

BEFORE THE DELAWARE PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION)
OF DELMARVA POWER & LIGHT) DOCKET NO. 12-546
COMPANY FOR AN INCREASE IN)
GAS BASE RATES)

DIRECT

TESTIMONY

OF

MICHAEL J. MCGARRY, SR.

ON BEHALF OF THE

COMMISSION STAFF

DELAWARE PUBLIC SERVICE COMMISSION

JUNE 3, 2013

1 **Q: Please state your name, position, and business address.**

2 **A:** My name is Michael J. McGarry, Sr. I am President and CEO of Blue Ridge
3 Consulting Services, Inc. My business address is 2131 Woodruff Road, Suite 2100,
4 PMB 309, Greenville, SC 29607.

5 **Q: Please state your experience and educational background.**

6 **A:** I have been President and CEO of Blue Ridge Consulting Services, Inc. since 2004.
7 In my career, I have overseen or been part of numerous rate cases (electric, gas and
8 water) rate case audits, prudence reviews, and management and operational audits. I
9 have worked with clients to manage various aspects of the regulatory and rate case
10 process; prepared supporting analyses and testimony for submission to regulatory
11 bodies; prepared revenue requirement and cost of service analyses; and developed
12 complex revenue requirement models to present alternative positions to a utility's
13 proposed rate request. Prior to assuming my present position, I was Vice President of
14 East Coast Operations from July 2003 to June 2004 with Hawks, Giffels & Pullin
15 (HGP), Inc. In that position, I was responsible for developing and overseeing client
16 engagements in utility regulatory affairs, management audits, and rate case
17 management. From August 2001 to July 2003, I was an independent consultant
18 working on a number of different projects, including a renewal/update of delivery
19 service tariffs for Illinois Power and several utility street lighting cost benefit
20 assessment projects. From June 2000 until August 2001, I was a senior consultant
21 with Denali Consulting, Inc., a utility supply chain and e-procurement strategy and
22 implementation firm. From October 1997 through June 2000, I was employed by
23 Navigant Consulting, Inc. and several of its predecessors or acquired firms working

1 on a number of different projects, including a management audit of Southern
2 Connecticut Gas Company and the original delivery service tariff filing for Illinois
3 Power. From July 1985 through October 1997, I was employed by the New York
4 State Department of Public Service (NYSDPS) in its Utility Operational Audit
5 Section in which the staff conducted focused operational audits in many facets of
6 utility operations for all sectors of the utility industry, including gas, electric,
7 telecommunications, and water. Prior to my employment with the NYSDPS, I was a
8 rate analyst with Orange and Rockland Utilities (1981 to 1983) and then Seminole
9 Electric Cooperative (1983 to 1985). I received my Masters of Business
10 Administration from the State University of New York at Buffalo in 1996 and a
11 Bachelor of Arts in Economics from Potsdam College (SUNY) in 1981.

12 **Q: Have you included a more detailed description of your qualifications?**

13 **A:** Yes. A detailed description of my qualification is included as Appendix A.

14 **Q: What is the purpose of your testimony?**

15 **A:** The purpose of my testimony is to address the policy issues associated with
16 Delmarva Power and Light Company's (Delmarva or Company) proposed changes to
17 its gas main extension policy and related fees.

18 **Q: What have you reviewed in preparing this testimony?**

19 **A:** I have reviewed the Company's application, testimony, responses to data and
20 information requests and industry white-papers on the subject.

21 **Q: Was this testimony prepared by you or under your direct supervision?**

22 **A:** Yes.

23 **Q. Are you submitting any exhibits?**

1 A: Yes. Included with this are the following Exhibits:

- 2 • Exhibit MJM-01 – Company’s response to CRI-07
- 3 • Exhibit MJM-02 – Company’s response to PSC-ME-1
- 4 • Exhibit MJM-3 - Company’s response to PSC-ME-8
- 5 Exhibit MJM-4 Line Extensions for Natural Gas: Regulatory Considerations, by Ken Costello
- 6 Principal Researcher National Regulatory Research Institute Report No. 13–
- 7 01 February 2013.
- 8 • Exhibit MJM-4 -Line Extensions for Natural Gas: Regulatory Considerations,
- 9 by Ken Costello Principal Researcher National Regulatory Research Institute
- 10 Report No. 13–01 February 2013.
- 11

12 **Summary of Position**

13 **Q: Please summarize your position with respect to the Company’s proposed main**
14 **extension policies and fees?**

15 **A.** I recommend that the Commission approve the Company’s proposed changes to its
16 natural gas main extension policy with several modifications. After reviewing the
17 various components of the proposal including the changes to the revenue test, the
18 allocation of “free main” lengths, and the overall policy, I believe that allowing the
19 Company to implement these changes will be consistent with the state’s desire to
20 allow flexibility with respect to choice of energy providers, reduce the dependence on
21 foreign oil, and provide end users who would otherwise not have a choice of the type
22 of energy with the opportunity to lower their energy costs in using natural gas.

23 However, while the Company’s proposed changes have merit and are in keeping with
24 public policy to reduce energy costs and dependence on foreign oil, certain
25 modifications must be made to ensure that the occurrence of uneconomical extensions
26 is minimized.

1 **Discussion**

2 **Q: Please describe the Company’s proposal to modify its main extension policy and**
3 **tariffs?**

4 **A:** In his direct testimony, Delmarva Witness Collacchi presented the Company’s
5 proposed changes to Delmarva’s tariffs concerning the natural gas main extension
6 policy. Witness Collacchi contends, “[M]ore residents of the State of Delaware
7 should have choices in meeting their energy needs and that those choices should be
8 based upon the current state of energy markets in Delaware. Many residential
9 neighborhoods and commercial developments in Delmarva's territory were built
10 during a period when extending natural gas mains was prohibited by federal
11 regulation due to a perceived natural gas supply shortage.”¹ He argues that the
12 natural gas market supply and prices for natural gas have “changed dramatically over
13 the past several years.”² These changes have resulted in an increasing number of
14 Delmarva’s customers seeking ways to lower their energy costs. One way that they
15 are seeking to do this is by having natural gas brought to their homes and businesses.
16 However, the Company contends that provision for extending service under the
17 current tariff has “proven too expensive for the majority of customers.”³ The
18 Company “believes that a revised main extension tariff will make gas service more
19 affordable for residents and small business owners seeking to make such a change
20 and will reduce their energy costs and the environmental impact of their energy use.
21 These are benefits that accrue to all residents of the State, and not just those seeking

¹ Direct Testimony of Robert M. Collacchi at 9:11-16

² Direct Testimony of Robert M. Collacchi at 9: 16-17

³ Direct Testimony of Robert M. Collacchi at 9: 19-21

1 service from the Company.”⁴ Witness Collacchi states that the Company’s proposed
2 changes “[simplify] the current process and attempts to address cost effectiveness
3 concerns raised by our customers.”⁵ To that end, Delmarva is proposing to do the
4 following:

5 • For residential customers in existing subdivisions and small-commercial
6 businesses, the Company would provide the first 100 ft of main extension for each
7 customer without any additional charges.

