

**BEFORE THE
CORPORATION COMMISSION OF THE STATE OF OKLAHOMA**

**RESPONSIVE JOINT TESTIMONY
OF
JOHN G. ATHAS AND KATHLEEN A. KELLY
ON BEHALF OF
OKLAHOMA HOSPITAL ASSOCIATION**

MARCH 31, 2016

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CAUSE NO. PUD 201500273
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CAUSE NO. PUD 201500273

RESPONSIVE JOINT TESTIMONY

OF

JOHN G. ATHAS AND KATHY KELLY

I. QUALIFICATIONS

Q. Please state your name, position, and business address.

A. My name is John G. Athas. I am a Principal Consultant and Treasurer of Daymark Energy Advisors, Inc. My business address is One Washington Mall, Boston, Massachusetts 02108. Daymark Energy Advisors is a consultancy that has provided policy, planning, and strategic decision support services to the energy industry for over 35 years.¹

Q. Is your testimony co-sponsored for this proceeding?

A. Yes. This testimony is jointly sponsored by my colleague Kathleen A. Kelly

Q. Please state your name, position, and business address.

A. My name is Kathleen A. Kelly. I am a Principal Consultant and Vice President of Daymark Energy Advisors, Inc. My business address is also One Washington Mall, Boston, Massachusetts 02108

Q. Mr. Athas, please summarize your professional experience and qualifications.

A. I am an electric utility industry planning specialist with 30 years of experience in

¹ On November 9, 2015, La Capra Associates changed its name to Daymark Energy Advisors.

areas including rates and pricing, strategic planning, integrated resource planning, generation planning, economic and financial analysis, marketing, wholesale power market analysis and forecasting, and electric power retail marketing.

I joined Daymark Energy Advisors in 2006. I am currently a Principal Consultant at Daymark Energy Advisors. I also serve the firm in a management function as Treasurer. Since joining Daymark Energy Advisors, my work has included several aspects of revenue requirements, rate design, cost allocation, special contracts, power systems planning, generation asset valuation, resource planning, independent monitoring wind generating capacity acquisitions, and integrated resource planning.

Immediately prior to joining Daymark Energy Advisors, I worked as an independent consultant with Direct Energy developing retail electric business plans. From 2001 to 2005, I was an Associate Director of North American Electric Power at Cambridge Energy Research Associates (“CERA”). In that capacity, I was responsible for market research and analysis and forecasting of power prices for the regions of the Eastern Interconnect for the US and Canada. Prior to joining CERA, I had various planning positions at Northeast Utilities Service Company (“NU”) on behalf of corporate NU and its regulated and competitive companies from 1981 through 2000. These positions included Director of Market Pricing and Policy, responsible for the rate design and cost allocations functions. From 1987 to 1991, I was the Manager of Strategic Analysis and Long-Term Resource Planning at NU, where my responsibilities included conducting NU’s Integrated Resource Planning, the analysis of the NU utility companies’ competitive position, and various strategic

planning efforts regarding diversification leading to the acquisition of HEC, Inc., an energy service company, and the formation of Charter Oak Energy, a competitive generation affiliate of NU. As part of my generation planning experience at NU, I performed economic analysis on projects such as new generation as well as generation betterment projects. Also, during my time at NU I spent several years as part of the budget committee working to review and recommend transmission, distribution, and customer service related projects.

A copy of my resume is attached to my testimony as Exhibit OHA-1. My testimony is being offer jointly with

Q. Please summarize Daymark Energy Advisors and its business.

A. Daymark Energy Advisors provides consulting services in energy planning, market analysis, and regulatory policy in the electricity and natural gas industries. We serve clients throughout North America from our offices in Boston, Massachusetts, and Portland, Maine, providing consulting services to a broad range of organizations involved with energy markets, including public and private utilities, energy producers and traders, financial institutions and investors, consumers, regulatory agencies, and public policy and energy research organizations. Our technical skills include power market forecasting models and methods, economics, management, planning, rates and pricing, and energy procurement, and contracting. Over the past several years, our firm has been very active in electric industry planning issues, including integrated resource planning, transmission planning, and wholesale and retail market analysis, competitive bidding and procurement, and renewable energy.

Q. On whose behalf are you testifying in this proceeding?

A. The Oklahoma Hospital Association (“OHA”).

Q. Have you previously testified before this or other Commissions?

A. Yes, Mr. Athas has previously submitted written testimony before the Oklahoma Corporation Commission (“Commission”) in the following proceedings:

CAUSE NO. PUD 201500208	October 23, 2015	APPLICATION OF PUBLIC SERVICE COMPANY OF OKLAHOMA, AN OKLAHOMA CORPORATION, FOR AN ADJUSTMENT IN ITS RATES AND CHARGES AND THE ELECTRIC SERVICE RULES, REGULATIONS AND CONDITIONS OF SERVICE FOR ELECTRIC SERVICE IN THE STATE OF OKLAHOMA
CAUSE NO. PUD 201100186	February, 2012	APPLICATION OF OKLAHOMA GAS & ELECTRIC COMPANY FOR AN ORDER OF THE COMMISSION APPROVING A SPECIAL CONTRACT WITH OKLAHOMA STATE UNIVERSITY AND A WIND ENERGY PURCHASE AGREEMENT
CAUSE NO. PUD 200500516	June 27, 2007	APPLICATION OF PUBLIC SERVICE COMPANY OF OKLAHOMA FOR A DETERMINATION THAT ADDITIONAL ELECTRIC GENERATING CAPACITY WILL BE USED AND USEFUL
CAUSE NO. PUD 200600030	June 27, 2007	APPLICATION OF PUBLIC SERVICE COMPANY OF OKLAHOMA FOR A DETERMINATION THAT ADDITIONAL BASELOAD GENERATING CAPACITY WILL BE USED AND USEFUL
CAUSE NO. PUD 200700012	June 27, 2007	IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC FOR AN ORDER OF THE COMMISSION GRANTING PRE-APPROVAL TO CONSTRUCT RED ROCK GENERATING FACILITY AND AUTHORIZING A RECOVERY RIDER

A list of the dockets where I have submitted testimony is attached to my resume OHA-1.

Q. What is the purpose of your testimony in this proceeding?

A. I am testifying regarding various aspects of Oklahoma Gas & Electric (“OG&E”) proposed revenue allocation and rate design, particularly with how these subjects impact members of the OHA and all major health care providers.

