

Schumaker & Company



Electric Utility Industry Projects

ELECTRIC UTILITY ASSIGNMENTS

Consolidated Edison Company (CECONY & O&R)

New York City, New York

Avangrid (NYSEG & RG&E)

Orange, Connecticut

The New York State Public Service Commission (NYSPSC) has directed that an independent third-party consultant be retained to perform consulting services by assisting the New York State Department of Public Service (NYSDPS) to investigate the income tax accounting of certain New York State utilities, including Consolidated Edison Company of New York, Inc. (CECONY) and Orange and Rockland Utilities, Inc. (O&R), and New York State Electric & Gas Corporation (NYSEG) and Rochester Gas and Electric Corporation (RG&E).

Long Island Power Authority

Uniondale, NY

Assisted LIPA in the evaluation and review of the appropriateness and effectiveness of the safety initiatives of LIPA's Service Provider, PSEG Long Island, LLC (PSEG-LI), including its safety standards and procedures. This assignment involved three consultants over roughly 538.5 hours during a 6-month effort, for a total project cost of approximately \$159,018.04.

Arizona Public Service Company

Phoenix, AZ

Assisted Arizona Corporation Commission (ACC) in the matter of a fuel and purchased power procurement audit of the Arizona Public Service Company (APS), which included an audit of APS fuel clause filings and APS' policies, practices, procedures, rules, accounting practices, and cost allocations, including reports, audits, analyses, and opinions of third party entities, agencies, and auditors who have reviewed relevant aspects of APS' business operations. Focus areas included: coal costs and plant operations, gas for electric power production, nuclear fuel expense, purchased power expense and sales for resale, fuel clause computations, and fuel clause related policies, procedures, rule, cost allocations and manuals. This assignment involved three consultants over roughly 352 hours during a 4-month effort, for a total project cost of approximately \$94,866.

Duke Energy Kentucky

Cincinnati, Ohio

Assisted Duke Energy Kentucky (DEK) with an affiliate management audit in response to the necessity of an affiliate management audit of DEK every two years as ordered by the Kentucky Public Service Commission (KPSC) in Case No. 2005-00228. In 2006, Cinergy Corp., the parent company of Union Light, Heat and Power Company, subsequently re-named Duke Energy Kentucky, merged with Duke Energy Corporation. As part of its approval of the merger, the KPSC established forty-six merger commitments in Case No. 2005-00228, of which three (3), specifically Commitments 11- proper accounting of costs, 12- maintaining appropriate cost allocation procedures and committing to third-party audits, and 13- protecting against cross-subsidization specifically related directly to this audit. Schumaker & Company consultants looked for economies, efficiencies, or improvements to benefit DEK and its ratepayers. This assignment involved five consultants over roughly 296 hours during an 8-month effort, for a total project cost of approximately \$63,574.

Duke Energy Indiana

Indianapolis, Indiana

Provided an affiliate standards audit of Duke Energy Indiana, Inc. (DEI) for the Indiana Office of Utility Consumer Counselor (OUCC). This audit was required by the approved Settlement Agreement in Cause No. 42873 (Settlement) concerning affiliate company transactions, including compliance with the affiliate standards approved in Cause No. 42873, such as the training and controls that DEI has in place to prevent affiliate cross-subsidization. Schumaker & Company consultants focused on key areas and associated deliverables while allowing for more in-depth analysis of those areas that held opportunity for improvements. The initial assignment reviewing the 2011 period involved five consultants during an 11-month effort, for a total project cost of approximately \$75,755. The extension for reviewing the 2013 time period had a total project cost of approximately \$68,769.



ELECTRIC UTILITY ASSIGNMENTS

City of Tacoma Department of Public Utilities, Light Division

Tacoma, Washington

Assisted the City of Tacoma, Department of Public Utilities, Light Division (dba Tacoma Power) with a comprehensive review and assessment of its Transmission and Distribution (T&D) management and operation practices.

Schumaker & Company applied an enterprise performance management approach that emphasized the relationship between service levels and costs. The mission of the enterprise was to provide good service at the lowest long-term total cost. Further, every enterprise management team had the responsibility to develop, implement and execute a performance management program that delivers measurable good service at the lowest long-term total cost. The Schumaker & Company approach evaluated the service and cost performances of Tacoma Power's T&D Section and recommended improvements in service levels as appropriate and cost reductions as practical. This assignment involved four consultants over roughly 688 hours for a total project cost of \$177,278.