8 • After the first 100 ft, a new customer would be charged \$38.93 per foot of
9 additional main.⁶

10 • The Company is proposing that civic or maintenance organizations should
11 petition residents and then act on their collective behalf in applying for
12 extensions.⁷

13 • The Company is not proposing any changes to its tariff provision for large
14 commercial or industrial customers and would rely on the three-year revenue
15 test.⁸

16 **Q: What reason(s) did Delmarva give for the proposed change?**

17 **A:** Witness Collacchi cited that because of improvements in equipment efficiency over
18 the last 15 years (since the last tariff revision in 1997), non-fuel revenue per customer
19 has remained flat at approximately \$406 and as a result the current tariff’s revenue

⁴ Direct Testimony of Robert M. Collacchi at 9:21 to 10:2

⁵ Direct Testimony of Robert M. Collacchi at 10: 4-6

⁶ The Company originally proposed \$40.23 but later revised that figure in response to a data request – CRI-07 (Exhibit MJM-01).

⁷ Direct Testimony of Robert M. Collacchi at 11:8-12.

⁸ Direct Testimony of Robert M. Collacchi at 11:20-21.

1 payback/rate of return method does not work.⁹ He argues that very few customers
2 qualify for service extensions under the current method and as a result are not able to
3 take advantage of the savings that might be available from using natural gas. He also
4 contends, “[E]nvironmental benefits from reduced emissions [have not] been
5 realized.”¹⁰

6 **Q. Please describe this revenue payback/rate of return test that the Company is**
7 **proposing to change?**

8 A. In simple terms, the revenue payback test measures the breakpoint at which revenue
9 from the customer covers the Company’s cost of extending the mains and providing
10 service. The current revenue payback test was approved by the Commission in
11 1997¹¹ and includes a five-year revenue test. The Company uses a detailed revenue
12 requirements model that includes a number of variables such as the increases in net
13 plant and an agreed-to rate at which customers would come on to the system.

14 **Q: Does the Company maintain a history of who has requested main service**
15 **extensions?**

16 A: In response to a data request, the Company stated that it takes calls from customers
17 and provides information but does not log or record the calls. However, the Company
18 provided information that states that they have a record of 43 individual customers
19 and 15 civic associations who “have chosen not to move forward due to the cost of
20 the CIAC.”¹² (CIAC stands for Contribution in Aid of Construction.) In addition, the

⁹ Direct Testimony of Robert M. Collacchi at 10:7-12.

¹⁰ Direct Testimony of Robert M. Collacchi at 10:13-17.

¹¹ Delaware Public Service Commission Order No. 4635, November 5 1997

¹² Exhibit MJM-02 – Company response to CRI-7

1 Company files an annual report which shows the number of extensions that it actually
2 performed.

3 **Q: What are your concerns related to the Company's proposed changes related to**
4 **main extension tariff?**

5 **A.** There are several concerns. The first concern is the recognition that the existing
6 revenue payback test has served well to protect the interests of existing ratepayers
7 from the possibility of the Company placing into service an uneconomic main
8 extension. The consequence of making that kind of decision is that the Company's
9 actual rate of return would be lower (from the uneconomic decision) and thus might
10 cause the Company to file unnecessary and continuing rate relief requests. Second,
11 civic organizations (which I take to include residential subdivision homeowner
12 associations and similar entities) can petition the Company to have mains extended on
13 behalf of all of their constituents (namely, homeowners) in existing residential
14 subdivisions. This may result in a situation in which the mains might be extended to
15 the subdivision, but the homeowners do not sign on for service for one reason or
16 another. This would create a potential revenue shortfall and make what was a viable
17 and economic decision, uneconomical with the consequences noted above.

18 **Q. Please continue.**

19 **A:** By way of example, assume there is an existing subdivision of 25 residential homes
20 that the homeowners association wants to act as a single entity requesting service.
21 Also assume that the subdivision will require 1500 ft of main within the subdivision,
22 and the entrance to the subdivision is 1000 ft (or a 1/4 mile) from where the
23 Company's existing main is and the new main will tap onto. Again, also assume that

1 the existing main has sufficient capacity to be able to handle the load of the 25
2 homes. Under the Company's proposal of providing 100 ft of main without charge,
3 there would be no charge to either the requesting entity or any resident since all the
4 main that is required is covered by the 25 residents or $25 \times 100 = 2500$ ft. The
5 Company's proposal would assume that all 25 customers would sign on for service.
6 However, there are no provisions for cost recovery should residents elect not to take
7 service. So, if 5 of the 25 residents within the association elect not to take service
8 (which is possible as some residents may be 100% green¹³ or do not want to pay for
9 the switching costs from their other energy devices such as converting an electric
10 water heater to gas), there would be 500 ft of main that would be placed in service
11 that is being subsidized. Under the Company's existing revenue payback method, the
12 revenue stream assumed that customers would phase in over a period of 5 years at a
13 rate of 26% in year 1, 34% in year 2, 19% in year 3, 10% in year 4, and 11% in year
14 5. This does total 100% and as such assumes that all customers who can switch do.
15 But the calculation's starting point is the potential number of customers which should
16 take into account those that would not sign on.

17 **Q: What do you recommend?**

18 **A:** I believe that the Company's tariff should be strengthened to dissuade/mitigate
19 situations similar to this example and protect existing ratepayers by requiring a surety
20 bond or some similar financial instrument from the existing homeowner association
21 or civic organization for the cost of the 100 ft per main per resident. This places the
22 burden on the HOA or civic organization to make sure that their residents are sincere
23 and are willing to guarantee that they will take service. The bond or surety

¹³ "Green" referring to using solar, wind, geo-thermal to meet there heating and cooling needs

1 instrument would be returned when the customers for whom the 100 ft is being
2 provided sign on and take service.