Q. Are you offering joint testimony?

A. Yes, Kathleen Kelly, also of Daymark Energy Advisors, is also offering this testimony of behalf of the OHA.

Q. Ms. Kelly, please state your name, position, and business address.

A. My name is Kathleen A. Kelly. I am a Principal Consultant and Vice President of Daymark Energy Advisors.

Q. Please summarize your professional experience and qualifications.

A. I joined Daymark Energy Advisors in February 2016, after spending 18 years with Lummus Consultants International (formerly Stone & Webster Management Consultants). I joined Stone & Webster Consultants in 1997 in the Management and Market Strategies practice area with the assignment of assembling a diverse team of professionals to enhance the practice. The practice has completed assignments in numerous utility business areas including Demand Side Management (DSM), Energy Efficiency, Load Control, Business Strategy, Energy Planning, Rate and Regulatory Proceedings, Energy Market Analysis, Organizational Design and Strategy, Business Process Improvements, Asset

Acquisition Support, Industry Benchmarking and several other energy related activities. While at Lummus Consultants I sponsored testimony before the Indiana Utility Regulatory Commission and the New Jersey Board of Public Utilities on utility issues.

Prior to my career at Stone & Webster Consultants, I spent 20 years at Boston Edison Company, which is now part of Eversource Energy. My positions at Boston Edison included Director of Industry Restructuring Activities, Manager of Marketing and Rates, Manager of Demand Side Management Evaluation, Division Manager of Energy Efficiency, Division Manager of Rates, Division Manager of Forecasting as well as several other entry level and training positions. In several of these roles, I offered expert testimony on rate policy, utility planning, and DSM planning and evaluation before the MA DPU.

Q. Please summarize your professional experience and qualifications.

A. I hold an M.B.A in finance from Northeastern University and a B.S. in mathematics from the University of Massachusetts. A copy of my resume, which includes dockets where I have testified, is attached as Exhibit OHA-2.

II. THE OKLAHOMA HOSPITAL ASSOCIATION

Q. Please describe the Oklahoma Hospital Association.

A. Established in 1919, the OHA represents the interests and views of more than 135 member hospitals and health systems across the state of Oklahoma. OHA's primary objective is to promote the health and welfare of all Oklahomans by

leading and assisting its member organizations in providing high quality, safe, and valued health care services to their communities. The OHA also believes hospitals play a vital role in helping to advance the overall state of health for their patients and the public at-large. The OHA provides a variety of membership services including representation and advocacy at the state and federal national levels, educational programs, information and data analysis, patient quality and safety resources, and industry communication.

Q. Has the OHA previously been involved in OG&E rate case proceedings?

A. This is the first appearance in an OG&E general rate case, but the OHA has recently appeared in Public Service Company of Oklahoma's ("PSO") rate case, CAUSE NO. PUD 201500273, regarding rate design and cost allocation matters. In order to fulfill its health-care mission, the OHA must be conscious of the costs associated with provision of medical services and electric power is obviously a critical factor in the daily operations for the OHA members, and certain OHA members currently are customers of the OG&E.

Q. Why are electric utility rate proceedings more important to the healthcare industry today?

A. The Healthcare Industry is clearly an industry in transition. Transitions are occurring in patient rights and expectations, commercial health insurance provider regulations, the Affordable Care Act, and continued advancements in Medical and Information Technology. Healthcare facilities have unique roles in the quality of life with the public services they provide. Healthcare facilities are filled with

electricity consuming technologies to serve patients faster, better and with better patient history and knowledge. The Healthcare industry is learning by necessity in this transition. It has learned to implement change quickly, expecting the same from its vendor partners. In addition Healthcare Facilities today vary widely in size, function and location particularly in order to address patient needs effectively. Technology advancement has enabled the trend toward satellite healthcare facilities independent of or directly/indirectly part of major hospital systems. These locations are reaching more people with services that include emergency care, diagnostic testing and surgical procedures.

Q. What do the healthcare facilities need and expect from its electric utility?

A. Healthcare facilities need a utility that can transition its own business, by containing costs and modifying rates to move all classes to the preferred rate of return as quickly as possible, in order to keep pace with the healthcare industry. The Oklahoma healthcare industry needs OG&E to provide electricity that is continually cheaper, cleaner and more reliable. This would enable healthcare facilities to invest in the technologies and facilities necessary to keep pace with the transition. They need OG&E to make the simple transitions occur rapidly by containing costs and sponsoring progressive ratemaking, so that healthcare facilities can honor their primary purpose promoting the health and welfare of all Oklahomans by providing high quality, safe, and valued health care services to their communities.

III. SUMMARY COMMENTS

Q. What has OG&E proposed with regard to revenue allocation and rate design that supports customers whose business models are in transition?

A. Yes. In my review, I see where OG&E has proposed to increase the choices available to residential small general service customers by offering optional alternative rate designs. These rates can allow customers to avoid or take on risks with the opportunity to achieve a reward through lower electric bills. OG&E has proposed capitalizing on technology to offer residential demand rates in order to help send pricing signals that more closely align with the marginal cost to serve. OG&E has blended innovation with traditional cost of service study analysis to inform customer class revenue assignment. OG&E has chosen to request that their 4.9% rate increase not be applied uniformly across rate classes.

Q. Did you find that OG&E proposed enough progress in its ratemaking process?

A. No. Though OG&E recognized the need to move customer classes to more equitable rates of return, there are several elements that are either missing or insufficient to support the needs of Oklahoma's healthcare facilities.

1. OG&E has been unable to slow growth in spending, despite the expansion of its territory which has resulted in OG&E's ability to collect new additional revenue associated with the added customer base.

2. OG&E continues to propose class revenue assignments that do not represent a range of Relative Rate of Return ("RRoR") close enough to 100%, resulting in an ongoing situation where small and medium commercial accounts pay significantly more for their electricity than the cost of service study indicates is necessary.

3. OG&E does not recognize that today's customers, especially those in Healthcare services, are represented by more than one account or one meter. Rate Designs unnecessarily increase a 'customers' cost with excess customer and demand charges.

Q. What do you recommend for the Commission to adopt that represents changes or additions to OG&E's application?

A. There are two recommendations that would be beneficial to the many healthcare business and their customers in Oklahoma.

