commission (*Commission*). The LDCs include Columbia Gas of Kentucky, Inc. (*Columbia*), Delta Natural Gas Company, Inc. (*Delta*), Louisville Gas and Electric Company (*LG&E*), The Union Light, Heat, and Power Company (*ULH&P*), and Western Kentucky Gas Company (*Western*).

There were two equally important primary objectives in this audit. The first primary objective was to examine and evaluate each of the major Kentucky LDCs' gas planning, procurement, and supply management processes and strategies, and make recommendations on a going forward



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basis. The Commission was especially concerned about the increased volatility being experienced in wholesale gas markets and how that has been translated to retail markets. The focus of the audit was therefore on determining whether the LDCs' planning, procurement, and supply management organizations were designed to produce a gas supply portfolio which adequately addressed the issues of minimizing cost to retail customers, reasonably mitigating price volatility, and maintaining a reasonable level of reliability.

The second equally important objective was to provide training to select Commission Staff during the course of the audit in order to help Staff understand, review and evaluate LDC gas procurement, gas portfolio management, and gas supply management related issues in the future. This training included both "classroom" training, and also more hands-on type instruction.

Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40601  
(502) 564-3940

Client: Enbridge Midcoast Energy, Inc.  
Client Contact: Chris Kaitson, General Counsel

**Summary:** Liberty is currently providing an expert witness to this mid-continent pipeline system in an investigation by the Missouri Public Service Commission of the gas-purchasing practices of Midcoast's customer, Missouri Gas Energy (MGE). MGE was operating under an Experimental Gas Cost Incentive Mechanism (EGCIM) during the periods in question. Both the structure of the EGCIM and MGE's operations under it have been at issue in the proceedings.

Enbridge Midcoast Energy, Inc.  
1100 Louisiana Street, Suite 2900  
Houston, Texas 77002-5217  
(713) 821-2028

Client: Public Utilities Commission of Ohio (*auditing Vectren Energy Delivery of Ohio, Inc.*)  
Client Contact: Roger Sarver, GCR Supervisor

**Summary:** Liberty has just completed conducting the 2003 Gas Cost Recovery management/performance audit of Vectren Energy Delivery of Ohio, Inc. The focus areas included supply planning; organization, staffing and control; gas acquisition; transportation; balancing; regulatory management; response to changes in regulation (primarily new Customer Choice programs in Ohio); follow-up to issues raised in the last audit; and several company-specific issues that were important to the PUCO.

Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43215-3793  
(614) 466-7647

Client: Connecticut Department of Public Utility Control  
Client Contact: David G. Shapiro

**Summary:** Liberty is currently serving as an extension of the Department's staff in a rate case for Yankee Gas Services Company. Liberty is evaluating certain aspects of the company's proposals, through review of filed materials; preparation of interrogatories; conducting cross-examination of



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company and other witnesses; advising commissioners regarding the appropriate disposition of each aspect; and drafting parts of the Department's final order.

Connecticut Department of Public Utility Control  
Utilities Operations and Management Analysis Unit  
10 Franklin Square  
New Britain, Connecticut 06051  
(860) 827-2687

Client: Arkansas Public Service Commission (APSC), Arkansas Western Gas Company (AWG), and the Office of the Attorney General (AG) of the State of Arkansas. (*auditing AWG*)  
Client Contact: Donna Gray, Ricky Gunter, and Shawn McMurray

**Summary:** Liberty conducted an independent audit of AWG for the APSC, AWG, and the AG. The areas of inquiry were cost allocation, executive compensation, and the company's staffing and allocation of labor costs to and from affiliated companies.

Ms. Donna Gray  
Director, Financial Analysis  
Arkansas Public Service Commission  
1000 Center Street  
Little Rock, AR 72201  
(501) 682-5720

Mr. Ricky Gunter  
Director, Rates and Regulation  
Arkansas Western Gas Company  
1083 Sain Street  
P.O. Box 1408  
Fayetteville, AR 72702-1408  
(501) 582-8482

Mr. Shawn McMurray  
Senior Assistant Attorney General  
200 Tower Building  
323 Center Street  
Little Rock, AR 72201  
(501) 682-1053

Client: Public Utilities Commission of Ohio (*auditing The East Ohio Gas Company*)  
Client Contact: Roger Sarver, GCR Supervisor

**Summary:** Liberty conducted the 1999 Gas Cost Recovery management/performance audit of The East Ohio Gas Company, which is one of four local-distribution operating units of Consolidated Natural Gas Company. The focus areas included supply planning; organization, staffing and control; gas acquisition; transportation; balancing; regulatory management; response to changes in regulation (primarily new Customer Choice programs in Ohio); follow-up to issues raised in the last audit; and several company-specific issues that were important to the PUCO.

Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43215-3793  
(614) 466-7647



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Client: Wyoming Public Service Commission (*auditing K N Energy*)  
Client Contact: Dave Mosier

**Summary:** Liberty performed an evaluation of gas supply operations at K N Energy, which prior to FERC Order 636 had served as an integrated supply system stretching from Wyoming and Colorado to Kansas. K N Energy had supplied the full range of vertically integrated gas supply functions, including production, gathering, transmission, marketing, sales, and service. The breadth of its operations required it to deal with virtually every facet of operations affected by Order 636. Liberty assisted the Wyoming Commission in examining the implications of the company's post-Order 636 restructuring for the state's gas customers.

Wyoming Public Service Commission  
700 West 21st Street  
Cheyenne, Wyoming 82002  
(307) 777-5709

Client: Wyoming Public Service Commission (*auditing K N Energy*)  
Client Contact: Dave Mosier

**Summary:** Pursuant to a recommendation in the general review of gas supply operations, Liberty examined K N's restructuring of its gas supply portfolio in response to the FERC's Order 636. The focus of the review was the sharing of liabilities among K N's affiliated and unaffiliated wholesale customers. Liberty presented testimony regarding its findings in a proceeding to consider K N's proposals to unbundle its services and rates.

Wyoming Public Service Commission  
700 West 21st Street  
Cheyenne, Wyoming 82002  
(307) 777-5709

Client: Philadelphia Gas Commission  
Client Contact: G. Christian Kimmerle, Executive Director

**Summary:** Liberty made a presentation at a retreat the Commission sponsored. Participants included Commissioners, Staff, the executive management of the Philadelphia Gas Works, members of the City Council, and consumer advocates. The topic of the presentation was who will pay for social programs as the provision of utility services becomes competitive.

Philadelphia Gas Commission  
1600 Arch Street, 2nd Floor  
Philadelphia, PA 19103-2028  
(215) 686-0909

Client: Connecticut Department of Public Utility Control (*auditing Southern Connecticut Natural Gas Company*)  
Client Contact: David Shapiro

**Summary:** Liberty conducted a comprehensive diagnostic management audit of Southern Connecticut Natural Gas Company (*SCG*). The scope of the study also included the following special issues: policies and procedures in the area of credit and collections and the collection of uncollectibles; expenditures for coal-tar remediation; the internal-audit function; purchasing and contracting; SCG's new service center in Orange; SCG's customer-service center in Bridgeport,





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with particular attention on how complaints, terminations, inquiries, and billing disputes are handled; how SCG is preparing to unbundle its services; and gas-procurement operations, in light of increasing competition and FERC orders, including FERC Order 636.