3 **Q. Is there a basis for the Company proposing 100 ft of main per customer versus**
4 **any other particular level?**

5 **A:** Yes. In response to a data request, I asked for support for the 100 ft. of main. In
6 response, the Company stated that there are approximately 10.3 million ft of gas main
7 and 114,000 residential customers, which calculates to 90.4 ft per residential
8 customer.¹⁴ I conclude that the 100 ft is a reasonable number of the base footage.

9 **Q: You mentioned that you related to the existing revenue payback method for**
10 **determining if a customer would need to make a contribution to aid in**
11 **construction. What is that concern?**

12 **A:** As I mentioned, the revenue payback method in my opinion has served the
13 ratepayers well to protect against uneconomic construction decisions being made. It
14 is conservative and includes a thorough analysis that clearly allows decision makers
15 (the Company and the Commission) to have the appropriate information when
16 deciding or reviewing those decisions that the extension was a good economic
17 decision balancing the cost of providing service and the revenues from that service. It
18 has been in place since 1997. I understand that there have been a number of potential
19 customers who would have to pay for the main extension, which from their
20 perspective made it uneconomic, but that decision is theirs to make and does not
21 involve having others subsidize their benefit. As such, I am hesitant to recommend
22 moving away from this conservative approach. However, I am also aware of the

¹⁴ Exhibit MJM-3 Company's response to PSC-ME-8

1 public policy initiatives in Delaware to broaden the use of natural gas as a cleaner
2 alternative to other fossil fuels such as oil.

3 **Q: Are you aware of any public policy initiatives that shed some light on the**
4 **regulatory aspects of promoting natural gas use?**

5 **A:** Yes. In February, 2013, the National Regulatory Research Institute recently published
6 a white paper titled “Line Extensions for Natural Gas: Regulatory Considerations.”¹⁵
7 This white paper specifically addresses the issue here at hand. For example, the white
8 paper identifies the following:

9 “Current and expected natural gas prices now make it economically sensible for
10 more energy consumers to switch from oil or propane to natural gas. Switching to
11 natural gas also may have broader public benefits, such as a cleaner environment,
12 more reliable service, and economic development. With natural gas prices
13 presently far lower than oil and propane prices, large-scale switching to natural
14 gas could create public benefits substantial enough to warrant governmental
15 actions.”¹⁶

16 The whitepaper continues:

17 “Fuel switching might fit within a state’s energy, economic development, or
18 environmental policy. From an operational standpoint, the integration of new
19 lines into a utility’s existing distribution network can lead to internal efficiencies.
20 These benefits can lower the average cost of a utility’s service. Overall,
21 switching to natural gas has the potential to save energy consumers substantial
22 sums of money and contribute to a cleaner and more robust economy.”¹⁷

23 Interestingly, the whitepaper provides support for the concept that there are potential
24 benefits to existing customers for allocating a portion of line extension costs to all
25 customers. These include: (1) increase in net revenues (i.e., that is an amount greater
26 than the incremental cost to serve the new customers) should result in lower overall

¹⁵ Exhibit MJM-4 Line Extensions for Natural Gas: Regulatory Considerations, by Ken Costello
Principal Researcher National Regulatory Research Institute Report No. 13–01 February 2013.

¹⁶ Exhibit MJM-4 Line Extensions for Natural Gas: Regulatory Considerations, by Ken Costello
Principal Researcher National Regulatory Research Institute Report No. 13–01 February 2013 page iv.

¹⁷ Ibid.

1 costs to the benefit all customers over time, (2) society may not achieve the optimal
2 amount of benefit from fuel switching if new customers bear all of the incremental costs,
3 and (3) that existing customers may benefit from economies of scope.¹⁸

4 The author¹⁹ of the paper argues that because the societal and economy of scope benefits
5 are hard to quantify, the “preferred approach” would be a mix or hybrid where the
6 economic portion of the extension costs are shared by all customers and the non-
7 economic costs (or net incremental costs) are charged to the new customers. He states,
8 “Most state utility commissions, in fact, tend to support this hybrid-pricing scheme in
9 protecting both existing customers and utility shareholders. New customers alone pay for
10 the “uneconomic” costs of new gas lines, while existing customers absorb the remaining
11 portion of costs that a utility expects to recover from new customers over time.”²⁰

12 **Q: From your review of this regulatory insight research paper, what did you**
13 **conclude?**

14 **A:** First, I concluded that what Delmarva is proposing is consistent with the hybrid
15 method described in the paper of rolling in a portion of the costs (the economic line
16 extension costs or the first 100 ft) and then charging new customers for uneconomic
17 costs (the \$38.93 per ft above 100 feet). Second, I concluded that the issue of line
18 extensions continues to evolve from the regulatory perspective. The author of the
19 white paper recommends that Commissions review their lines extension policies to
20 update them to match the current market situation for natural gas and take into
21 account the broader societal questions concerning fuel switching.²¹ Third, I

¹⁸ Ibid. at iv and v.

¹⁹ Ken Costello Principal Researcher National Regulatory Research Institute

²⁰ Exhibit MJM-4 Line Extensions for Natural Gas: Regulatory Considerations, by Ken Costello
Principal Researcher National Regulatory Research Institute Report No. 13-01 February 2013 page v.

²¹ Ibid at 42.

1 concluded that there are many broader regulatory aspects that may impact the
2 Commission's decision whether to encourage and/or promote fuel switching (i.e.,
3 other fossil fuels to natural gas) and the related costs of line extension to further this
4 decision. The specific scope of this case relates to Delmarva's proposed main
5 extension tariff changes. However, this is just an aspect of the broader fuel switching
6 and related societal benefits to all residents. That discussion is for another forum.

7 **Q: Are there any other aspects of Delmarva's proposed changes you would like to**
8 **discuss?**

9 **A:** Yes. I am aware that other Dockets under the Commission's review are looking at the
10 issue of line extension and what the incremental cost should be to new customers.
11 However, due to the confidentiality of the settlement discussions around those
12 proceedings I have not been able to review any of the specifics of those cases. It may
13 be argued that the Commission should standardize whether the Companies offer any
14 particular set of "free footage."²² I do not think that this is necessary. Individual
15 company demographics, circumstances, and costs should be evaluated in their own
16 context and decisions made based on the particular situation. In addition, should the
17 Commission decide to approve the Company's tariff changes with my suggested
18 modification, the Commission could order a review of the policy to be filed with the
19 Company's next annual report. I am not recommending any change to that process.
20 This should provide the Commission, Staff, and intervenors an opportunity to know
21 whether existing customers are being negatively impacted on a cost basis, and then a

²² I consider the term "free footage" somewhat misleading as the Company would begin to collect on the capital costs associated with that amount of "free footage" after its next base rate case when the net plant (which would include the cost of this "free footage" is reflected in the Company's rate base.