1. Institute a rider or tariff, perhaps called the Healthcare Incentive Rate Transition (HIT) rider, that would set the RRoR for healthcare facilities to 100% immediately, applying a rider “credit” to each healthcare account. The percentage rate reduction that would be realized from applying this rider would be:

- a. General Service Rates (“GS”)² – 2.6% incentive credit
- b. Power and Light (“PL”) – 1.8% incentive credit
- c. Power and Light Time-of-Use (“PL TOU”) – 4.2% incentive credit

We propose the creation of this rider enhances the ability of healthcare facilities to deliver quality accessible and affordable care to Oklahomans and more quickly advance setting the RRoR to 100% for these OG&E customers.

2. Allow adjacent, campus based, multiple Healthcare Facilities accounts (meters) with the same ownership or resident organization to be billed as one customer, i.e. with one demand that is from the coincident hourly demands and one associated customer charge.

IV. ANALYSIS OF COMPANY PROPOSALS

A. Revenue Allocation Among Rate Classes

Q. How does a utility determine whether its various rate classes (and rate schedules) are paying the cost of serving them?

A. The utility can estimate the cost of serving its various rate classes by functionalizing and classifying its costs, and then allocating them to the rate

² This would apply to all general Service Rate Schedules GS-GFB, GS-1, GS-TOU, GS-VPP, GS-CPP

classes in a way that reflects what causes the different costs. The Company's sponsored rate design results in class revenues which are then compared to allocated class costs. Typically in a rate case the costs reflect the utility's requested base costs. Revenues may also be adjusted or "normalized." This process determines the difference between revenues and costs, which is the percentage rate of return from each class. Class earnings equal to the system requested rate of return show that the class is actually paying the cost of serving it. If a class is actually paying rates in excess of the rates necessary to result in the average rate of return, that result generally indicates that its revenues are greater than its share of costs as allocated. The relative rates of return provide a great deal of information, as relatively lower achieved rates of return will require relatively higher percentage increases in order for revenues to equal costs. For example Chart 8 below shows that for the PL TOU rate class, OG&E currently recovers more revenue than the COSS would allocate, showing a 4.2% reduction should occur in order to recover the RRoR of 100% from that class, however due to the adjustments made by OG&E – the PL TOU class has been set at essentially the current revenue recovery level, thereby receiving no increase in this case but providing a RRoR of 118%.

The Company has produced a chart (Chart 8 below) that illustrates the increase or decrease in rates that a class should receive to produce a return equal to the return that the Company is requesting based on its rate request. If this metric is greater than the average percentage increase across all classes, it means that the class is

currently earning less than the average rate of return. If it is smaller than average, the class is earning a higher than average rate of return.

Q. Have you examined the Company's COSS methodology and results?

A. Yes I have, although not on an account by account in depth review.

Q. Has OG&E made any changes to the methodology in this application?

A. Yes. The changes are discussed in the testimony of David Smith. Mr. Smith describes the basic cost of service study principles applied by OG&E in this filing. The first step in the process is **Functionalization**. OG&E has changed the way certain transmission assets are functionalized. Generation Step-up Transformers and generation radial ties are assigned the same allocation as generation costs.

Q. Do you find this change to be reasonable?

A. Yes, this approach is not unusual.

Q. Are there any other changes proposed by OG&E?

A. Yes, also within Mr. Smith's testimony, OG&E adopted a change in the **Classification** of certain environmental costs and solar projects cost(s) to be demand related.

Q. Do you find this change to be reasonable?

A. No, these costs are most often associated with making investments to reduce the energy production costs. This would make it more appropriate to treat these costs

as energy related. I have not analyzed the effect of this change and at the time of this testimony I am not proposing a change in the OG&E methodology.

Q. Have you performed an assessment of OG&E's use of the Average and Excess ("A&E") methodology?

A. No. We are not asking the Commission to adopt an alternative methodology at this time.

Q. What is the output of Mr. Smith's COSS analyses?

A. The COSS analysis produces the revenue responsibility for each rate class that if used in rate design would produce equalized rate of return for all classes. We maintain that this is the ultimate target for which OG&E should assign revenue responsibility. We want OG&E to transition to these equalized rates of return as swiftly as possible, so as to avoid further unnecessary harm to the healthcare industry in Oklahoma.

Q. What are the possible responses by ratemakers to the results of allocated cost studies?

A. There are several possibilities. First, target revenues to each class can be increased (or decreased) by an amount that should result in the class paying its full costs, and only its full costs. This adjustment should result in each class paying an equal rate of return. Second, target revenues to each class can be

modified such that each class moves closer to its full costs, and thus closer to an equal rate return. In many cases, a Commission may approve or require a limited, multi-year plan to achieve such equity. Third, the results of the cost of service study may be ignored, usually as a result of becoming subordinate to the implementation of State energy or economic policies.

Q. What has OG&E chosen to do with the COSS results?

A. I will discuss this further, however, I would summarize by stating that OG&E has utilized the COSS results to guide the split of the overall revenue increases into each rate class in a way that is directionally similar to the results of the COSS. This is covered in the testimony of Bryan J. Scott in his section II. Revenue Allocation, which begins on page 15. After Mr. Scott develops the revenue deficiencies Chart 8 COSS Results (reproduced below) he goes on to explain that OG&E is proposing class revenue requirements that deviate from the COSS results in his Chart 9 Proposed Revenue Allocation (reproduced below). He discusses the restrictions on the public school rates that result in those rate classes producing RRoR's well below 100%. This is not the sole reason for the proposed revenue allocations of Chart 9. All Mr. Scott says is "Other differences are due to rounding and are within the design limits for pricing"³. However, the 'rounding' does not seem to be the major issue at all. The public school rate classes⁴ revenue that would need to be proposed to bring those rates to 100% RRoR total \$40,091,801 (column (3)). In Chart 9 the proposed revenue of these two public school rate classes totals \$33,779,047

³ Scott Testimony dated December 18, 2015 page 8 of 19 lines 6-7

⁴ PS-ND and PS-D rate classes

(column (3)). This approximately \$6.3 million difference is less than the difference between the Chart 8 and Chart 9 Proposed revenues for the PL TOU rate alone. Other rate classes are also higher in Chart 9, GS, PL, PL TOU and RS. This shows revenue assignment choices made by OG&E that are certainly more than 'rounding'. In fact when we look at the differences between the Total Proposed % Change (5) in Chart 9 and the Net Proposed % Change (5) in Chart 8 we see that the GS proposed rate increase is 2.3% higher (12.6% - 10.3%). Similarly PL is 1.8% higher and PL TOU is 4.2% higher.