Connecticut Department of Public Utility Control  
Utilities Operations and Management Analysis Unit  
10 Franklin Square  
New Britain, Connecticut 06051  
(860) 827-2687

Client: Tennessee Public Service Commission (*auditing United Cities Gas Company*)  
Client Contact: William H. Novak, Utility Rate Division Manager (Mr. Novak now works for Atlanta Gas Light, at 404-584-3399).

**Summary:** This comprehensive management audit covered the traditional functional areas of executive management and corporate planning, financial systems, system operations, customer services, human resources, and support functions, as well as specific issues, including: main extension policies; vehicle management; affiliate interests and leases; advertising, sales, and promotion expenses; continuing property records; procurement and vendor relations; comparative rates; and comparative salaries and wages. Liberty's review of financial systems included requirements planning, accounting, budget management and control, rates, internal auditing, cash management, taxes, forecasting, compensation and benefits, and construction management.

United Cities Gas Company accepted most of Liberty's 70 recommendations for improvements. The Tennessee Public Service Commission asked Liberty's consultants to testify on a few areas of disagreement as expert witnesses in a rate case conducted during 1996.

Tennessee Public Service Commission  
460 James Robertson Parkway  
Nashville, Tennessee 37243-0505  
(615) 741-2792

Client: Public Utilities Commission of Ohio (*auditing Eastern Natural Gas Company and Pike Natural Gas Company*)  
Client Contact: Adam Pyles

**Summary:** Liberty conducted the 1993 Gas Cost Recovery management/performance audits of Eastern Natural Gas and Pike Natural Gas, which are local distribution operating units of Clearfield Ohio Holdings, Inc. The focus areas included: supply planning, organization, staffing and control, gas acquisition, transportation, unaccounted-for gas, regulatory management, response to changes in regulation (primarily FERC Order 636), follow-up to issues raised in the last audit, and several company-specific issues that were important to the PUCO.

Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43266-0573  
(614) 466-8203





### **3. Other Audit Projects, Including Affiliate Relations**

Client: New Jersey Board of Public Utilities (*audits of the competitive-service offerings of New Jersey's four electric-distribution companies*)  
Client Contact: Pasquale Salvemini

**Summary:** Liberty performed audits of the competitive-service offerings of New Jersey's four electric-distribution companies to assure that the utilities were complying with the Board's Affiliate Relations, Fair Competition and Accounting Standards and Related Reporting Requirements, which implement New Jersey statutes that regulate utility-affiliate transactions and establish standards of conduct in providing competitive services to end users in New Jersey. The objectives of these audits are to assure that neither the utilities nor their related competitive business segments enjoy an unfair competitive advantage over their competitors, and that there is no form of cross-subsidization of competitive services by utility operations or affiliates with which they are associated.

New Jersey Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102  
(973) 648-2162

Client: Division of Consumer Advocacy, Department of Commerce and Consumer Affairs, State of Hawaii  
Client Contact: Charles W. Totto, Executive Director

**Summary:** Liberty evaluated a report prepared by a consultant to the Hawaii Public Utilities Commission on the relationship between Hawaiian Electric Industries (*HEI*), a diversified utility-holding company, and Hawaiian Electric Company (*HECO*), its principal subsidiary and operating electric utility. The impetus for the original study was public concern about the bankruptcy of an insurance subsidiary, the size of HEI's investment in non-utility investments, and the relatively high frequency of HECO's outages. The issues included in Liberty's assessment included corporate governance; affiliate transactions and cost allocations; credit support; and service reliability.

Division of Consumer Advocacy  
Department of Commerce and Consumer Affairs  
State of Hawaii  
250 South King Street  
Honolulu, Hawaii 96813  
(808) 586-2770

Client: Virginia State Corporation Commission (*examining relationships between Virginia Power Company and its parent company, Dominion Resources, Inc.*)  
Client Contact: James Douglas

**Summary:** Liberty examined corporate and financial relationships between Dominion Resources, Inc. (*DRI*) and its wholly-owned and largest subsidiary, Virginia Power Company, in the wake of an unprecedented public dispute between the two about control over public utility operations. This unique study, which Liberty performed for the State Corporation Commission, addressed all significant facets of the corporate governance, operating relationships, and affiliate-arrangement interrelationships between the two. Liberty specifically examined whether organization, staffing, planning, and authority for conducting activities gave Virginia Power adequate authority and capability to move forward in a changing electric utility environment. Among the authorities



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Liberty examined were the arrangements governing the operations of the Treasury and Cash Management departments.

Liberty performed its study at the same time that Virginia Power was undergoing a major strategic planning effort specifically designed to assist it in preparing to meet the challenges of a more competitive marketplace. This was another study that Liberty had to complete in only a few months because of the tremendous notoriety that the issues had attracted in the news media and state legislature.

Virginia State Corporation Commission  
Box 1197  
Richmond, Virginia 23209  
(804) 371-9422

Clients: Pennsylvania Public Utility Commission (*auditing Bell Atlantic - Pennsylvania*) and District of Columbia Public Service Commission (*auditing Bell Atlantic - District of Columbia*)  
Client Contacts: Kathy Swords, Bureau of Audits (PA) and Dwayne Boyd, Chief Auditor (D.C.)

**Summary:** Liberty performed a comprehensive management audit of the functional operations of Bell Atlantic - Pennsylvania and Bell Atlantic - District of Columbia, operating companies of Bell Atlantic, one of the largest telecommunications organizations in the world. The audit included in-depth reviews of accounting functions and finance, including cost accounting, managerial accounting, budgeting and control, internal auditing, rates, cash management, financial-requirements planning, financing methods, and asset transfers. Liberty's review of compensation and benefits was performed because the area was identified as a special area warranting focused review. The review also included an in-depth analysis of the relationships and transactions of Bell Atlantic - Pennsylvania and Bell Atlantic - District of Columbia and their Bell Atlantic affiliates.

Pennsylvania Public Utility Commission  
901 N. Seventh Street - Rear  
Harrisburg, Pennsylvania 17105-3265  
(717) 772-0315

Public Service Commission of the District of Columbia  
450 5th Street, N.W.  
Washington, D.C. 20001  
(202) 626-5100

Client: Maryland Public Service Commission (*auditing Baltimore Gas & Electric Company*)  
Client Contacts: Allen Freifeld and Ronald Alper

**Summary:** Liberty performed for the Maryland Public Service Commission an extensive review of management and the productive capacity of Baltimore Gas & Electric Company's (BG&E) Calvert Cliffs Nuclear Power Plant. The focus of the study concerns issues and events pertinent to extended outages at both units of Calvert Cliffs. Testimony has been filed in a BG&E fuel rate adjustment proceeding.

Maryland Public Service Commission  
6 St. Paul Center  
Baltimore, Maryland 21202  
(410) 767-8000



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Client: New Jersey Board of Regulatory Commissioners (*auditing Public Service Electric & Gas Company*)  
Client Contact: Walter P. Szymanski, Director, Division of Audits

**Summary:** Liberty performed a focused evaluation of The Public Service Enterprise Group (PSEG) and its subsidiaries, which include, among others, Public Service Electric & Gas Company, one of the largest combination electricity and natural-gas utilities in the United States. The scope included a review of the management of resources, cash, and property of each company and their impacts on short- and long-term performance. The focus areas included documentation of the scope, nature, and controls on cost-allocation methods; prices of goods and services; and the financial, economic, and operating impacts of the holding-company structure and affiliates on utility rates and service. The financial performance and business plans of the company's unregulated subsidiaries were evaluated. Liberty also reviewed the appropriateness of executive compensation packages.