1 review of the other factors should be done to determine if the societal benefits balance
2 out any increased costs existing customers are incurring.

3 **Q: Does this conclude your testimony?**

4 **A:** Yes.

APPENDIX

Qualifications of Michael J. McGarry, Sr.

Summary

Mr. McGarry's professional experience spans Thirty-two years within the private and public sectors. He has conducted over thirty comprehensive management and operational audits of investor-owned energy, telecommunications, and water utilities. These audits have included comprehensive management audits and/or operational audits on most utility functions including corporate governance, strategic planning, internal auditing, capital and operating budget process and practices, distribution operations and maintenance, fuel procurement, supply chain management, demand side management, crew operations, affiliates transactions, commodity trading and construction program practices.

Project Management

Mr. McGarry's experience includes management of multi-discipline teams for a wide range of client engagements, development and implementation of detailed work plans and project schedules. He has analyzed and planned interdivisional resource utilization, supervised, developed and coached interdivisional team members and created numerous executive reports, briefings, and presentations.

Regulatory and Rate Case Management

Mr. McGarry has worked with clients to manage all aspects of the regulatory and rate case process. He has developed efficient processes to prepare supporting analyses and testimony for submission to the regulatory bodies and interveners. He is a seasoned project manager and has analytical expertise to respond to interrogatories and data requests from all rate case interveners in a timely manner. Mr. McGarry has assisted a number of clients in preparing revenue requirement and cost of service analyses. He has also developed rate structure and billing determinant information analyses, time of day and interruptible rates analyses, fuel and purchased power reports and annual wholesale rates for member cooperatives. He has developed complex revenue requirement models to present alternative positions to a utility's proposed rate request.

Testimony and Witness Preparation

Mr. McGarry has proffered testimony in Arizona, Colorado, Delaware, Illinois, Maine, Michigan, Maryland, New York, Nova Scotia, Ohio, Pennsylvania and Utah. These proceedings included testimony involving management decision and prudence impacts, operations and maintenance expenses, capital investments, revenue requirements, project management and others.

Utility Management and Operational Audits

Mr. McGarry has conducted over thirty comprehensive management and operational audits of investor-owned energy and telecommunications utilities. These audits have included comprehensive management audits and/or operational audits on most functions with the utility environment including corporate governance, strategic

planning, internal auditing, capital and operating budget process and practices, distribution operations and maintenance, fuel procurement, supply chain management, demand side management, crew operations, affiliates transactions, commodity trading and construction program practices.

Restructuring, Unbundling, and Cost Allocation

Mr. McGarry has developed the supporting analyses and regulatory filing requirements needed to support unbundling rates for utilities. This has included detailed studies where the company's plant-in-service and depreciation reserve was allocated to each unbundled function. He has assessed utility management actions to prepare the company for competition, including the processes and practices used by the utility to prepare to enter new markets and offer new services.

Training and Public Speaking

Mr. McGarry has presented topics before Commission staff groups, NARUC sub-committee groups, and as a program faculty member (2010) for the Institute of Public Utilities at Michigan State University. Topics presented include management auditing and prudence reviews, service company costs and allocations, forecasting methodology and modeling, revenue requirements, rate base, and price regulation theory.

Education

Potsdam College, B.A., Economics, 1981

University at Buffalo School of Management, MBA, 1996

Regulatory Experience

Before the Arizona Corporation Commission

(Docket No. E-01933A-12-0291) *In the matter of the application of Tucson Electric Power for the establishment of just and reasonable rates and charges designed to realize a reasonable rate of return on the fair value of its operations throughout the State of Arizona.* August 2012 - present Michael McGarry testified as to cost recovery of energy efficiency, renewable energy, and compliance with environmental regulations;

Docket No. E-01345A-11-0224 *In the matter of the filing of a general rate case application by Arizona Public Service Company.* July 2011 - March 2012 Mr. McGarry Blue Ridge analyzed the company's proposed Infrastructure Tracking Mechanism, power supply adjustor, and tariffs. Mr. McGarry submitted testimony regarding Environmental Reliability Adjustment, Power Supply Adjustor, Transmission Cost Adjustor, and Service Schedules on November 18, 2011.

Before the Department of Energy and Environmental Protection – Public Utilities Regulatory Authority (formerly Connecticut Department of Utility Control)

Docket 10-02-13 *Application of Aquarion Water Company to Amend its Rate Schedules* On behalf of the Connecticut Department of Public Utility, April 2010 – August 2010 Project Manager. Oversaw rate case analysis and assessment of company's proposed revenue requirement specifically related to cash working capital and test year expenses.

Assisted with analysis of specific issues and preparation of Commission's recommended decision.

Docket 07-07-01 *Diagnostic Management Audit of Connecticut Light and Power Company.*

On behalf of the Staff of the Connecticut Department of Public Utility, July 2008-June 2009

Project Manager. Performed overall day to day project management responsibilities to conduct a diagnostic management audit of the Connecticut Light & Power Company (CL&P). Managed a project team of accountants, engineers and industry specialists who were responsible for evaluating the effectiveness of the management and operations of all aspects of the company. In addition, managed a focused prudency review of Northeast Utilities' (CL&P's parent company) development and implementation of a \$122 million customer information system known as CustomerCentral or C2.

Before the Delaware Public Service Commission

Docket No. 11-528 *On behalf of the Staff of the Delaware Public Service Commission in the matter of the application of Delmarva Power & Light Company (DPL) for approval of modifications to its electric base rates* January - July 2012

Project Manager/Testifying Witness – Mr. McGarry analyzed the company's inter-company allocations in the context of the electric base rate case. He testified regarding issues related to the sale of Conectiv Energy and their impact on intercompany allocations and the resulting effect on revenue requirements. Testimony filed: May 15, 2012.