Massachusetts Electric Company/Nantucket Electric Company d/b/a National Grid (National Grid), NSTAR Electric Company (NSTAR), and Western Massachusetts Electric Company (WMECo)

Boston, Massachusetts

Provided the Commonwealth of Massachusetts, Department of Public Utilities (DPU) staff on three DPU adjudications investigating the emergency preparation and restoration of service following storms by the electric distribution utilities in Massachusetts, specifically Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid (National Grid), NSTAR Electric Company (NSTAR), and Western Massachusetts Electric Company (WMECo). Our inquiry in these matters focused on the companies' compliance with the DPU's performance standards for emergency preparedness and restoration of service, including:

- ◆ Preparation for and management of the restoration efforts with respect to Tropical Storm Irene and/or the October 2011 Snowstorm
- ◆ Allocation of company resources in the affected communities
- ◆ Communications with state, municipal, and public safety officials and with the DPU
- ◆ Dissemination of timely information to the public
- ◆ Identification of company practices that require improvement, if any

This assignment involved two consultants over roughly 670 hours during a 7-month effort, for a total project cost of approximately \$170,921.

State of Maine Public Advocate

Augusta, Maine

Provided regulatory and litigation support to the Maine Public Advocate regarding Bangor Hydro-Electric Company's and Maine Public Service Company's request for exemptions and for reorganization approvals (Docket No. 2010-170). This assignment involved two consultants over roughly 106 hours for a total project cost of \$25,000.

State of Maine Public Advocate

Augusta, Maine

Provided regulatory and litigation support to the Maine Public Advocate regarding Central Maine Power Company's (CMP's) credit and collection policies and standard offer uncollectible balances (Docket No. 2010-327). The Maine Public Utilities Commission (MPUC) staff has made a preliminary determination that CMP's actions led to a significant increase in its uncollectible balances and that some of its actions were imprudent. Specifically, the Public Advocate required expert consulting services to assist his staff in 1) evaluating the questions presented by the MPUC's notice of investigation and the staff bench analysis in this proceeding; 2) evaluating CMP's response to a bench analysis filed on June 24, 2011; and 3) presenting evidence and recommendations before the MPUC and/or advice to the Public Advocate regarding these questions. This assignment involved two consultants over roughly 108 hours for a total project cost of \$25,000.

ELECTRIC UTILITY ASSIGNMENTS

Nova Scotia Power Incorporated

Halifax, Nova Scotia

Assisted Nova Scotia Power Incorporated (NSPI) in undertaking an audit to examine the solid fuel inventory management function and provide meaningful recommendations for improvement. The review addressed adherence to good utility practice and consistency with the policies and procedures governing fuel management as described in the NSPI Fuel Manual. The scope of the audit included testing the assertions of existence and valuation and an examination of access control for NSPI's coal inventory. The process audited spanned the receipt of the physical inventory through to financial reporting, with a particular focus on adjustments and/or discrepancies between the physical inventory and the inventory records. This assignment involved four consultants over roughly 336 hours for a total project cost of approximately \$79,960 (\$77,787 Cdn).

Michigan Public Service Commission, Regulated Energy Division

Lansing, Michigan



Assisted the Regulated Energy Division of the Michigan Public Service Commission by verifying that the requirements of Section 11, Public Act No. 286 of 2008 are being satisfied beginning with rate case orders issued after January 1, 2009 for each electric utility in the state, including Detroit Edison, Consumers Energy, Upper Peninsula Power Company, Wisconsin Electric Power Company, Alpena Power Company, Indiana Michigan Power, Northern States Power Company, and Wisconsin Public Service Corporation.

Regulated energy utilities file rate cases with the Commission for approval. The Commission issues an order after reviewing the testimony and exhibits of the utility, interveners and the Commission staff. Subsection (1) of Section 11 of PA 286 requires the Commission to phase in electric rates equal to the cost of providing service to each customer class over a period of five years from the effective date of this act unless an exception is met. Therefore, for each regulated electric utility with more than one million retail customers (Consumers Energy and Detroit Edison), the MPSC is phasing in electric rates equal to the cost of providing service to each customer class before October 2013. For each regulated electric utility with less than one million retail customers (all others in Michigan), as mentioned in Subsection (2) as an exception, the phase-in period for cost-of-service rates can exceed five years.