These are important rate class proposals to the healthcare industry facilities in Oklahoma because it will increase the industry's ability to transition its facilities and services to provide quality accessible and affordable health care as desired by its Oklahoma patient base.

Q. Are you proposing that OG&E use the class by class proposed increases in Chart 8 (equalized class rate of return) rather than what they have proposed in this application in Chart 9?

A. While this would be fair and equitable to all the rate classes, as well as being beneficial to the healthcare industry's ability to provide quality public services, we recognize the limitation regarding the public school rate classes. We also recognize that shifting millions of dollars between rate classes to implement equalized class rate of return is something is at best dealt with by starting a transition period. We do not see OG&E proposing a transition plan toward equalized rate of return, nor have we seen that the Commission is requiring them to do so. Unfortunately, as discussed earlier, the transitions within the healthcare industry in Oklahoma are well underway.

Q. What are you proposing?

A. We believe that the OG&E customers operating and maintaining healthcare facilities need to have equalized rate of returns now. We are proposing that OG&E establish, with Commission approval, a special incentive transition rate rider, much like the specialty rate treatment given public schools and economic development opportunities.⁵ We would suggest that this rider be established so that it provides a credit to healthcare accounts of the GS, PL and PL TOU rate classes equal to the percentage that their class revenue requirements are in excess of the equalized rate of return revenue targets for these classes. This rider has a sunset provision in that

⁵ OG&E Rate Schedule EDIC – Economic Development Incentive Credit Rider

we propose it would remain in effect so long as these rate classes have revenue responsibility assignments that exceed the results of the most current COSS. We suggest this rider be named the Healthcare Incentive Transition rider, or the HIT rider

Q. Do you find that there is any reasonable basis for this request?

A. Yes, OG&E has proposed and the Commission has approved specialty rate classes, such as public schools, and incentive rate riders, such as economic development. We also believe that by proposing the rider, it eliminates a subsidizing of other rate classes that the healthcare industry has been asked to pay. This proposal does not ask for rates discounted below OG&E's own COSS.

B. Healthcare Facility Targeted Incentives

Q. One of the initial recommendations was for the Company to create a healthcare account specific rate rider. Can you elaborate?

A. Yes. We discussed above the HIT rider, or Healthcare Incentive Rate Transition. This would be set up to credit healthcare facilities monthly electric bills with amounts that would bring them back to rate levels fully supported by COSS.

Q. How would a facility or account be certified that indeed they are eligible for the rider?

A. OHA would work with OG&E to establish an application process that will certify that the state recognizes these facilities as healthcare. The licensure of healthcare facilities enables this process to be simple and effective under the definition below.

"Hospital located in this state which has been licensed as a hospital at that location pursuant to Section 1-701 et seq. of Title 63 of the Oklahoma Statutes for the diagnosis, treatment, or care of patients in order to obtain medical care, surgical care or obstetrical care."

We propose that customers would have to apply for eligibility on the HIT rider and that OG&E not be solely responsible for placing customers on the rider based upon their understanding of the facility providing healthcare services. We propose that the OHA provide evidence of the facility's certification to OG&E, and that OG&E would then initiate the application of the rider to the certified facility's bills.

Chart 8. COSS Results

Revenue Allocation - COSS Results				
(1) Customer Group	(2) Total Current Revenue	(3) Total Proposed Revenue	(4) Net Proposed Increase	(5) Net Proposed % Change
RS	\$ 851,089,149	\$ 919,908,737	\$ 68,819,589	8.1%
GS	\$ 160,706,813	\$ 177,261,617	\$ 16,554,804	10.3%
PL	\$ 275,909,489	\$ 287,514,966	\$ 11,605,477	4.2%
PL TOU	\$ 195,003,103	\$ 186,772,748	\$ (8,230,355)	-4.2%
LPL TOU	\$ 296,502,780	\$ 292,043,020	\$ (4,459,760)	-1.5%
OGP	\$ 20,766,095	\$ 17,353,984	\$ (3,412,111)	-16.4%
PS-ND	\$ 18,894,844	\$ 24,979,394	\$ 6,084,551	32.2%
PS-D	\$ 12,892,656	\$ 15,112,427	\$ 2,219,772	17.2%
MP	\$ 8,348,644	\$ 7,726,709	\$ (621,935)	-7.4%
ML	\$ 14,346,075	\$ 17,410,878	\$ 3,064,803	21.4%
OSL	\$ 20,185,811	\$ 20,982,544	\$ 796,734	3.9%
Total Retail	\$ 1,874,645,458	\$ 1,967,067,024	\$ 92,421,567	4.9%

Chart 9. Proposed Revenue Allocation

Revenue Allocation		Proposed Allocation for Rate Design					
(1) Customer Group	(2) Total Current Revenue	(3) Total Proposed Revenue	(4) Revenue Change	(5) Total Proposed % Change	(6) Proposed Rate of Return	(7) Proposed RROR	(8) Percent of Total Cost of Service
RS	\$ 851,089,149	\$ 907,276,771	\$ 66,187,623	6.6%	7.7%	95%	98.1%
GS	\$ 160,706,813	\$ 180,954,418	\$ 20,247,606	12.6%	8.6%	107%	102.7%
PL	\$ 275,909,489	\$ 292,454,643	\$ 16,545,154	6.0%	8.6%	106%	102.7%
PL TOU	\$ 195,003,103	\$ 195,003,103	\$ 0	0.0%	9.6%	118%	107.8%
LPL TOU	\$ 296,502,780	\$ 291,658,168	\$ (4,844,612)	-1.6%	8.1%	100%	99.7%
OGP	\$ 20,766,095	\$ 20,766,095	\$ 0	0.0%	15.1%	186%	135.7%
PS-ND	\$ 18,894,844	\$ 19,957,168	\$ 1,062,324	5.6%	3.6%	44%	72.4%
PS-D	\$ 12,892,656	\$ 13,821,879	\$ 929,223	7.2%	6.0%	74%	87.2%
MP	\$ 8,348,644	\$ 8,348,644	\$ 0	0.0%	10.8%	134%	114.9%
ML	\$ 14,346,075	\$ 15,846,003	\$ 1,500,928	10.5%	6.2%	65%	89.5%
OSL	\$ 20,185,811	\$ 20,982,544	\$ 796,734	3.9%	8.1%	100%	100.0%
Total Retail	\$ 1,874,645,458	\$ 1,967,067,025	\$ 92,421,567	4.9%	8.1%	100%	100.0%