Docket No. 09-414 *On behalf of the Staff of the Delaware Public Service Commission in the matter of the application Delmarva Power & Light Company for approval of modifications to its electric base rates,* September 2009 - May 2010

Project Manager. Oversaw rate case analysis and assessment of company's proposed revenue requirement. Assisted with analysis of specific issues and preparation of witness testimony.

Docket No. 07-239F *On behalf of the Staff of the Delaware Public Service Commission in the matter of the application Delmarva Power & Light Company for approval of modifications to its gas cost rates,* October 2007-April 2008

Project Manager. Oversaw a review of Delmarva Power and Light's gas hedging program.

Docket No. 06-287 *On behalf of the Staff of the Delaware Public Service Commission in the matter of Chesapeake Gas Corporation's implementation of a Gas Hedging program,* June-August 2007

Project Manager. Provided industry expertise and suggestions to the Commission on a proposal plan to implement a gas hedging procurement program at the Company.

Docket No. 06-284 *On behalf of the Staff of the Delaware Public Service Commission in the matter of Delmarva Power and Light Company's request for a \$15 million increase in gas base rates,* October 2006-March 2007

Project Manager and testifying witness. Provide expert testimony on several rate base and revenue requirement issues. Recommended Commission reduce proposed rate increase request to \$8.4 million (56%).

Before the District of Columbia Public Service Commission

Formal Case No. 1076 *In the Matter of the Application of the Potomac Electric Power Company for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service.*

On Behalf of the DCPSC, July-June 2010

Project Manager: Advised Commission Staff on the Company's and intervener's filings and testimony regarding revenue requirements, rate base, cost of service, rate design, bill stabilization, and depreciation.

Formal Case No. 1053 - *Technical consultant for the Commission in the matter of Potomac Electric Power Company's request for a \$50.4 million increase in base rates, February 2007-June 2008*

Project Manager. Provide technical expertise to Commission in evaluating the Company's rate case filing. Commission accepted adjustments which reduced the allowed increase by a significant percentage.

Formal Case No. 1032 *In the Matter of the Investigation into Potomac Electric Power Company's Distribution Service Rates*

On Behalf of the DCPSC, January-March 2005

Project Manager. Review and evaluation of Potomac Electric Power Company compliance filings for class cost of service and revenue requirements for distribution service pursuant to a settlement approved in May 2002. Provided analysis and recommended adjustments to Staff on 23 designated issues and 13 Company proposed adjustments. Proceeding was settled in anticipation of a full rate case for rates to be effective August 8, 2007.

Formal Case No. 1016 *In the Matter of the Application of Washington Gas Light Company, District of Columbia Division, for Authority to Increase Existing Rates and Charges for Gas Service*

On Behalf of the DCPSC, June-December 2003

Project Manager and Consultant to Commissioners and Staff. Project Manager for the analysis of WGL's rate filings. Provided analysis and recommended adjustments to the DCPSC Staff on WGL's proposed increase to base rates. Advised the Commission during deliberations on party positions and possible recommendations.

Before the Hawaii Public Utilities Commission

Docket No. 05-0075 *In the matter of a proceeding to investigate Kauai Island Utility Cooperative's Proposed Revised Integrated Resource Plan and Demand Side Management Framework, June-November 2005*

Project Manager. Managed a team of consultants responsible for evaluating the impact of the changes proposed by the Company.

Before the Illinois Commerce Commission

Case: 05-0597 *On behalf of the Illinois Citizens Utility Board, Cook County States Attorney's Office and City of Chicago*, November 2005-May 2006

Project Manager and Testifying Witness. Provided analysis and recommended adjustments in the general rate increase of 20.1% or \$320 million filed by ComEd.

Consultant to Illinois Power Company. Conducted mandated compliance filing to un-bundle utility's rate tariffs. Prepared filing requirements and all support schedules analysis to justify allocation of generation, transmission and distribution. Prepared testimony on behalf of the Company's Controller.

Consultant to Illinois Power Company. Prepared 2001 required update filing for the Illinois Commerce Commission compliance filing to un-bundle utility's rate tariffs. Prepared filing requirements and all support schedules analysis to justify allocation of generation, transmission and distribution. Prepared testimony on behalf of the Company's Controller.

Before Maine Public Utilities Commission

Case No 2008-151 *Maine Public Utilities Commission Investigation into Maintenance and Replacement Program for Northern Utilities Inc.'s Cast Iron Facilities (Phase II)*

On behalf of Maine Public Advocate, July 2008 - present

Project Manager and Testifying Witness. Litigated proceeding and led a consultant team to assist the State of Maine Public Advocate to follow-up on investigation for the need for the program and the company's management of the repair or replacement of its cast iron facilities.

Case No 2004-813 *Maine Public Utilities Commission Investigation into Maintenance and Replacement Program for Northern Utilities Inc.'s Cast Iron Facilities (Phase I)*

On behalf of Maine Public Advocate, November 2004-March 2005

Project Manager and Testifying Witness. Litigated proceeding and led a consultant team to assist the State of Maine Public Advocate to investigate the need for an accelerated cast iron replacement program the company's management of the repair or replacement of its cast iron facilities.

Before the Maryland Public Service Commission

Case No. 9092/9093 (Phase II) *On behalf of the Staff of the Commission in Base Rate Proceeding for Potomac Electric Power Company and Delmarva Power and Light Company* December-March 2008

Project Manager. Provided rebuttal testimony on behalf of the Commission related to the reasonableness of the costs and charges of Pepco Holdings, Inc. Service Company.

Case No. 9092 *On behalf of the Staff of the Commission in Base Rate Proceeding for Potomac Electric Power Company*, January-June 2007

Project Manager. Reviewed and analyzed company's base increase request and all pro formas, adjustments to test year revenue requirement and supported witness testimony. Commission approved less than 20% of Company's original request.

Case No. 9062 *On behalf of the Staff of the Commission in the matter of the application of Chesapeake Utilities Corporation for authority to revise its rates and charges for gas service, May-October 2006*

Project manager. Managed a project team responsible for providing expert witness testimony in the areas of revenue requirements, rate base, cost of service, revenue allocation, rate design, revenue normalization, and cost of capital.

Before the Massachusetts Department of Public Utilities

Case No. D.P.U. 08-110 *On behalf of the Massachusetts Department of Public Utilities regarding the Petition and Complaint of the Massachusetts Attorney General for an Audit of New England Gas Company, February 2010-August 2010*

Project manager. Managed a project team of accountants and industry specialists who were responsible for evaluating the accuracy of the accounting records, practices and procedures used in the development of New England Gas Company's revenue requirements calculations in the Company's base rate request.