El Paso Electric Company

El Paso, Texas

Assisted the New Mexico Public Regulation Commission (NMPRC) staff in a prudence review and audit of the fuel and purchased power cost adjustment clause (fuel clause) and related documentation of the electric business operations of El Paso Electric Company (EPE), specifically to provide professional auditing and prudence review services of EPE's fuel and purchased power costs, fuel clause filings and related documentation for the period of January 1, 2010 through December 31, 2010. This review investigated whether EPE's calculation of the fuel clause was accurate and the costs included in the fuel clause included only allowed costs and EPE's current accounting and internal control policies, management practices, and operational procedures, as they pertain to EPE's administration of the fuel clause, were effective and met related requirements. This assignment involved seven consultants over roughly 1,448 hours for a total project cost of approximately \$309,126.

ELECTRIC UTILITY ASSIGNMENTS

Jersey Central Power & Light

Morristown, New Jersey

Assisted the New Jersey Board of Public Utilities in an audit of the affiliated transactions between Jersey Central Power and Light (JCP&L) and its affiliates, and a comprehensive management audit of JCP&L. Task areas included an examination of affiliate relationships and cost allocation methodologies, executive management and corporate governance, organization structure, human resources, strategic planning, finance, accounting and property records, cash management, procurement and purchasing of energy, distribution and operation management, extensions and upgrades to provide regulated services, clean energy, market conditions, contractor performance, customer service, external relations, support services, and a review of actions taken by JCP&L regarding prior audits. As part of the audit, Schumaker & Company reviewed and assessed affiliate cost allocation methodologies to determine accounting and allocation procedures for separating the costs of inter-company transactions. Analysis determined if current accounting and allocation procedures were equitable, fair, and did not favor certain affiliates over JCP&L and its ratepayers. Additionally, examination assessed the electric generation policies, distribution policies, and assignment strategies of JCP&L and its affiliates. This assignment involved nine consultants over roughly 2,944 hours for a total project cost of approximately \$594,720.

Dayton Power & Light Company

Dayton, Ohio

Provided fuel cost recovery rider audit co-sourcing assistance to Dayton Power and Light Company (DP&L) to prepare DP&L for its annual review and audit to take place in the first quarter of 2011 for calendar year 2010. Items covered in the scope of work included fuel prices, allocation between wholesale and retail, sharing of gains and losses, coal handling costs, environmental compliance, PJM-related charges, power plant performance, and utility industry perspective. This assignment involved five consultants over roughly 536 hours for a total project cost of approximately \$113,680.

State of Maine Public Advocate

Augusta, Maine

Provided regulatory and litigation support to the Maine Public Advocate in its intervention in a petition filed on March 18, 2010 at the Maine Public Utilities Commission by Bangor Hydro-Electric Power Company, Maine Public Service Company, Maine Electric Power Company, Inc., and Chester SVC Partnership requesting an approval of reorganization (35-A M.R.S.A. §§ 708 and 1103) financial provisions. Specifically, Schumaker & Company consultants were responsible for analyzing all pertinent data and presenting overall recommendations on the regulatory (including reliability) implications of the proposed merger. This assignment involved two consultants over roughly 104 hours for a total project cost of approximately \$25,560.

Duke Energy Ohio

Cincinnati, Ohio

Assisted the Public Utilities Commission of Ohio (PUCO) staff in a management/performance and financial audit of Duke's fuel and purchased power and system reliability tracker riders of Duke Energy Ohio, Inc. Specifically, conducted an audit of the company's fuel costs (including any renewable energy costs) plus an audit of system reliability costs. This audit addressed the management/performance and financial aspects of the recovery mechanism. It consisted of a three-year audit cycle (2009-2011) with a complete and thorough audit being conducted in each year of the audit cycle. The initial audit included the actual cost for Rider PTC-FPP for the months January 2009 through December 2009. This assignment involved seven consultants over roughly 760 hours during the first year, with reduced effort for the following two years, for a total project cost of approximately \$327,000.