Liberty conducted this audit in accordance with the U.S. General Accounting Office's audit standards. Liberty completed this assignment in only a few months, and within budget, despite the size and complexity of PSEG's operations and number of subsidiary companies. Liberty's client, the New Jersey Board of Regulatory Commissioners, accepted our recommendations.

New Jersey Board of Regulatory Commissioners  
Two Gateway Center  
Newark, New Jersey 07102  
(201) 648-2026

Client: New York Public Service Commission (*auditing New York Telephone Company*)  
Client Contact: Cheryl Callahan, Assistant Counsel

**Summary:** Liberty performed an analysis of the propriety and reasonableness of transactions between New York Telephone and its affiliates. This review involved the development of a comprehensive collection of factual information, determining the reasonableness of affiliate transactions and the management processes and performance associated with them, and quantifying the financial impact of transactions and performance on ratepayers.

New York Public Service Commission  
Three Empire State Plaza  
Albany, New York 12223  
(518) 474-7072

#### **4. Representative Projects for Private-Sector Clients**

Client: Powder River Energy Corporation  
Client Contact: Ron Harper (Ron Harper is now CEO at Basin Electric, @ 1-800-242-2372).

**Summary:** For this mid-sized Wyoming distribution coop, Liberty first acted as facilitator of a strategic planning process that included the coop's board and senior staff. Subsequently, Liberty assessed the utility's readiness for competition, and developed the coop's first ever strategic business plan for provision of new offerings of service to its members.

Powder River Energy Corporation  
221 Main Street  
P.O. Box 930  
Sundance, Wyoming 82729  
(307) 283-3531



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Client: Confidential  
Client Contact: Confidential

**Summary:** Liberty assisted a major southern public-power entity to examine several of its core business practices and processes with the objective of identifying methods for enhancing their competitiveness in a more-open electricity marketplace. This project involved structural, staffing, and methods issues that affect the client's competitiveness.

Client: The Dayton Power and Light Company  
Client Contact: Judy W. Lansaw, Group Vice President

**Summary:** Liberty assisted this combination gas- and electric-utility company with a review of its strategy for its gas business. The focus of this review was preparing for competition. Principal areas of concern were gas-main extension policy, gas rates and service offerings, financial performance of the gas business, the company's approach to gas marketing, and the potential for competitors to affect the company's electric business.

The Dayton Power and Light Company  
P. O. Box 8825  
Dayton, Ohio 45401  
(513) 259-7201

Client: Major Electric Cooperative  
Contact: Confidential

**Summary:** Liberty facilitated the development of a strategic plan for the client. Liberty performed a review of the operations of the member companies and the generating and transmission company to determine: missions, functions, environmental factors and other strategy drivers, strengths and weaknesses, opportunities and threats, and roles and responsibilities. Liberty then led a group of about 50 managers, directors, and other executives in writing the basic elements of the strategic plan.

Client: Potomac Electric Power Company  
Client Contacts: Thomas E. Graves, Manager, Fuels Procurement  
Susann D. Felton, Vice President - Materials

**Summary:** Liberty prepared a comprehensive set of fuel-management policies, practices, and procedures for the Fuel Department of Potomac Electric Power Company (*PEPCO*). This project was highly interactive with PEPCO personnel from all departments involved in the fuel management process. The project included identification of all significant fuel management processes and the subsequent development of policies, practices, and procedures to cover these processes. Major processes included requirements planning, procurement, transportation, utilization, contract administration and inventory management of coal, oil, and natural gas used as fuels for electric power generation.

Potomac Electric Power Company  
1900 Pennsylvania Avenue, N.W.  
Washington, D.C. 20068-0001  
(202) 872-3415



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Client: Belize Electricity Limited  
Client Contact: Lynn R. Young, CEO

**Summary:** Liberty undertook a re-engineering and organization study for Belize Electricity Limited, the electric utility that serves the country of Belize. Liberty designed a new organization structure for the company, which is now being put into place. Major areas of emphasis in the re-engineering include customer service (eliminating business offices, reducing theft of service, and improving installations of new services), distribution operations (work management), materials management (forecasting material needs,) economic dispatch and system control, and human-resources management (streamlining and automating transactions).

Belize Electricity Limited  
115 Barrack Road  
P. O. Box 327  
Belize City, Belize, C. A.  
(501) 2-33357

Client: East Kentucky Power Cooperative, Inc.  
Client Contact: Randy Dials, Vice President, Power Production

**Summary:** Liberty assisted the Fuels staff of this generation and transmission electric power cooperative with the development of a supply strategy for its first-ever gas-fired generating capacity. Gas requirements were estimated through generation simulations, a solicitation for supply offers was conducted, and responses to the solicitation were evaluated.

East Kentucky Power Cooperative, Inc.  
P. O. Box 707  
Winchester, Kentucky 40392-0707  
(606) 744-4812

Client: Houston Lighting & Power Company  
Client Contacts: C. Janie Mitcham (Houston Lighting & Power Company) and Scott Rozzell (Baker & Botts)

**Summary:** Liberty assisted Houston Lighting & Power by independently assessing the reasonableness of management actions at its two nuclear units at the South Texas Project (*STP*). *STP* had been under close NRC scrutiny because of perceived weaknesses in several plant programs that affected safety, and had experienced an extended two-unit outage in 1992-1994 to make equipment upgrades and program improvements. Liberty reviewed the reasonableness of HL&P's management of the plant from a viewpoint that considered all factors involved in decision making, and helped HL&P fairly portray its performance in regulatory proceedings affecting rates. Liberty's role included the evaluation of management effectiveness in the planning and budgeting processes, in plant operations, engineering support, maintenance, training, material control, and several other areas.

Houston Lighting & Power Company  
611 Walker Street  
Houston, TX 77002  
(713) 207-3700

Baker & Botts  
One Shell Plaza  
Houston, Texas 77002  
(713) 229-1502



## **VII. Initial Request for Documents**

Liberty requests that the following Company documents be made available as soon as possible subsequent to final selection of the consultant by the Commission for this audit of the Companies.

Items #1 through #15 on the list below should be readily available, and therefore submitted prior to the start of the audit. The balance of the items on the list should be provided within one week after the official audit kickoff date. Liberty has made every effort to streamline this data request list by utilizing data related to the fuel management process that will be available in the regular Company FAC filings. However, the data request is still extensive because Liberty considers it to be the Baseline Set of Data Requests. Time is of the essence on this project, and obtaining sufficient information at the beginning of the project will enable completion of the project by the required deadline. Liberty anticipates that some additional requests may be necessary for clarification purposes, but this initial Baseline Set of Data Requests represents the majority of Liberty's requests for information.