Before the Michigan Public Service Commission

Case No. U-16047 *On behalf of the Attorney General of the State of Michigan in the matter of the application of The Detroit Edison Company for authority to implement a Power Supply Cost Recovery Plan in its rate schedules for 2010 metered jurisdictional sales of electricity, January-May 2010*

Project manager and testifying witness. Reviewed power supply cost recovery plan requirements and testified to appropriateness of specific components of that factor.

Case No. U-15415-R *On behalf of the Attorney General of the State of Michigan in the matter of the application of Consumers Energy Company for the reconciliation of power supply cost recovery costs and revenues for the calendar year 2008 and for other relief related to pension and OPEB costs, May-November 2009*

Reviewed power supply cost recovery reconciliation and provided analysis of potential issues and developed recommendations including basis, past precedence, and/or industry expertise.

Case No. U-15806/U-15890 *In the matter of Detroit Edison's and Michigan Consolidated Gas Company's to comply with Public Acts 286 and 296 regarding their Renewable Energy Plan and Energy Optimization Plan, March-June 2009*

Reviewed the Energy Optimization Plans of both Detroit Edison and Michigan Consolidated Gas and provided analysis of issues and shortcomings concerning the plans in relation to the specifications of the Act and the benefit to customers.

Case No. U-15805/15889 *In the matter of Consumers Energy Company to comply with Public Acts 286 and 295 regarding their Renewable Energy Plan and Energy Optimization Plan, March-June 2009*

Reviewed the Energy Optimization Plans of Consumers Energy Company and provided analysis of issues and shortcomings concerning the plans in relation to the specifications of the Act and the benefit to customers.

Case No. U-15677 *On behalf of the Attorney General of the State of Michigan in the matter of the application of The Detroit Edison Company for authority to implement a power supply cost recovery plan in its rate schedules for 2009 metered jurisdictional sales of electricity*, January 2009-June 2010

Project manager and testifying witness. Reviewed power supply cost recovery plan requirements and testified to appropriateness of specific components of that factor.

Case No. U-15415 *On behalf of the Attorney General of the State of Michigan in the matter of the application of Consumers Energy Company for approval of a power supply cost recovery plan and for authorization of monthly power supply cost recovery factors for the year 2008*, January-March 2008

Project Manager. Reviewed power supply cost recovery plan requirements and provided summary briefing to Michigan Attorney General.

Case No. U-15320 *On behalf of the Attorney General of the State of Michigan in the matter of the application of Midland Cogeneration Venture Limited Partnership for the Commission to eliminate the “availability caps” which limit Consumers Energy Company’s recovery of capacity payments with respect to its power purchase agreement with Midland Cogeneration Venture Limited Partnership*, October 2007-June 2008

Project Manager. Oversaw project to provide industry expertise to evaluate issue in case and recommend alternative arguments.

Case No. U-15245 *On behalf of the Attorney General of the State of Michigan in the matter of the application of Consumers Energy Company for authority to increase its rates for the generation and distribution of electricity and for other relief*, July 2007-April 2008

Project Manager and testifying witness. Provided expert testimony on partial and interim rate relief, Consumers’ decision to acquire Zeeland Power Company from Broadway Gen Funding, LLC. Provided testimony in permanent phase to reduce company’s net operating income to more closely reflect the expected costs in 2008.

Case No U-15244 *On behalf of the Attorney General of the State of Michigan in the matter of the application of Detroit Edison for authority to increase its electric base rates*, September 2007-October 2008

Project Manager and testifying witness. Provided expert testimony on revenue requirements.

Case No U-15190 *On behalf of the Attorney General of the State of Michigan in Base Rate Proceeding for Consumer’s Energy*, March-September 2007

Project Manager. Reviewed the revenue decoupling proposal and supported the witness testimony.

Case No U-15040 *On behalf of the Attorney General of the State of Michigan in Gas Cost Recovery 2007/08 Plan proceeding*, March-August 2007

Project Manager and Testifying Witness. Reviewed gas cost recovery plan requirements and provided analysis of the potential benefits of gas procurement hedging program.

Case No. U-15001 *On behalf of the Attorney General of the State of Michigan in Power Supply Cost Recovery 2007/08 Plan proceeding*, November 2006-August 2007
Project Manager and Testifying Witness. Reviewed power supply cost recovery plan requirements and testified to appropriateness of specific components of that factor.

Case No. U-14701-R *On behalf of the Attorney General of the State of Michigan in Power Supply Cost Recovery 2006/07 reconciliation proceeding*, June-November 2007
Project Manager and Testifying Witness. Reviewed power supply cost recovery reconciliation.

Case No. U-14547 *On behalf of the Attorney General of the State of Michigan in the matter of the application of Consumer Energy Company for authority to increase rates for the distribution of natural gas and for other relief*, December 2005-April 2006
Expert Witness and Project Manager. Provided analysis, recommended adjustments and filed testimony for the Michigan Attorney General on Consumers Energy proposed increase to base rates.

New Mexico Public Service Commission

Special Case Study: Public Service Company of New Mexico NM PRC Docket No. 10-00086-UT, August 2010

Blue Ridge worked with QSI Consulting, Inc. to conduct a training session for the New Mexico PSC Staff and develop training materials for presentation to Commission Staff on the basic elements of future test year proceedings, how those may differ from traditional rate cases, and how to apply and interpret the forecasting methodologies and modeling that will come into play; and analyze the pending PNM rate case and provide an analytic framework for Staff to apply to the forecasting issues in the case.

Before the Nova Scotia Utility and Review Board

Case No. P-886 *On behalf of the Consumer Advocate of the Province of Nova Scotia in the base rate proceeding of Nova Scotia Power*, December 2006-March 2007
Project Manager and testifying witness. Provided an evaluation of a management audit of Nova Scotia Power and that report's usefulness to assess the Company's management performance and operational efficiency within the context of that proceeding.

Before the Public Utilities Commission of Ohio

Case No. 08-0917-EL-SSO *On behalf of the Ohio Hospital Association in the matter of the Application of American Electric Power of Ohio for authority to increase rates for distribution of electric service*. (Hired by Ohio Hospital Association's attorney for utility matters, Bricker and Eckler, to provide expertise in negotiating rate with American Electric.), September 2008-March 2009
Evaluated revenue and rate impact on member hospitals.