ELECTRIC UTILITY ASSIGNMENTS

Public Service Company of New Mexico

Albuquerque, New Mexico

Assisted the New Mexico Public Regulation Commission (NMPRC) staff in a prudence review and audit of the fuel and purchased power cost adjustment clause (fuel clause) and related documentation of the electric business operations of Public Service Company of New Mexico (PNM). In specific, to provide professional auditing and prudence review services of PNM's fuel and purchased power costs, fuel clause filings and related documentation for the period of June 1, 2008 through June 30, 2009. This review provided documented evidence on the following:

- ◆ PNM's calculation of the fuel clause is accurate and the costs included in the fuel clause include only allowed costs
- ◆ PNM's current accounting and internal control policies, management practices, and operational procedures as they pertain to PNM's administration of the fuel clause are effective and meet related requirements

This assignment involved six consultants over roughly 1368 hours during a seven-month effort, for a total project cost of approximately \$341,869.

PECO Energy Company

Philadelphia, Pennsylvania

Assisted the Pennsylvania Public Utility Commission (PaPUC) staff in a stratified management and operations audit of PECO Energy Company. This audit consisted of three phases. The first involved a diagnostic review that assessed the condition of each functional area or business unit against evaluative criteria or expected business practice. While this review was primarily limited to determining if appropriate management controls, systems and processes are in place, it was of sufficient scope to identify significant problems requiring additional focused analysis. The second phase entailed an in-depth analysis of pre-identified areas or issues. These analyses were of sufficient depth to present specific recommendations for changes in combination with projected costs and potential dollar savings or other quantifiable benefits. The third phase constituted an in-depth, focused analysis of two issues (emergency response and GIS) resulting from the diagnostic review phase. This assignment involved ten consultants over roughly 4,064 hours during a 13-month effort for a total project cost of approximately \$843,112.

AEP/Kentucky

Hazard, Kentucky

Performed an assessment of the reliability of service within AEP/Kentucky's distribution system in its Hazard service territory (a forested mountainous terrain). This region has historically experienced a greater number of electric service interruptions than other AEP/Kentucky service areas, and additionally, these interruptions have tended to be of longer in duration. This assignment involved three consultants over roughly 700 hours during a six-month effort, for a total project cost of approximately \$145,000.

New Jersey Board of Public Utilities/Conectiv, GPU Energy, Public Service Electric & Gas, & Rockland Electric

Trenton, New Jersey

Assisted New Jersey Board of Public Utilities (BPU) staff in reviewing and monitoring implementation of recommendations that resulted from an investigation of the system reliability of New Jersey's electric utilities. Assisted by reviewing and investigating information supplied by the four utilities in connection with the implementation of selected recommendations as ordered by the Board. Worked closely with BPU staff to assist in fulfilling the Board's obligation to assure that, notwithstanding the changes occurring in the electric industry, customers are provided reliable, safe, and adequate service now and in the future. Particular emphasis was placed on activities to improve and/or maintain CAIDI and SAIDI indicators to/at acceptable levels. Issues regarding work force management and construction program planning were addressed. Additionally, performed assessments of each utility's system, specifically the distribution system planning and engineering practices, load flow analysis, transmission and substation maintenance practices and procedures, and adequacy of lightning protections. This assignment involved six consultants over roughly 900 hours of effort during a five-month effort, for a total project cost of approximately \$221,000.



ELECTRIC UTILITY ASSIGNMENTS

Illinois Commerce Commission

Springfield, Illinois

Designed a survey to measure customer satisfaction with electric service reliability and quality, clarity of billing, rates, and services. Provided Electric Service Customer Satisfaction Survey Rules to instruct electric service providers on how to administer the survey and how to understand, interpret, and present its results. Conducted workshops to train electric service providers on how to implement the customer satisfaction survey. This assignment involved five consultants over approximately 750 hours of effort during a 10-month period, for a total project cost of approximately \$130,000.