1. Please provide the Annual Reports for the Companies for the years 2001 and 2002.
2. Please provide the Companies' Fuel Adjustment Clause (FAC) filings and Orders for 2001, 2002 and 2003 year to date. In addition, please also provide responses of the Companies to all Interrogatories and Requests for Production of Documents associated with such FAC filings and any administrative or government hearings related to fuel in which the Companies participated during this period.
3. Please provide the KPSC Application and Order for the LG&E/KU merger.
4. Please provide the KPSC Application and Order for the LG&E/PowerGen merger.
5. Please provide the KPSC Application and Order for the PowerGen/E.ON merger.
6. Please provide the Companies' FERC Form 1 filings for 2001 and 2002.
7. Please provide the Companies' Form 10-K filings with the SEC for 2001 and 2002.
8. Please provide the LG&E Energy Business Plan for 2003. If the individual Departments responsible for fuel procurement within each of the Companies have their own Business Plans, please also provide these plans for the same period.
9. Please provide any policies and procedures for or related to fuel procurement.
10. Please provide the results of any internal audits related to fuel procurement conducted over the last three years.
11. Please provide the Companies' Cost Allocation Manual (CAM).



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12. If not in the CAM, please provide all policies, rules, procedures, practices, *etc.* that govern how prices are determined for the provision/transfer of non-tariffed goods and services between and among the utilities, the service company, and non-regulated subsidiaries.
13. If not in the CAM, please provide all policies, rules, procedures, practices, *etc.* that govern how prices are determined for the provision/transfer of assets between and among the utilities, the service company, and non-regulated subsidiaries.
14. Please provide an organization chart for the fuel procurement function of every LG&E Energy company, as well as a chart of the holding company that identifies the location of the fuel procurement function(s), including all of the regulated utilities and all non-regulated subsidiaries. Includes names of individuals on these charts.
15. Please provide specific policies or procedures related to ethical conduct of employees in the fuel procurement function, including procedures for dealing with affiliates.
16. Please provide a monthly listing for 2001 through 2003 to date of coal quantities (tons), qualities (Btu/lb of coal delivered and #SO<sub>2</sub>/MMBtu) and prices (F.O.B. Mine - \$/ton; transportation - \$/ton; and delivered - Cents/MMBtu) for coal delivered to each of the Companies' stations under each term coal contract and for all spot coal. This response should include summary data for each separate coal supplier, and for each station, for each of the months requested.
17. Please provide monthly summaries for 2001 through 2003 to date of natural gas and fuel oil delivered to the Companies' stations. Include station to which fuel was delivered, supplier identification, quantities and prices.
18. Please provide on-site access to copies of all coal contracts currently effective, including amendments, extensions and restatements.
19. Please provide a listing of all coal contract price redeterminations in 2001, 2002 and 2003 year to date along with substantiating backup calculations. Normal contract price escalations are not "redeterminations". A redetermination is defined as a coal contract price change as a result of contract renegotiations and/or contract price reopeners.
20. Please provide a listing of all Emission Credits requested by the Companies pursuant to provisions of current coal contracts.
21. Please provide a listing of all open or unresolved coal contract issues, along with a summary of the issue.
22. Please provide a listing of any coal contract force majeure provisions that were invoked by either party during the period 2001 through 2003 to date, along with a summary of the issue.





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23. Please provide a listing of any term coal contract terminations in 2001 through 2003 to date, accompanied by a statement as to why the contract was terminated.
24. Please provide a listing of any new term coal contracts entered into in 2001 through 2003 to date.
25. Please provide a listing of any renegotiations, amendments or extensions to term coal contracts entered into during 2001 through 2003 to date, along with summaries of the negotiations leading to the changes.
26. Please provide coal inventory levels in both tons and days, by month from 2001 to 2003 to date, for each of the Companies' stations. Include the assumptions for average daily burn rates, and show the unusable coal inventory at each location. Provide data on a unit-by-unit basis, if inventory is maintained on a unit basis.
27. Please provide a comparison of actual coal inventories, in tons of coal, with the target coal inventories, for each month of the period from 2001 through 2003 to date, for each of the Companies power stations. Provide data on a unit-by-unit basis, if inventory is maintained on a unit basis.
28. Please provide the coal burn forecast for each of the next ten years for each power station on a unit-by-unit basis, as already in the possession of the Companies.
29. Please provide the station by station summary of all coal pile physical inventory measurements from 2001 through 2003 to date, showing the physical inventory, the book inventory, the difference, and any adjustments made to the book inventory. Include a statement of the criteria governing adjustments to book inventory.
30. Please provide the comparison of forecast and actual coal burns by power station for each month of the period from 2001 through 2003 to date.
31. Please provide a listing of the tons of coal, and percentages of coal, for the Companies during each year from 2001 through 2003 to date that were delivered by truck, by rail, by belt, and by barge.
32. Please provide the forecasted delivered coal costs in Cents/MMBtu for each power station for each month from 2001 through 2003 to date, and for each year for the next 10 years.
33. Please provide the goals and objectives applicable or developed for 2003 concerning fuel procurement and management.
34. Please provide a summary description of fuels planning & cost forecasting processes and tools.





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35. Please provide the short and long range fuel plans applicable or developed for 2003, and all amendments or other changes to them.
36. Please provide a list of station characteristics at all stations for which fuel is purchased, including total station capability, emission standards, fuel specifications, pollution control devices, fuel delivery modes, and any significant operating constraints related to fuel.
37. Please provide a list and summary description of all instances during 2001 through 2003 to date of non-delivery or out-of-specification delivery of any fuel for which delivery commitments had been made.
38. Please provide job descriptions and resumes for all executives and managers involved in fuel procurement or management and job descriptions and resumes for first two levels of management beneath.
39. Please provide sample copies of all fuel procurement or management, and fuel transportation status or management reports used currently.
40. Please provide a description of the vendor qualification and evaluation process and criteria used to qualify fuel supply vendors, if not contained in existing fuel procurement procedures.
41. Please provide a summary description of the process for keeping vendor lists current, if not contained in existing fuel procurement procedures.
42. Please provide a listing by coal mine name and supplier, of all potential new coal supply facilities inspected by Fuel Procurement personnel, for each month during 2001 through 2003 to date.
43. Please provide the reports for all work performed by consultants or contractors advising on fuel procurement and management, and fuel transportation from 2001 through 2003 to date. If work is in progress, please provide a summary of work performed to date.
44. Please provide a list of any fuel or transportation related purchases from affiliates from 2001 through 2003 to date.
45. Please provide fuel inspection, sampling and weighing procedures.
46. Please provide a summary of coal scale calibration dates and repairs.
47. Please provide a summary of current ash storage and disposal methods for each station and anticipated changes during ensuing twelve months.
48. Please provide a summary of ash disposal quantities, costs and sales by type of ash, for each power station for 2001 and 2003 to date.