Q. What other approaches would OHA like to see with regard to healthcare facilities?

A. We discussed above that the decentralization of hospital services into many satellite facilities making up a hospital system is today's reality in Oklahoma. We are also aware that in some expansions of major healthcare facilities, OG&E has chosen to provide service to the buildings on a separate meter. The electric utility industry is in transition with the very definition of customer. As electric utilities provide more varied services from its customer service and distribution functions the customers' needs and desire for services change. In some jurisdictions, it is under discussion or enacted in a limited manner that accounts (defined as meters) of similar owners, such as a government accounts, can be combined in ways that provide that the benefit of distributed generation is shared, even though that it is behind only one of a number of meters service that customer. There are instances where a hospital has two or more metered accounts serving what is essentially one healthcare facility. At this point in time OHA is not suggested combined billing of all accounts under the same ownership. OHA is seeking to have OG&E allow adjacent, campus style, multiple Healthcare Facilities accounts (meters) with the same ownership or resident organization to be billed as one customer, i.e. with one demand that is from the coincident hourly demands and one customer charge.

Q. What are your recommendations for OG&E and the Commission?

A. Our recommendations are:

1. A rider or tariff should be created that allows OG&E to earn the COSS indicated return on healthcare facilities while also improving the ability of healthcare facilities

to transition its facilities and services to provide quality accessible and affordable healthcare to Oklahomans. This Healthcare Incentive Rate Transition (HIT) rider would credit each healthcare account with a percentage rate reduction that would be realized if their rate class had a RRoR of 100%.

- a. General Service Rates (“GS”)⁶ – 2.6% incentive credit
- b. Power and Light (“PL”) – 1.8% incentive credit
- c. Power and Light Time-of-Use (“PL TOU”) – 4.2% incentive credit

2. Allow adjacent multiple Healthcare Facilities accounts (meters) with the same ownership or resident organization to be billed as one customer, i.e. with on demand that is from the coincident hourly demands and one customer charge.

Q. Does this conclude your testimony?

A. Yes.

⁶ This would apply to all general Service Rate Schedules GS-GFB, GS-1, GS-TOU, GS-VPP, GS-CPP

March 31, 2016

Exhibit OHA-1 – Resume of John G. Athas



John G. Athas

Principal Consultant and Treasurer

John Athas joined Daymark Energy Advisors (formerly La Capra Associates) in 2006, bringing nearly 30 years of diverse electric industry experience. He has substantial, hands-on skills having worked for an electric utility, a competitive retail electric services provider, a power technology manufacturer, and an energy industry consulting firm. Through extensive practical application, he has assumed leadership roles in market pricing and policy, resource planning, analysis of competitive wholesale and retail markets, financial and risk analysis, strategic planning, and contracts and transactions. With expertise in utility regulation, energy marketing and product development, energy policy, asset valuation, mergers and acquisitions, and corporate strategy, Mr. Athas has provided clients valuable insight from his unique blend of experience in strategy consulting, technical evaluations and energy market participation.

Mr. Athas holds an M.B.A. from the University of Connecticut, an M.S. in Mechanical Engineering from Rensselaer Polytechnic Institute, and a B.E. from Cooper Union.

PROFESSIONAL EXPERIENCE

Economic Development

- Developed special incentive packages of utility rate discounts and comprehensive energy efficiency investments for large customers in Business Retention and Economic Development circumstances. These packages were coordinated with and integrated into broad incentive packages developed by state and local economic development agencies.
- Provided expert testimony before the Nova Scotia Public Service Board regarding the appropriateness of special load retention tariffs for Nova Scotia Power Incorporated
- Managed NU's economic development and special contracting flexible rate tariffs in Connecticut and Massachusetts.
- Negotiated special contracts with NU's large customers in Massachusetts, Connecticut and New Hampshire.

Rates and Regulation

- Provided expert review and critique for Public Service Organization of Oklahoma's request for proposal for baseload generation in support of the Office of the Attorney General.
- Provided review and comment on the Philadelphia Electric Smart Metering Implementation Plan for the Pennsylvania Office of Consumer Advocate
- Drafted changes to proposed demand-side rules in Oklahoma for the Oklahoma Industrial Energy Consumers.
- Managed rates and cost-of-service functions for Northeast Utilities (NU).

Integrated Resource Planning

- Collaborating to review and critique the Connecticut utilities' 2010 IRP on behalf of the Connecticut Energy Advisory Board (CEAB), including extending analysis and modeling to 2030.
- Managing consultant leading IRP planning and related regulatory filings for various New England electric utilities and cooperatives, including Green Mountain Power, Washington Electric Cooperative (VT), Vermont Electric Cooperative, and Vermont Marble Power.
- Provided a critique of Public Service of Oklahoma's IRP and Oklahoma Gas & Electric Company's IRP, in response to their joint application to build a base load coal fired generating capacity, on behalf of the Oklahoma Attorney General's Office.
- Managed NU's resource planning function from the inception of Integrated Demand/Supply Planning (now IRP) through 1991.

Market Analysis

- Project manager and principal lead on analysis for Vermont Combined Heat and Power and Distributed Generation Potential Study in 2010 on behalf of Vermont's System Planning Committee.
- Provide principal leadership to the team responsible for the La Capra Associates' Electric Market Model, which is used to support the analysis for numerous client projects.
- Conducted scenario planning studies for all North America regional power markets (U.S. and Canada). Provided capacity requirements, resource adequacy assessment, and energy price outlooks.
- Conducted scenario planning studies for all North America regional power markets (U.S. and Canada). Provided capacity requirements, resource adequacy assessment, and energy price outlooks.
- Charged with the role of principal for power research and consulting for the Eastern Energy Service, providing insight into the interactions of electric and gas markets within the Eastern Interconnect.
- Led marketing, structuring and product development for Select Energy's retail energy commodity and energy services business.
- Directed market research regarding customer choice and customer satisfaction.
- Supervised market modeling activities for North America (U.S. and Canada) for Cambridge Energy Research Associates (CERA).
- Analyzed power prices and their impacts on clients in the evolving market structures for ISO New England (ISO-NE), New York Independent System Operator (NYISO) and the PJM Interconnection (PJM).
- Supported the development and marketing, while negotiating a power and energy services package to, major retail aggregations and affinity for Select Energy. This includes the largest Municipal Aggregation the Cape Light Compact for communities on Cape Cod and Martha's Vineyard.