City of Sturgis

Sturgis, Michigan

Performed a management and operations review of various city departments, conducted a customer satisfaction and needs assessment, and developed a strategic plan. Addressed the changes occurring within the electric utility industry and the competitive threats felt by the electric operations department. The effort involved: (1) performing a competitive assessment and benchmarking; (2) surveying customer attitudes to identify issues that required addressing in the strategic plan; (3) conducting a management and operations review of the relevant city departments; and (4) assisting the electric utility in conducting a strategic planning session. This assignment involved seven consultants over approximately 620 hours of effort during a seven-month period, for a total project cost of approximately \$60,000. The strategic planning effort was undertaken subsequently in January.

Town of Middleborough Gas & Electric Department

Middleborough, Massachusetts

Performed a competitive assessment of the operations of this municipal gas and electric department. This assignment included a management review of all functional areas, benchmarking of major performance indicators in relation to other Massachusetts municipalities and the best practices of other public and investor-owned utilities. Two consultants spent about 300 hours over a four-month period. Subsequently Schumaker & Company has been providing strategic planning and information technology assessment and planning services to this organization. The costs of these projects totaled approximately \$150,000.

City of Coldwater, Board of Public Utilities

Coldwater, Michigan

Developed, performed, and analyzed the results of a customer survey (a follow-up to a survey two years earlier) to assess satisfaction with the city utility and other city services. Three consultants worked about 200 hours over three months for a total project cost of approximately \$25,000.

Kingsport Power Company

Kingsport, Tennessee

Performed a comprehensive management review of an American Electric Power (AEP) operating company for the Tennessee Regulatory Authority. The review included evaluations of customer service, electric operations, and many of the administrative, financial, and technology support activities provided by AEP Service Corporation. Examined the methods used by AEP Service Corporation and Appalachian Power Company (another AEP operating company) for billing for services provided to Kingsport Power Company. This project, representing \$96,400, involved five consultants over 700 hours of effort during a four-month period.

Michigan South Central Power Agency

Litchfield, Michigan

Developed and implemented a relationship development (key accounts) program aimed at the larger commercial and industrial customers. Developed an ongoing communication/public relations program for the agencies, councils, and member communities. This project involved four consultants over approximately 1,600 hours of effort during an 18-month period, totaling about \$130,000. Follow-up assignments were subsequently performed.

ELECTRIC UTILITY ASSIGNMENTS

A 1935 Public Utility Holding Company

Confidentiality Requested

Reviewed charges for services provided by a public utility holding company to its affiliates. The review was used to determine whether the services were reasonable, necessary, non-duplicative and calculated in compliance with appropriate allocation formulas. This four-month project involved five consultants and approximately 1,000 hours for a total cost of approximately \$150,000.

Michigan South Central Power Agency

Litchfield, Michigan

Assisted in developing a strategic plan for this power agency, owned by five Michigan municipalities: Coldwater, Clinton, Hillsdale, Marshall, and Union City. The plan addressed the changes within the electric utility industry as well as the competitive threats felt by the agency. Performed a competitive assessment and benchmarking of the power agency and surveyed customer attitudes (mail survey to residential and non-residential customers) to identify issues for the strategic plan. Four consultants spent about 600 hours over a 12-month period on these assignments for a project total of approximately \$50,000.

Pennsylvania Power & Light

Allentown, Pennsylvania

Performed a stratified management review, beginning with an initial diagnostic review of all functional areas within the Pennsylvania Power & Light (PP&L) organization for the Pennsylvania Public Utility Commission (PaPUC). This task was followed by in-depth investigation of 23 issues that were pre-identified by the PaPUC and PP&L. Such issues included affirmative action/EEO programs; salaries, wages, and benefits; staffing plans and levels; corporate-wide information technology; nuclear de-commissioning; power plant materials management; a competitive assessment of in-house construction; and maintenance work forces. Made 18 major recommendations were made, including the detailed steps necessary for bringing technology up to date. PP&L accepted 153 of 156 recommendations and within a month implemented 30. The utility expected to complete another 50 within six months. Total estimated savings and/or increased efficiency associated with our recommendations exceeded \$70 million (annually) and \$40 million (one time). This 17-month project involved over 20 consultants and 9,000 to 10,000 hours of effort, for a total project cost of approximately \$911,300.

Hillsdale Utilities Department

Hillsdale, Michigan

Team: Dennis Schumaker and Michael Taft

Developed a strategic plan that included a mission statement; identified the organization's strengths, weaknesses, opportunities, and threats; and formulated long-term goals and objectives. Two consultants spend roughly one month on this project and approximately 55 hours for a total cost of approximately \$4,375.