Case No. 08-0072-GA-AIR *On behalf of the Staff of Ohio Public Utilities Commission in the matter of the Application of Columbia Gas of Ohio, Inc. for authority to increase its gas base rate, April-August 2008*

Project Manager. Oversaw multi-discipline team of accountants, auditors, engineers and analysts to conduct a comprehensive rate case audit of Columbia Gas of Ohio's gas base rate filing. Primary goal of project was to validate information in filing, provide findings conclusions and recommendations concerning the reliability of information and data in the filing and support Staff in its evaluation of the reasonableness of the filing.

Case No. 07-0829-GA-AIR *On behalf of the Staff of Ohio Public Utilities Commission in the matter of the Application of The East Ohio Gas Company d/b/a Dominion East Ohio for authority to increase its gas base rate, November 2007-April 2008*

Project Manager. Oversaw multi-discipline team of accountants, auditors, engineers and analysts to conduct a comprehensive rate case audit of Dominion East Ohio's gas base rate filing. Primary goal of project was to validate information in filing, provide findings conclusions and recommendations concerning the reliability of information and data in the filing and support Staff in its evaluation of the reasonableness of the filing.

Case No. 07-0589-GA-AIR *On behalf of the Staff of Ohio Public Utilities Commission in the matter of the Application of Duke Energy Ohio, Inc., for an increase in Gas Rates. November 2007-February 2008*

Project Manager. Oversaw multi-discipline team of accountants, auditors, engineers and analysts to conduct a comprehensive rate case audit of Duke Energy – Ohio's gas base rate filing. Primary goal of project was to validate information in filing, provide findings conclusions and recommendations concerning the reliability of information and data in the filing and support Staff in its evaluation of the reasonableness of the filing.

Case No. 07-0551-EL-UNC *On behalf of the Ohio Schools Council in the matter of the Application of First Energy Ohio (and its operating companies Ohio Edison, Cleveland Electric and Toledo Edison) for authority to Increase rates for distribution service, modify certain accounting practices and for tariff approval, August 2007-April 2008*

Project Manager. Hired by Ohio Schools Council's attorney for utility matters (Bricker and Eckler, LLP) to provide industry expertise in reviewing First Energy's application with respect to cost of service and rate design and the resulting impact on Council's member school systems energy costs.

Case No. 06-0986-EL-UNC *On behalf of the City of Cincinnati in the matter of the Application of Duke Energy Ohio, Inc., to modify its market-based Standard service over, May-August 2007*

Project Manager. Hired by City of Cincinnati's Water and Sewer District attorney for utility matters (Bricker and Eckler, LLP) to provide industry expertise in reviewing Duke Energy Ohio's proposal and impact on City's project energy costs.

Oregon Public Utilities Commission

Docket No. UP205 *Examination of NW Natural's Rate Base and Affiliated Interests Issues*

Co-sponsored between NW Natural, Staff, Northwest Industrial Gas Users, Citizens Utility Board, August 2005-January 2006

Project Manager. Led a team that conducted a management audit of NW Natural Gas that included an evaluation of rate base issues for Financial Instruments (gas and financial hedging) Deferred Taxes, Tax Credits, Cost for a Distribution System, Security Issuance Costs and AFUDC calculations as well as Affiliate Transactions for Cost Allocations and Transfer Pricing, Labor Loading, Segregation of Regulated Rate Base and Subsidiary Investments and Properties, and validation of tax paid from / to affiliates are proper. Audit was to ensure Company compliance with orders, rules and regulations of the OPUC, with Company policy and with Generally Accepted Accounting Principles.

Utah Division of Public Utilities

Docket No. 09-035-23 *In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations*, June-December 2009

Project Manager and testifying witness. Verified the reasonableness of the revenue requirements as provided by the company in its application and testified before the Public Service Commission of Utah.

Docket No. 09-035-15 *In the Matter of the Application of Rocky Mountain Power for Approval of its Proposed Energy Cost Adjustment Mechanism - Net Power Cost Evaluation (NPC), Rocky Mountain Power (RMP) 2009 General Rate Case*, July-December 2009

Project Manager and testifying witness. Analyzed the reasonableness and technical accuracy of the RMP's NPC request, performed a comprehensive review of the Company's NPC estimate and developed recommendations to ensure an accurate baseline for the ECAM, analyzed special issues addressed in the NPC portion of the case, analyzed the Company's fuel price hedging policies and provided recommendations appropriate for the ECAM, and reviewed intervenor NPC issues as well as analyzing additional issues as raised by the Company and testified to hedging issues.

Before the Washington Utilities and Transportation Commission

Independent Third-Party Evaluation of Puget Sound Energy's (PSE) Conservation Incentive Mechanism (ECIM) under the co-direction of PSE and the Washington Utilities and Transportation Commission staff, Phase I: July-October 2009; Phase II: October 2009 – September 2010

Project Manager: Assess the extent to which the design and implementation of the incentive mechanism addressed key issues and objectives required by the Commission: accuracy of implementation in calculations of incentives or penalties, compliance with the conditions and requirements of the pilot program, proper use of the calculation methodology, and which assumptions or methods were used to calculate and verify the savings report.

Before the Public Utilities Commission of the State of Colorado

Docket No. 04A-050E *Review of the Electric Commodity Trading Operations of Public Service Company of Colorado*

On behalf of the COPUC Staff, March 2004-September 2004

Project Manager. Focused operational audit within the bounds of a litigated proceeding to determine if ratepayers were subsidizing or negatively impacted by PSCo's energy trading function.

South Carolina State Senator

Advised Senator on regulatory process for requesting States Public Service Commission for a comprehensive review of Duke Power Company's storm and restoration and right of way management. Reviewed and advised Senator of results of report finding.

Before the Missouri Public Service Commission

Consultant to Ameren UE. Conducted revenue requirement analysis in preparation of Missouri Public Service Commission compliance filing to un-bundle utility's rate tariffs. Prepared the filing requirements and all support schedules analysis to justify allocations of generation, transmission and distribution.

Southern Connecticut Gas

Consultant. As part of a team that conducted a comprehensive management audit of the management and operations of the Company, completed the capital budgeting area of the audit.