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49. Please provide descriptions of all citations or government authority contentions or investigations of environmental non-compliance from 2001 through 2003 to date related to both fuel use and waste storage or disposal.
50. Please provide on site-access to all current contracts for sale and disposal of fuel related ash products.
51. Please provide a description of plans for meeting and efforts to comply with CAAA Federal emission standards.
52. Please provide legal SO<sub>2</sub> emission limits for all of the Companies' generating units. Provide actual and planned SO<sub>2</sub> emissions from 2001 through 2003 to date. Provide a comparison of the actual SO<sub>2</sub> tons emitted from each unit with the monthly SO<sub>2</sub> ton limits for each unit. Provide separately the average emission rate for SO<sub>2</sub> (#/MMBtu) and NO<sub>x</sub> (#/MMBtu) for each unit for the same period.
53. Please provide the legal NO<sub>x</sub> emission limits for all of the Companies' generating units.
54. Please provide summary descriptions of planned and forced outages at each generating unit during the period from 2001 through 2003 to date, and the planned overall availability and outages at each unit for the ensuing twelve month period. Please include a summary of any unit retirements during this same period of time and for the ensuing twelve months.
55. Please provide documents that show the Companies' policies and procedures regarding joint procurements, generally, and joint procurement of fuels, specifically.
56. Please provide documents that show how, if at all, the Companies have changed their policies and procedures regarding joint solicitations and the sale of fuel between companies, since Case No. 2000-00497-B.



## **VIII. Other RFP Requirements**

### **A. Offices To Be Used For This Study**

Liberty will use the offices and computer, telephone and other communications equipment at its Denver, Colorado office as the primary study location. Support services will be provided by Liberty's main office in Quentin, Pennsylvania, and satellite office in Baltimore, Maryland.

Liberty's requirements for working space at the Companies' headquarters should consist of a private room of sufficient size to accommodate three consultants working at the same time, with sufficient desk or conference table space for each. This room should have phone lines for each consultant, with at least one line capable of direct outside access for Liberty's computers, and should contain one printer capable of being connected to Liberty's computers. This work room should also have sufficient storage space for filing of all of the responses to Liberty's data requests. In addition, Liberty should have convenient access to a photocopy machine and a FAX machine.

### **B. Potential Conflicts**

Section VI, Experience, of this Proposal contains a listing of all recent Liberty projects, a great number of which involved work for other utilities or regulatory agencies.

Neither Liberty nor any member of its study team has any financial interest in the firms being audited. To the best of Liberty's knowledge, none of the firm's clients, nor any of the subcontractor's clients, have any such interest either; however, Liberty is not privy to their financial holdings.

Liberty expressly commits to compliance with all of the requirements of Section 13, Conflicts of Interest, of the RFP.

Liberty's Conflict of Interest Policy is included as Appendix B to this Proposal.

### **C. Prior Experience**

Section 5.D of the RFP requires the submission of Liberty's most recently completed audit report with this proposal. Liberty's most recently submitted audit report was the management/performance audit of the gas purchasing practices of Vectren Energy Delivery of Ohio, Inc for the Public Utilities Commission of Ohio. In addition, Liberty has recently completed two separate projects for the Kentucky Public Service Commission that are relevant to this fuel purchasing audit of KU and LG&E. These are the reports on the Audit of Five Major Kentucky Gas Local Distribution Companies, submitted to the Kentucky Public Service Commission on November 15, 2002, and the management audit of East Kentucky Power Cooperative for the



Kentucky Public Service Commission submitted on October 24, 2001. Therefore, Liberty assumes that the Commission already has a copy of these additional two reports.

Finally, Liberty has included an audit report prepared for The Public Utilities Commission of Ohio on the fuel management audit of Columbus Southern Power and Ohio Power; this project, managed by Don Spangenberg, was based on a work plan very similar to the work plan proposed for this current audit of KU and LG&E, and the report itself contains issues similar to the issues of interest for this current audit.

A complete listing of Liberty's recent projects is included in Section VI, Experience, of this Proposal. This listing includes project descriptions, and name, address and phone number of the responsible official of the client company who may be contacted as a reference. A reference of particular significance is Raymond Strom of the Ohio Public Utilities Commission for whom Mr. Spangenberg has conducted a number of coal procurement audits of Ohio electric utilities. Mr. Strom (and others at the Ohio Commission) displayed continued confidence in Mr. Spangenberg through utilization of Mr. Spangenberg as the lead fuel auditor on multiple Ohio fuel audits since 1992. Mr. Strom may be reached at 614-466-7707.

#### **D. Further Information Contact**

For further information about this proposal, please contact:

##### **Donald T. Spangenberg, Jr., Western Region Manager**

The Liberty Consulting Group  
633 Fairfax Street  
Denver, Colorado 80220

(303)-333-5258 voice  
(303)-333-5268 fax  
(303)-619-4521 cell

E-mail: [Spangenberg@libertyconsultinggroup.com](mailto:Spangenberg@libertyconsultinggroup.com)

Mr. Spangenberg is authorized to negotiate in Liberty's behalf all matters concerning this proposal and the services it describes.



## **IX. Willingness to Work, Period of Offer and Signatures**

This proposal constitutes an offer to provide services of the stated scope, at the lesser of (a) actual costs for services at rates specified in this proposal plus reimbursable expenses or (b) the not-to-exceed price stated in Part V hereof. This proposal sets forth Liberty's willingness, and intention, to work with the Staff Project Officer and the Management Audit Branch in the manner described in the RFP and in this Proposal.

Liberty agrees to comply with the provisions of Sections 12, Contractual Arrangement, and Section 14, Conditions, of the RFP, and takes no exception to them. This offer is subject to the execution of a mutually acceptable agreement specifying such further terms and conditions considered necessary by Liberty and the Commission. Liberty agrees to negotiate such an agreement in good faith. All prices, terms and conditions set forth herein shall remain valid through the close of business on December 22, 2003.

Liberty indicates its agreement to be bound by the terms of this offer to serve by the signature of its duly authorized officer, which appears below.

Accepted for:

The Liberty Consulting Group

by:

John Antonuk  
President

This 19<sup>th</sup> day of September 2003.



# **Appendix A**

## **Resumes**



# Donald T. Spangenberg, Jr.

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## Areas of Specialization

Mr. Spangenberg has over 30 years of experience in the energy industry, with recent emphasis on preparation for competition and transition to a deregulated utility marketplace. Mr. Spangenberg is an experienced Project Manager on projects in the gas and electric utility industry. Mr. Spangenberg has a strong history of work in strategic-business planning and in fuels management, including supply evaluation, procurement, marketing, contract negotiation, and administration. He has led numerous fuel-management-system studies and has developed comprehensive fuel-procurement programs and contract-administration systems.

## Relevant Experience

### *Commission-Sponsored Studies*

Project Manager and Senior Consultant for Liberty's management/performance audit of Vectren Energy Delivery of Ohio for the Public Utilities Commission of Ohio (PUCO).

Project Manager and Senior Consultant for Liberty's natural gas procurement and supply management audit of Kentucky's five major local distribution companies for the Kentucky Public Service Commission.

Senior Consultant and Task Area leader for Liberty's audit of transmission and distribution revenue requirements of the Commonwealth Edison Company for the Illinois Commerce Commission.

Project Manager and Lead Consultant for Liberty's Management and Operations Audit of East Kentucky Power Cooperative for the Kentucky Public Service Commission.

Lead Consultant in the areas of preparation for competition in Liberty's Management and Operations Audit of the New York Power Authority for the New York State Office of the State Comptroller.

Project Manager and Lead Consultant for Liberty's review of the fuel purchasing policies, procurement models, and fuel management practices at Columbus Southern Power Company and Ohio Power Company (subsidiaries of American Electric Power Company) for the Public Utilities Commission of Ohio (PUCO).