Central Maine Power Company

Augusta, Maine

Evaluated CMP's organizational structure and staffing, executive compensation, customer service operations, management efficiency, and cost controls. Our findings and conclusions were referenced when commissioners granted only 31% of \$83 million dollars requested. Savings we identified were credited for \$26 million of the reduction. Following the rate decision, CMP's Board approved an integrated cost-containment plan (with capital and operating budget reductions and a 42% cut in its quarterly dividend); the restructuring saved \$10 million in its first year. CMP emerged a stronger, more viable competitor, on a course to permanent improvement in all aspects of business management. This seven-month project involved seven consultants and about 2,500 hours of effort, for a total project cost of approximately \$242,400.

ELECTRIC UTILITY ASSIGNMENTS

Toledo Edison Company / Cleveland Electric Illuminating Company

Columbus, Ohio

For the Public Utilities Commission of Ohio, investigated the fuel procurement policies and procedures for fossil and nuclear fuels and provided testimony on the findings and conclusions.

Public Service Electric and Gas

Newark, New Jersey

Assisted in preparing a long-range strategic generation plan. Assessed PSE&G's computer information systems for generation planning and scenario analysis. Reviewed selected scenarios for political and qualitative considerations and prepared a comprehensive presentation for senior management. Two consultants spent approximately 2,000 hours of effort over 10 months.

City of Niles Utilities Department

Niles, Michigan

Performed a management and operations review and assisted in developing a long-term action plan. For this 55-person municipal department, we identified potential annual benefits approaching \$250,000. This three-month engagement involved four consultants and more than 250 hours of effort.

Arkansas Public Service Commission

Little Rock, Arkansas

Trained Arkansas Public Service Commission (APSC) members on how to monitor and control a management and operations review of Arkansas Power and Light Company and its parent organization, Entergy Corporation. This project included a written and oral review of the proposal and detailed work plan that was prepared by a team of outside consultants selected by APSC to perform the management review. Assisted the APSC in managing the project, which included quality control checks of the outside consultant project team and its results. This 11-month assignment involved three consultants and approximately 750 hours of effort, for a total project cost of approximately \$95,000.

West Texas Utilities Company

Abilene, Texas

Performed a comprehensive management and operations review of a wholly owned subsidiary of Central and South West Corporation, a registered public utility holding company for the Public Utility Commission of Texas. Our review included assessments of all functional areas within WTU, as well as WTU's relationships and transactions with its parent and other affiliate companies. We identified ways to save over \$2.5 million annually. All 85 recommendations were accepted. This assignment required 11 months, engaging over 10 consultants for 4,500 hours of effort, for a total project cost of approximately \$451,160.

Central Maine Power Company

Augusta, Maine

Performed a focused management review of the implementation of Central Maine Power's (CMP's) Customer Service System for the Maine Public Utilities Commission. Provided testimony at a general rate hearing in which a portion of the implementation costs was disallowed for ratemaking purposes. Mismanagement at CMP led to this ruling. This four-month assignment included two consultants and approximately 500 hours of effort, for a total project cost of approximately \$48,800.

ELECTRIC UTILITY ASSIGNMENTS

Ohio Power Company, Columbus Southern Power Company

Columbus, Ohio

Reviewed the fuel-related practices and procedures of these companies for two consecutive years for the Public Utilities Commission of Ohio. Overall organizational structure, management decision processes, and the computer information systems supporting these activities were included in this review. Provided testimony on our findings and conclusions. This 12-month review involved three consultants and more than 1,000 hours of effort.

Union Light, Heat and Power

Cincinnati, Ohio

Performed a management and operations review of Union Light, Heat and Power (ULH&P), a subsidiary of Cincinnati Gas and Electric Company, for the Kentucky Public Service Commission. ULH&P is essentially run as a single company. Our review covered all areas of operations, including management and organization, electric operations (excluding power production and fuels management), gas supply and operations, customer service, financial management, human resources, marketing and external relations, and corporate services. We also reviewed ULH&P's relationships and transactions with its parent company and other affiliate companies. This 11-month assignment involved more than 10 consultants and 2,000 hours of effort, for a total project cost of approximately \$250,000.