Before the New York Public Service Commission

Case: 94-C-0657

Commission Staff. Proceeding to evaluate the compliance of NYNEX with Commission rules and orders related to operational support system costs to competitors. Part of staff panel to facilitate discussion between company and potential competitors (i.e., users of operational support systems) and report back to Commission.

Focused review of the preparedness of RG&E and ConEd for competition in the electric industry. Evaluated all aspects of the company's management actions to prepare for competition including strategic planning, goals and objectives and senior management's attention to the company operations in a de-regulated industry

Case: 97-M-0567

Commission Staff. Litigated proceeding to determine the benefits of a proposed merger of LILCO / Brooklyn Union Gas. Analyzed the proposed synergy savings.

Case: 96-E-0132 *Show Cause Proceeding Regarding Rate Relief for Ratepayers of Long Island Lighting Company*

Commission Staff and Testifying Witness. Litigated proceeding where Staff proffered testimony containing a benchmark study showing that Long Island Lighting Company's operations and maintenance expenses were excessive compared to a peer group of 24

utilities. Panel testimony concerning the findings and conclusions resulting from the benchmark study.

Case: 96-M-0858 *Prudence Investigation into the Scrap Handling Practices in the Western Division of Niagara Mohawk Power Company*

Commission Staff and Testifying Witness. Litigated proceeding as a result of allegations of bribery and corruption in company practices related to a specific vendor who purchased company scrap metal. Lead team of 10 staff examiners to quantify the extent to which the Company paid excessive rates to this vendor. Testified to the findings of the analysis. Case settled with ratepayers receiving a credit to bills

Case: 91-C-0613 *Operational Audit of the Outside Plant Construction and Rehabilitation Program of New York Telephone Company*

Commission Staff. Comprehensive operational audit of the company's management and implementation of a \$150 million capital program to rehabilitate the outside plant distribution network. Served as Staff Examiner responsible for crew supervision, goals monitoring, contractor oversight, and report preparation.

Case: 91-W-0583 *Prudence Proceeding Regarding the Operations and Management of Jamaica Water*

Commission Staff and Testifying Witness. Litigated proceeding as a result of audit to determine extent to which management inattention and inappropriate practices resulted in excessive costs to rate payers. Testified on a Staff panel to the excessive costs associated with management's inattention to sound business practices related to the design, purchase and installation of the Company customer information system.

Case: 92-W-0030 *Operational Audit of Jamaica Water Company Operations and Management*

Commission Staff. Comprehensive management audit of company operations. Responsible for work plan development, and specific topics areas including engineering, contracting, and information technology. Findings led to prudence proceeding.

Case: 92-M-0973 *Management Audit of Rochester Gas and Electric*

Commission Staff. Comprehensive management audit of company operations. Responsible for work plan development, supervision of staff and specific topics areas including purchasing and internal controls.

Case: 93-E-0918 *Operational Audit of the Demand Side Management Function at Rochester Gas and Electric*

Commission Staff. Comprehensive operational audit of the demand side management function including program planning, management and energy savings verification. Developed and supervised the implementation of the work plan.

Case: 88005 *Operational Audit of the Materials and Supply Function at National Fuel Gas*

Commission Staff. Comprehensive operational audit of the materials and supplies function including warehouse operations, inventory control and procurement. Developed and implemented the work plan for this project.

Operational Audit of the Fuel Procurement and Contracting of Long Island Lighting Company

Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on non-nuclear fuel. Provided research and data evaluation expertise to the project.

Operational Audit of the Fuel Procurement and Contracting of Consolidated Edison Company of New York

Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on non-nuclear fuel. Provided research and data evaluation expertise to the project

Case: 90007 Operational Audit of the Fuel Procurement and Contracting of Central Hudson Gas and Electric

Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on non-nuclear fuel. Provided research and data evaluation expertise to the project

Operational Audit of the Fuel Procurement and Contracting of Orange and Rockland Utilities

Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on non-nuclear fuel. Provided research and data evaluation expertise to the project

Operational Audit of the Fuel Procurement and Contracting of Rochester Gas and Electric

Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on nuclear fuel. Provided research and data evaluation expertise to the project

Case: 88-E-115 Prudence Proceeding to Investigate the Construction Costs Associated with the Homer City Coal Cleaning Plant

Commission Staff and Testifying Witness. Litigated proceeding as a result of audit to determine extent to which management inattention and inappropriate practices resulted in excessive construction charges related to the Homer City Coal Cleaning Plant. Testified on a Staff panel to the fuel price differential costs resulting from the failure of the coal cleaning plant to function as designed as well as surrebuttal testimony on the cost of a flu-gas de-sulfurization plant and ancillary equipment and facilities. Case settled with customers receiving \$125 million credit.

Case: 87003 *Operational Audit of the Homer City Coal Cleaning Plant*
Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on the construction of the Homer City Coal Cleaning Plant jointly owned by NYSEG and Penelec. Responsible for fuel and construction costs analysis, benchmarking costs and alternative methods for meeting EPA Clean air restrictions, contracting practices and report preparation.

Case: 87003 *Operational Audit of the Fuel Procurement and Contracting of New York State Electric and Gas*

Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on non-nuclear fuel. Responsible for fuel cost analysis, benchmarking costs, contracting practices and report preparation.

Case: 86007 *Operational Audit of the Field Crew Supervision and Utilization of New York State Electric and Gas Company*

Commission Staff. Comprehensive operational audit to determine effectiveness of field crew utilization and supervision. Staff examiner responsible for verifying supervisor activities, reporting, goals attainment and report preparation.

Case: 86005 *Prudence Proceeding to Investigate the Fuel Procurement and Contracting Practices at Niagara Mohawk Power Company*

Commission Staff. Litigated proceeding as a result of audit to determine extent to which management inattention and inappropriate practices resulted in excessive fuel charges to customers. Responsible for fuel cost analysis and benchmarking costs, contracting practices and testimony preparation. Case settled with customers receiving \$66 million credit.

Case: 86005 *Operational Audit of the Fuel Procurement and Contracting of Niagara Mohawk Power Company.*

Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on non-nuclear fuel. Responsible for fuel cost analysis and benchmarking costs, contracting practices and report preparation.

Case: 85001 *Operational Audit of the Research and Development Function of Consolidated Edison Company of New York*

Commission Staff. Comprehensive operational audit to determine effectiveness of ratepayer funds spent on R&D activities. Staff examiner on the project responsible for reviewing projects documentation and control, outside contracting a report preparation.