Project Manager for Liberty's review of the natural gas purchasing policies, procurement models, and fuel management practices at East Ohio Gas Company for the Public Utilities Commission of Ohio (PUCO).

Project Manager and Lead Consultant for Liberty's review of the fuel-purchasing policies, procurement models, and fuel-management practices at Cincinnati Gas & Electric Company for the Public Utilities Commission of Ohio (PUCO).



Project Manager and Lead Consultant for Liberty's review of the fuel-purchasing policies, procurement models, and fuel-management practices at Monongahela Power Company for the Public Utilities Commission of Ohio. (*PUCO*).

Senior Consultant in the area of fuels management for Liberty's management and financial audit of the management and operations of Public Service Company of New Hampshire, for the New Hampshire Public Utilities Commission.

Lead Consultant for Liberty's review of the fuel-purchasing policies, procurement models, and fuel-management practices at Ohio Edison for the PUCO.

Lead Consultant for Liberty's audit of the natural-gas-purchasing and supply-management policies and practices of KN Energy, Inc. for the Wyoming Public Service Commission. Responsible for the reviews of gas-supply planning, and organization, staffing, and controls.

Lead Consultant for Liberty's review of the fuel-purchasing policies, procurement models, and fuel-management practices of the Centerior companies (Cleveland Electric Illuminating Company and Toledo Edison Company) for the PUCO.

Led Liberty's review of fuel planning, acquisition, management, transportation, and disposal as part of a comprehensive management audit of West Penn Power Company for the Pennsylvania Public Utility Commission.

#### *Utility Strategy*

Project Manager and Lead Consultant for Liberty's facilitation of strategic planning for Powder River Energy Corporation, a Wyoming electric-distribution cooperative. Project Manager for a second project aimed at improving operations and evaluating opportunities for diversification.

Project Manager and Lead Consultant for Liberty's facilitation of a meeting of participants in the Wyoming power-generation industry, for the Governor of Wyoming, with the objective of developing the basis for a strategic-energy plan for the State of Wyoming.

Project Manager and Lead Consultant for Liberty's power-marketing project for a western owner of power plants. This project included development of options for sale of electric power from the company's facilities, training in the operation of local and regional electric-power markets, and assistance with the evaluation and selection of the optimal market for this electric power.

Senior Consultant for Liberty's project for a western regional utility to explore options to ownership of its generating assets, because of expected changes in power-sales agreements. Liberty defined the components of the utility's current generation operations for comparison with alternative scenarios in the areas of power resources, ownership structures, operating entities, asset-securitization structures, and methods of gaining added operational leverage. Strategic options were structured, and the framework for comparative analysis was established to provide decision-making information for the utility's management and its board of directors.





Managed Liberty's project that assessed the effects of electric-industry restructuring on all of the members of the Colorado Independent Energy Association (CIEA). CIEA represents about 20 owners of small power-generation projects (qualifying facilities—QF—as defined under PURPA) who sell power to their local electric utility. The project involved detailed assessment of the current regional market for electric-power sales, evaluation of existing power-sales agreements, and analysis of the operations and economics of the QF facilities. The project included a review of national electric-industry initiatives and programs, and a formal presentation of findings and strategies to CIEA's members.

Lead Consultant for Liberty's study for Colorado Springs Utilities to assist this utility in addressing the organizational impacts associated with a transition to automated meter reading (AMR). Consideration of the issues of human-resource management in conjunction with technical changes was a large part of this work. Liberty's work included a survey of the experiences and lessons learned from 25 utilities who had already experienced the transition to AMR.

Senior Consultant for Liberty's assessment of the manpower-planning and workforce-management activities of the Gas & Electric Distribution unit of Public Service Company of Colorado. Specific elements of focus included activity tracking and timekeeping as it related to workforce-management processes. This project included interviews with selected managers and concluded with a workshop involving these same individuals to identify opportunities for process improvement and develop action plans in workforce management.

Senior Consultant for Liberty's project to review the natural-gas main-extension policy of Dayton Power & Light Company and to recommend revisions to this policy to permit the company to maintain its competitiveness after the restructuring of the natural-gas industry.

### *Fuels Management*

Project Manager and Lead Consultant for Liberty's process-improvement project for Alabama Electric Cooperative, Inc. This project included analysis of operations and development of recommendations for improvement of policies, practices, processes, and procedures in the areas of fuel management for electricity-generating stations, and operations and maintenance of the stations.

Lead Consultant for Liberty's preparation of a comprehensive set of fuel-management policies and procedures for the Fuel Department of Potomac Electric Power Company. This project included development of governing policies and the procedures for all aspects of procurement, transportation, utilization, contract administration, and inventory management of coal, oil, and natural gas as power-generation fuels.

Led a fuel procurement and management study for Missouri Public Service Company. Conducted assessment of the organizational requirements for fuel-procurement systems and procedures. Analyzed and recommended action in the following areas related to fuel management: organization, personnel, and job descriptions; fuel planning and budgeting; fuel procurement; selection of coal suppliers and carriers; coal-contracting strategy; coal sales; and reporting and information systems.



Served as Project Leader of two projects at Ohio Edison Company: an analysis of fuel-information flow and a fuel-supply organization study. Evaluated effectiveness of fuel-material flow and associated information flow, and made recommendations to improve efficiency. Assessed capabilities of personnel. Studied organization alternatives and recommended new organization structure.

Served as co-project leader of a retrospective analysis of key fuel-procurement actions and decisions of Central Illinois Public Service Company to determine whether prior actions and decisions were reasonable. Conclusions included evaluation of contractor performance, contract administration, fuel-procurement operations and procedures, and organizational issues.

Led a fuel-management systems study for Intermountain Power. Identified fuel-management needs of a utility that had not burned coal before. Developed conceptual design of suitable system. Conducted detailed interviews with all utility departments that had dealings with the fuel function, as well as with coal suppliers and railroads. Surveyed fuel management practices of 18 other utilities.

Led a coal-contract-escalation structure and evaluation project for Missouri Public Service Company. Recommended new concepts, correlated deficiencies in existing concepts, and structured new contract language.

### *Legal Industry*

Led Liberty's project at National Fuel Gas Distribution Corporation to develop the strategy and procedures for selection and management of outside legal counsel. This work included establishing the need for outside counsel, selection and contracting with outside counsel, and management and evaluation of the services of outside counsel.

Served as chief operating officer for two Colorado law firms with responsibility for all aspects of law-firm business management. Responsibilities included risk management, financial management, personnel management, strategic planning, marketing, and general business management and operation.

Management consultant to over 25 law firms on strategic planning, marketing, personnel management, risk management, and general business management and operation of the law firm.

## **Other Experience**

President, Management Insight – Formed this management consulting firm providing specialized consulting to users and suppliers in the energy industry. Assisted clients in fuel-supply evaluation and procurement, fuel management and contract preparation, negotiation, and administration. Also provided general management consulting, including strategic analysis, business planning, and development of marketing programs.