Stakeholder Facilitation and Process

- Facilitated information exchange and consensus building between the utilities and stakeholders—for Connecticut's first IRP since the 1980s—including multiple generation owners, operators and developers; energy efficiency planners, regulatory oversight groups and public advocate organizations; environmental agency and environmental advocacy organizations, transmission owners and the regional transmission ISO; and consumers.

- In 2010, facilitated a greatly-expanded process during the subsequent Connecticut IRP to include nuclear power operators, developers, advocates and opposition groups, natural gas utilities and pipeline operators; energy security experts; and CHP developers, policymakers and commercial/industrial business.

Utility Planning

- Project Principal and Witness in the review of acquisition of generation resources in Arkansas (EAI – KGEN Hot Springs, AECC – Suez Hot Spring Plant).
- Managed strategic planning analyses for NU including the areas of competition, integrated resource planning (IRP), and utility strategic and organizational goal development.
- Representation on the Northeast Utilities Service Company Transmission & Distribution Budget and Planning Committee
- Member of the CL&P – Hartford District Storm Restoration Management Team
- Led the team responsible for analysis and presentation materials for executive planning conferences, including utility diversification into energy services and merchant generation.
- Supervised generation planning for a large utility provided economic and financial analysis of power plant construction and capital additions and determined avoided costs.
- Developed a New England market entry business plan for Direct Energy's retail business.
- Advised the management team at Cape Light Compact on the merits of forming an Electric Cooperative.

Expert Witness

- Presented expert testimony on behalf of the New Brunswick Office of Public Intervenor in the continuance of *New Brunswick EUB Matter 271 IN THE MATTER of a review of New Brunswick Power Corporation's Class Cost Allocation Study (CCAS) methodology*
- Presented expert testimony on behalf of the Nova Scotia Small Business Advocate *In the Matter [M06214] of an Application by Nova Scotia Power Inc. concerning Sales of Renewable Low Impact Electricity Generated within Nova scotia by a Retail Seller to a Retail Customer pursuant to The Electricity Act*
- Presented expert testimony on behalf of the Newfoundland & Labrador Hydro in *Docket No. P.U. 28(2013) AMENDED Newfoundland & Labrador Hydro - 2013 AMENDED General Rate Application Prudence Review*
- Presented expert testimony on behalf of the Oklahoma Hospital Association in *Cause No. PUD 21055500208 APPLICATION OF PUBLIC SERVICE COMPANY OF OKLAHOMA, AN OKLAHOMA CORPORATION, FOR AN ADJUSTMENT IN ITS RATES AND CHARGES AND THE ELECTRIC SERVICE RULES, REGULATIONS AND CONDITIONS FOR ELECTRIC SERVICE IN THE STATE OF OKLAHOMA*
- Presented expert testimony on behalf of the Nova Scotia Small Business Advocate *In the Matter [M06733] of an Application by EfficiencyOne for Approval of a Supply Agreement for Electricity Efficiency and Conservation Activities between EfficiencyOne and Nova Scotia Power Inc., the Establishment of a Final Agreement between the Parties and Approval of the 2016-2018 Demand Side Management ("DSM") Plan-E-ENSC-R-2015*
- Presented expert testimony on behalf of the Arkansas Public Service Commission (ASPC) General Staff in *Docket 14-118-U IN THE MATTER OF THE PETITION OF ENENERGY ARKANSAS, INC. REQUEST FOR APPROVAL OF THE ACQUISITION OF A GENERATING UNIT AT THE UNION POWER STATION TO SERVE ITS RETAIL CUSTOMERS*

- Presented expert testimony on behalf of the Arkansas Public Service Commission (ASPC) General Staff in *Docket 15-014-U IN THE MATTER OF THE PETITION OF ENENERGY ARKANSAS, INC. FOR A DECLARATORY ORDER REGARDING A PURCHASE POWER AGREEMENT FOR A RENEWABLE RESOURCE*
- Presented expert testimony on behalf of the New Brunswick Office of Public Intervenor in *New Brunswick EUB Matter 272 IN THE MATTER of a review of New Brunswick Power Corporation's General Rate Application*
- Presented expert testimony on behalf of the Michigan Environmental Council and the National Resources Defense Council in *Michigan 2015 GRC-U-17735 Consumers Energy Company (General Electric Rate Case)*
- Presented expert testimony on behalf of the New Brunswick Office of Public Intervenor in *New Brunswick EUB Matter 271 IN THE MATTER of a review of New Brunswick Power Corporation's Class Cost Allocation Study (CCAS) methodology*
- Presented independent expert testimony on behalf of the Manitoba Public Utilities Board in *2013/14 NFAT Proceeding NEEDS FOR AND ALTERNATIVES TO (NFAT) REVIEW OF MANITOBA HYDRO'S PROPOSAL FOR THE KEYASK AND CONAWAPA GENERATING STATIONS* (In this Proceedings the filing of reports by La Capra Associates were the basis for cross examination of Mr. Athas.)
- Presented expert testimony on behalf of the Southern Environmental Law Council in *Case No. PUE-2013-00088 Virginia Electric and Power Company's Integrated Resource Plan filing pursuant to § 56-597 et seq. of the Code of Virginia*
- Presented expert testimony on behalf of the Nova Scotia Small Business Advocate in *Matter NSPI-P-128.13 In the Matter of an Application by Nova Scotia Power Incorporated for Approval of its 2014 Annual Capital Expenditure Plan*
- Presented expert testimony on behalf of the Arkansas Public Service Commission (ASPC) General Staff in *Docket NO.13-033-U In the Matter of the Petition of the Southwestern Electric Power Company for a Declaratory Order Finding That Certain Renewable Wind Energy Purchase Agreements are Prudent, and Wind Energy Purchase Agreements are Energy Only Contracts Eligible for Cost Recovery Through the Energy Cost Recovery Rider*
- Provided expert testimony on behalf of the Small Business Advocate of Nova Scotia in *NSPI-128-13 In the Matter of an Application by Nova Scotia Power Incorporated for Approval of Capital Expenditure for 2013 for South Canoe Wind Project - CI#42127 for \$93,091,536*
- Provided expert testimony on behalf of the Small Business Advocate of Nova Scotia *NSPI-128-13 In the Matter of an Application by Nova Scotia Power Incorporated for Approval of its 2013 Annual Capital Expenditure Plan*
- Presented expert testimony on behalf of the Arkansas Public Service Commission (ASPC) General Staff in *Docket NO.12-067-U In the Matter of the Application of Oklahoma Gas and Electric Company for an Oder Approving a Temporary Surcharge to Recover the Costs of a Renewable Wind Generation Facility*
- Presented expert testimony on behalf of the Arkansas Public Service Commission (ASPC) General Staff in *Docket NO.12-038-U In the Matter of Entergy Arkansas, Inc.'s Request for approval of certain wholesale base load capacity to serve EAI customers and a proposed rider recovery mechanism for these and other capacity costs.*
- Presented expert testimony on behalf of the Citizen's Action Coalition of Indiana before the State of Indiana Utility Regulatory Commission. *In the Matter of the application of Indiana Michigan Power Company requesting from the Commission, 1) A Finding that the Life Cycle Management program for the Donald C. Cooke Nuclear Plant is Reasonable and Necessary, 2) Approving of Cost*