Vice President, Marketing, Northern Coal Company – Responsible for development and implementation of marketing program, including sales and customer relations, market research



and planning, and contract and traffic administration for \$20-million coal subsidiary of InterNorth. Restructured the marketing department. Negotiated and administered six coal supply agreements with customers in Japan and Korea, including first agreements made by Japanese utilities with a western U.S. coal supplier.

Fuel Supply Manager, Public Service Company of Colorado – Responsible for management of energy supplies required to fuel electricity-generating stations of a \$1 billion electric and gas utility. Principal evaluator of fuel supplies and negotiator and administrator of fuel contracts for \$175 million in annual fuel purchases.

General Electric, Nuclear Division. Nuclear Field Engineer, starting up BWRs in Germany (KRB) and India (Tarapur). Also worked as a nuclear fuel sales specialist, preparing, presenting, and negotiating contracts for sale of nuclear fuel and nuclear-fuel reprocessing services to electric utilities in the U.S.

## **Education**

M.B.A., Stanford University

B.S.E., *cum laude*, Chemical Engineering, Princeton University

## **Publications and Presentations**

Taught numerous courses in the Colorado Continuing Legal Education program on business management and marketing of law firms. Representative course titles included: Building Your Trial Practice, Developing and Marketing Your Practice, Business Planning for Law Firms, The Competitive Lawyer, and Effective Client Development Strategies.

Wrote numerous articles for *The Colorado Lawyer*. Representative article titles included: “The Business Management Approach To Avoiding Legal Malpractice Claims,” “The Attorney’s Professional Liability Insurance Alternative,” and “Good Business Management Decreases Malpractice Exposure.”

Certified Instructor at the National Legal Resource Center. Primary course was entitled Marketing and Client Development.



# Lawrence N. Koppelman

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## Areas of Specialization

Management and operations audits; affiliate relations; regulatory policy; provision of centralized services; customer service; utility-field operations; human resources and manpower planning; and organization planning and practices.

## Relevant Experience

### Commission-Sponsored Management Audits

#### *Electric*

Lead Consultant on a management and operations audit of East Kentucky Power Cooperative, Inc. for the Kentucky Public Service Commission in the areas of member services, information technology, human resources, corporate-support services, and marketing.

Lead Consultant in Liberty's audits of the competitive service offerings of New Jersey's four electric distribution companies for the New Jersey Board of Public Utilities. Primary area of work was to assure that there is no form of cross-subsidization of competitive services by utility operations or affiliates with which they are associated.

Consultant in Liberty's audit of the transmission and distribution revenue requirements of Commonwealth Edison Company for the Illinois Commerce Commission, with focus on affiliate relations.

Lead Consultant in the areas of preparation for competition in Liberty's Management and Operations Audit of the New York Power Authority for the New York State Office of the State Comptroller.

Team Leader in monitoring Public Service Company of New Hampshire's (*PSNH*) divestiture of its power plants, for the New Hampshire Public Utilities Commission (*NHPUC*). Also, Lead Consultant in on-going restructuring and rate-case support to the NHPUC's Staff.

Project Manager in Liberty's support to the New Hampshire Governor's Office of Energy and Community Services in the case before the NHPUC

Team Leader of a comprehensive management audit of PSNH for the NHPUC, responsible for the reviews of organization and executive management, corporate planning, customer service, personnel and labor relations, support services, marketing and sales, and workforce consolidation.

Lead Consultant in a management audit of the Seabrook nuclear-power-plant project for the Connecticut Department of Public Utility Control (DPUC). Responsible for analysis of the roles of PSNH, Northeast Utilities, and United Illuminating in financing their ownership interests in the project and how each company managed its involvement in the project. Areas of



investigation included financial planning, financing, and oversight by senior management and boards of directors.

Project Manager for an audit ordered by the Public Utilities Commission of Ohio (PUCO) of the fuel procurement and utilization practices of the Monongahela Power Company subsidiary of Allegheny Power System. The audit covered fuels purchasing, system dispatch and purchased power, and power-plant performance.

Consultant in an audit for the PUCO of the fuel procurement and utilization practices of Toledo Edison Company.

Consultant in an audit for the PUCO of the fuel procurement and utilization practices of Cleveland Electric Illuminating Company.

Lead Consultant in a management audit of Nevada Power Company for the Nevada PSC. Responsible for the review of purchasing and bid practices. Also responsible for reviewing the customer-service organization, and recommending ways to reduce billing and service problems.

Project Manager on a study for the Consumer Advocate Division of the West Virginia PSC on the economic-dispatch method of American Electric Power Company.

#### *Combination Companies*

Project Manager for a NYPSC-ordered management audit by Liberty of Central Hudson Gas & Electric Corporation. Focus areas in this collaborative study included human-resource planning, management development, EEO/AA, construction-program planning, budgeting, consumer services, information systems, and economic development.

Lead Consultant responsible for reviewing compensation, benefits, risk management, labor relations, the role of the board of directors, pension-fund management, cash management, and financial planning and financial structure in a management audit of Consolidated Edison for the NYPSC.

#### *Telephone*

Lead Consultant in Liberty's management audit of GTE South - Kentucky for the Kentucky Public Service Commission, responsible for the review of the human resources and compensation areas.

Lead consultant in the comprehensive financial review of Verizon New Jersey, under the Plan for Alternative Regulation, for the New Jersey Board of Public Utilities, responsible for the review of merger costs and savings.

Project manager for Liberty's financial audit of the operations of Verizon New Hampshire for the New Hampshire Public Utilities Commission, including any services provided by affiliates, and the allocation of costs between regulated and non-regulated activities, including investigating all management services contracts and affiliate relationships to ensure a fair



allocation of cost-sharing. This audit was conducted in the context of the company and Commission considering a change from traditional ratemaking.

Team Leader for Liberty's comprehensive management and affiliate-relations audit of Bell Atlantic-Pennsylvania and BA-DC for their respective commissions. Managed or performed the reviews of customer service, pay telephones, billing and collection, operator services, human resources, compensation and benefits, labor relations, EEO/AA, directory publishing, and information systems.

Team Leader in Liberty's retrospective management audit of the affiliate transactions of New York Telephone Company (NYT) for the New York Public Service Commission (NYPSC). Responsible for analysis of affiliates involved in marketing and sales, real estate, finance, and leasing. Review topics included allocations, reasons for the existence of new affiliates, profitability of affiliates, and purchases and leases made by regulated companies of goods and services provided by non-regulated affiliates.

Team Leader in a management audit for the Maryland Public Service Commission (MPSC) of the affiliate interests of C&P Telephone of Maryland, responsible for analysis of the provision of centralized services to the company. Studied re-organizations and changes in governance of Bell Atlantic's centralized-services organizations and reviewed C&P's monitoring of the performance of centralized-services providers. Witness in the rate case that considered Liberty's recommendations.

Team Leader in an audit for the NYPSC of Rochester Telephone Company. Performed investigation in human resources, including compensation, labor relations, and EEO/AA. Also reviewed work-management and workforce-planning systems used in central-office and outside-plant functions.

Lead Consultant in an audit of the maintenance costs of GTE's West Virginia division for the West Virginia PSC. Areas covered included division organization, workforce management and manpower planning, labor relations and wages, compensation, and preventive-maintenance practices.

Lead Consultant in a Stage II engagement at NYT for the NYPSC that resulted from a focused review of the company's work-management and manpower-planning practices. Monitored implementation of recommendations for improvements to the corporate manpower-planning model.