and Schedule, 3) Authorizing Recovery through a periodic Rate Adjustment Mechanism, 4) Granting I&M Authority to Defer Costs and 5) Grant I&M future Rate Relief as may be Necessary and Appropriate.

- Presented expert Public Service Commission regarding IRP and Existing Nuclear Capital Projects. *In the Matter of the application of Indiana Michigan Power Company for a certificate of necessity pursuant to MCL 460.6s and related accounting authorizations*
- Presented expert testimony on behalf of the Arkansas Public Service Commission (ASPC) General Staff in *Docket NO.12-012-U In the Matter of Arkansas Electric Cooperative Corporation for Approval of the Acquisition of the Hot Spring*
- Provided expert testimony on behalf of the Small Business Advocate of Nova Scotia in *Matter M04862 Application by Pacific West Commercial Corporation and NSPI for a Load Retention Rate*
- Provided expert testimony on behalf of the Small Business Advocate of Nova Scotia in *Matter M04175 Proposed Amendments to Nova Scotia Power Inc.'s Load Retention Tariff*
- Provided expert testimony on behalf of the Small Business Advocate of Nova Scotia in *Matter M04892 Main Computer Centre Upgrade*
- Presented expert testimony on behalf of the Arkansas Public Service Commission (ASPC) General Staff in *Docket NO.11-069-U In the Matter of Energy Arkansas, Inc.'s Request for Approval of the Acquisition of the Hot Spring Plant to Serve its Retail Customers*
- Presented expert testimony on behalf of the Oklahoma Attorney General before the Oklahoma Corporation Commission regarding IRP and baseload coal RFPs. (*Causes Nos. PUD 200500516, 200600030, 200700012, 2006 through 2007.*)
- Presented expert testimony before the Connecticut Department of Public Utility Control (DPUC) for Select Energy in Connecticut regarding its retail licensing application in 2000.
- Testified on customer impacts, pricing levels and utility planning during various electric industry restructuring proceedings in Connecticut and Massachusetts.
- Presented expert testimony on numerous occasions before the Connecticut DPUC regarding special contract approvals.

EMPLOYMENT HISTORY

Daymark Energy Advisors (formerly La Capra Associates, Inc.)

Principal Consultant

Managing Consultant

Boston, MA

2009 - Present

2006 - 2009

Direct Energy North America

Independent Consultant

Assignment – New England Market Entry Business Plan, Channel Management Plan Development

Stamford, CT

2005

Northeastern US Markets

Developed a business plan outlining the potential market entry for the client into the New England power market.

Cambridge Energy Research Associates

Associate Director, North American Electric Power

Eastern North American Energy Service Principal

Cambridge, MA

2001 – February 2005

Developed independent primary research on various aspects of power markets around the Eastern U.S. and Canada, primarily responsible for the Northeast and Midwest markets, including price outlooks for

energy and "full requirements" electric power. Analyzed market structure, supply/demand balances, price caps, market clearing prices, capacity markets, and generation technologies.

Northeast Utilities

Berlin, CT

Director, Retail Business Strategy - Select Energy

1997 – 2000

Managing Director, Marketing - Select Energy

Directed market strategy, market research, product development, product management, strategic alliance development, retail electric energy supply management and pricing strategy for Northeast Utilities' unregulated retail energy service company, Select Energy, formed in 1997. Managed the activities of 31 professionals, including six managers. Negotiated a major retail supply agreement with the Massachusetts Municipal Association, which resulted in participation by 120 cities and towns.

Director, Market Pricing & Policy

1995 – 1997

Directed the work in all areas of pricing for Northeast Utilities and its operating companies: CL&P, WMECo, PSNH and HWPCo, with revenues totaling over \$3 billion. Three managerial units comprised the pricing organization, Cost of Service, Rates and Special Contracts. Led the development of proposals in unbundled rates prior to the restructuring of electric utility markets in Connecticut and Massachusetts. Responsible for developing utility discount rate and energy efficiency offerings for large customers in Business Retention and Economic Development circumstances, which were coordinated and packaged into state and local economic development agencies incentive packages.

Manager, Market Analysis

1990 – 1995

Led market planning and market research functions in developing strategies to prepare NU for the competitive business environment, including sales force program training and development.