Consultant in a focused management audit of NYT for the NYPSC. Responsible for review of methods used in determining workforce size and work-management methods, in: centralized repair-service-attendant bureau, outside-plant construction, installation and maintenance, loop assignment, and cable maintenance.

Consultant in a management audit of Bell of Pennsylvania for the Pennsylvania Public Utility Commission. Responsible for reviewing the training and development, and medical functions.



Lead Consultant in Liberty's management audit of Bell Atlantic-District of Columbia's (BA-DC) charges for lobbying expenses, performed for the District of Columbia Public Service Commission.

*Natural Gas*

Project Manager for Liberty's focused affiliate-costs management audit of Arkansas Western Gas Company (AWG) for the Arkansas Public Service Commission, AWG, and the Office of the Attorney General of the State of Arkansas.

Project Manager for Liberty's comprehensive management audit of Southern Connecticut Gas Company for the DPUC. Also responsible for the review of human resources and customer services.

Project Manager for Liberty's comprehensive management audit of Connecticut Natural Gas Company for the DPUC. Also responsible for the review of human resources and customer services.

Team Leader in Liberty's comprehensive management audit of Yankee Gas Services Company for the DPUC. Responsible for review in the areas of customer services and support services.

Team Leader in Liberty's management audit of United Cities Gas Company for the Tennessee PSC. Responsible for review of human resources, customer services, comparative administrative and general expenses, and support functions, including management information systems and purchasing.

*Utility-Industry Studies*

Consultant on Liberty's project supporting BEC Energy, an electric-utility holding company whose participation in a new venture became subject to regulatory scrutiny. Contributed to an issues paper and prepared an analysis of testimony.

Project Manager of Liberty's re-engineering and organization study for Belize Electricity Limited, the electric utility that serves the country of Belize. Major areas of emphasis included customer service, distribution operations, and human-resources management.

Lead Consultant for the review of cost and expense benchmarking in Liberty's engagement for Dayton Power & Light Company. The purpose of the engagement was to develop and assist in the implementation of a gas-marketing strategy and specific marketing plans.

Project Manager of a study for Brooklyn Union Gas of its organization and practices in gas procurement and gas dispatching. Study results included an evaluation of the effectiveness of the function, recommendations on the preparation of policies and procedures, re-organization and staffing changes to the department, and changes in its responsibilities.





Project Manager of cost-reduction study in human-resources operations for General Public Utilities (GPU). Study focused on the training organization, benefits management, the use of centralized services, and labor-relations management in all five GPU companies.

Project Manager on a cost-reduction study in transmission and distribution operations for GPU. Focus areas included the dispatch organization, division organization, engineering organization and staffing levels, and several aspects of work practices.

## **Other Experience**

Managing Associate for Theodore Barry & Associates (TB&A), a management-consulting firm specializing in the utility industries. Director of Marketing for the Advanced Fuels Technology division of Gulf & Western Industries, Inc. Senior Staff for business development for MCI Communications Corporation. Associate for Resource Planning Associates, Inc., a management-consulting firm that focused on natural-resource issues.

## **Education**

S.M., management, The Sloan School of Management, Massachusetts Institute of Technology  
B.A. and M.A., natural resource economics, The Johns Hopkins University





# Steven C. DeLuca

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## Areas of Specialization

Focused experience in the utility industry including project management, regulatory policy, regulatory filings, utility industry research and data analysis, computer applications, and business planning.

## Relevant Experience

Assistant Project Manager on Liberty's focused audit of NUI Corporation and its regulated utility affiliates. Assisted in the corporate governance, affiliate relationships, and executive compensation examinations as they pertain to specific regulatory standards in order to determine regulatory compliance.

Consultant on Liberty's audit of customer communications issues on audits (for the New Jersey Board of Public Utilities) of New Jersey's four major electric companies. Assisted on analysis of the competitive services for Public Service Gas & Electric (PSE&G) and Atlantic City Electric (ACE). Specifically responsible for the examination of PSE&G's Appliance Service Business to determine compliance with the New Jersey *Energy Competition Standards*.

Principal analyst supporting activities designed to examine ComEd maintenance practices in Liberty's work for the Illinois Commerce Commission. Specifically examined historical O&M expenditure levels, service reliability statistics, maintenance programs, open and backlogged maintenance item levels over time, and resource levels applied and efficiency achieved in performing maintenance activities.

Assisted in Liberty's compliance review of the monthly performance reports and associated incentive plan payment reports of Verizon-New Jersey for the NJ Board of Public Utilities.

## Other Experience

Previously, a national account manager and founding employee at privately-held e-commerce solutions firm. Responsibilities included development of company business plan, design and implementation of sales and marketing processes, and client/supplier relationships.

## Education

B.S., Business Administration, Economics Minor, Bucknell University



## Appendix B

### Liberty's Conflict of Interest Policy

In order for Liberty to maintain its reputation of adhering to the highest standards of business ethics, each employee shall:

- avoid any arrangement, agreement, investment, employment with, or any ownership or other interest in, any business or other entity that is or intends to be in competition with Liberty or with any existing Liberty client or entity identified as a potential client in marketing program information known to the employee.
- not undertake or attempt to create any relationship, act, or interest that is or appears to be contrary to the best interests of Liberty or its clients or in any way may impair the employee's performance of duties or the exercise of independent judgment or action with respect to the interest of Liberty or its clients.
- refuse to accept or seek, directly or indirectly, from any client, contractor, subcontractor, or supplier of services (or its representative or agent) who is doing or may do business with Liberty or a client of Liberty (a) any commission, fee or compensation of any kind or (b) any gift, loan, advance, benefit, or service of any kind.

This policy shall apply to any item or interest whatever its value, except that the limitations of item (b) above shall not apply to meals or entertainment in the ordinary course of business, provided that the meal or entertainment is contemplated by the employee's assignment and provided that there is a legitimate business for such meal or entertainment.

Any item or interest of value contemplated by this policy shall be deemed, for the purposes hereof, to be that of the employee if it is owned or held beneficially by any member of the employee's immediate family, or any other person to whom the employee directs such item or interest of value for the purpose of avoiding the limitations of this policy.

#### **Procedure:**

All employees shall immediately disclose to a disinterested officer of Liberty:

- any relationship, ownership, interest, agreement, gift, loan, advance, benefit, service, or other thing that may affect or have the appearance of affecting the judgment of the employee or any other employee of Liberty.
- any attempt to create any of the relationships or transfers of any item or interest of value noted above, whether such attempt is by a Liberty employee, client, or entity with whom Liberty does or may do business.

Securities ownership by an employee or by any person affiliated with such employee under the terms of this policy may be construed as a conflict, and shall be reported to Liberty. This



requirement, where it involves any entity regarding which Liberty has been retained to provide management or other auditing services may be satisfied by providing the General Counsel with a list of the companies or other entities involved, provided that such a list is current as of the date such information is provided and is updated as changes occur.

Upon notice that such ownership constitutes a real or apparent conflict of interest, the employee shall undertake prompt and reasonable efforts to dispose of such securities. The General Counsel will maintain the confidentiality of any such list provided and will return it upon demand by the employee who submitted it.