Manager, Strategic Analysis & Long Term Resource Planning

1987 – 1990

Held various positions within the Capacity Planning Department

1981 – 1987

United Technologies Corporation

Hartford, CT

Analytical Engineer – International Fuel Cells/Pratt & Whitney Aircraft

1977 – 1981

EDUCATION

University of Connecticut

Storrs, CT

Masters of Business Administration

1987

Rensselaer Polytechnic Institute – HGC

Troy, NY

M.S., Mechanical Engineering

1982

Cooper Union

New York, NY

B.E., Mechanical Engineering

1977

Elected to Pi Tau Sigma – Mechanical Engineering Honorary Fraternity

PROFESSIONAL ACHIEVEMENTS

- Recipient, **1998 Northeast Utilities Chairman's Award** for innovation in developing offerings and negotiating with large aggregation groups
- Recipient, **1996 Northeast Utilities Chairman's Award** and **1996 Retail Business Group's President's Award** for the role in leading efforts in the Retail Competition Pilot in New Hampshire
- Recipient, **Northeast Utilities 1994 Retail Business Group's President's Award** for developing and successfully implementing special utility contracting efforts
- Licensed **Professional Engineer** - State of Connecticut
- Past appointee to the **Electric Power Research Institute (EPRI)** Industrial Business Unit Council
- Participation in the Energy Committee of the Manufacturer's Alliance of Connecticut, Inc.
- Participation in various **NEPOOL** Committees
- Member of the **Association of Energy Engineers**
- Author of the paper '**Fulfilling on the Promises of Deregulation**'
- Speaking experience includes:
 - 2012, Speaker at EUCI *Resource Planning: A Practitioner's Toolkit for Current Issues*
 - U.S. Chamber Of Commerce Satellite Seminar Series on Deregulation
 - Massachusetts HEFA sponsored conference on *Organizing Energy Buying Groups*
 - INFOCAST Seminars on *Negotiating Power Contracts*
 - Interview on a nationally syndicated news show, *First Business*, on energy deregulation

Exhibit OHA-2 – Resume of Kathleen A. Kelly



Kathleen A. Kelly

Principal Consultant

Kathleen Kelly is a management consultant with wide-ranging experience in strategic planning. As a director within a major northeastern electric utility, she managed the regulatory participation and transition to a restructured market environment, and as a management consultant, she advises utility executives on business planning in an industry undergoing transformative change. Ms. Kelly is a collaborative leader, managing expert teams to address multiple and diverse client engagements with competing and earnest deadlines while providing superior client relationship management and satisfaction evidenced by a high client return engagement rate. She develops and facilitates strategic planning discussions among senior managers relative to energy planning, disruptive technologies, and long-term organizational objectives. Her extensive strategic utility experience includes enhancing organizational effectiveness and business processes as well as advising senior managers with regard to technical issues, management and operations, organizational design, and change management. Clients rely on her ability to get things done and her specific expertise in regulatory policy, strategy, and analytics, as well as technical planning and operations issues such as load forecasting, resource planning, asset management analysis, risk analysis and mitigation strategies, power procurement decision-making, technical feasibility studies, wholesale energy markets, and knowledge management. Ms. Kelly has provided expert testimony on regulatory policy, rate design, resource planning, energy forecasting, and DSM initiatives. She has an M.B.A. in Finance and a B.S. degree in Mathematics and Economics.

SELECTED PROFESSIONAL EXPERIENCE

Renewable Energy

- Provided technical, regulatory, and project management support for the development of a Request For Proposal (RFP) for 50 MW of geothermal resources on the Big Island of Hawai'i for Hawaii Electric Light Company. Managed an internal team in the development of RFP parameters; prepared filing documents for the public utility commission review process; organized and prepared responses to bidder, public, and regulator questions regarding the RFP approach and documentation; developed and organized a webinar bidder meeting to ensure that all parties had access to information; developed the bid evaluation approach and managed its implementation; and communicated with senior management relative to ultimate bidder selection and risk considerations.
- Completed a market assessment for a confidential equity investor interested in potentially acquiring a percentage of a renewable energy generation facility on the island of Hawaii. Analysis included a full description of the market realities in Hawaii, such as potentially market-altering plans to transition existing generation facilities to burn LNG and continuation of the broad adoption of distributed solar photovoltaic systems. The independent market assessment report provided, for all post-PPA years, a projection of annual weighted average energy market pricing, the potential market revenues of the asset, and the potential operational profile of the facility under a range of future market assumptions, including unit curtailment potential.
- Managed the process and development of technical content for an RFP for Hawaiian Electric on the island of O'ahu for renewable energy; the RFP would also consider off-island sources with an undersea cable. Managed the documents, including internal utility staff comments and information, filing development for the Hawai'i Public Utilities Commission, information requests from potential bidders

and interested parties, responses to information requests, and preparation and execution of an on-site bidder meeting to describe the process, need, proposal requirements, and policies of the commission.

- Provided an independent market advisory and valuation assessment for a confidential client's investigation into potential acquisition of several biomass-fueled generation resources in the New England and California power markets. Provided insight into the U.S. power industry, including specifically, the wholesale power markets and Renewable Energy Credits (RECs) markets for both of these regions, as well as the related fuel supply markets in New Hampshire and California for wood-waste biomass. Identified potential risk implications for each of the three facilities, based on the U.S. market trends and the future of REC markets.
- Worked with a cross-functional team of managers at Constellation Energy to support the development of a renewable energy strategic plan by providing technology information, regulatory and market information by state and North American regions. Facilitated strategic planning workshops developing and documenting recommended market approaches.

Procurement/Market Analysis

- Directed the competitive positioning analysis of more than 50 generation units or portfolios using industry standard economic and bid based dispatch models to develop market prices for regions and for locational pricing. For example, directed the development of a portfolio market analysis for a major investor that included more than 12 plants in eight different US markets that established competitive position of each unit, based on the forecasted market or PPA revenues, operating costs and market risks.
- Assets analyzed for potential asset transactions include electric generation, electric and gas transmission and distribution systems, steam systems, and competitive businesses such as product and service businesses or retail energy companies.
- For several confidential clients, directed cross functional teams investigating the potential profitability of acquisitions of generation assets located throughout Canada and the US. For these clients, the team developed potential revenues, identifies regulatory and market risk factors, develops mitigation strategies for these risks, prepares reports for financing support and works with diverse advisory teams to prepare documents for approval by investment boards.
- For the Tuxpan V project in Mexico, directed a review of existing market information in order to develop a market based revenue projection for the market. This review included seeking out and reviewing regulatory reports on market regulatory changes and development of IPPs, reports on market potential from a number of sources, and discussion with market participants to assess their market knowledge.
- For an independent investment firm, reviewed the power procurement plans for a new process plant in TX, providing independent recommendations for a phased in approach to acquire necessary power in a tight ERCOT market. Met with the ownership consortium to discuss the recommendations and worked with the team through the first phase.
- Worked with MA PowerOptions to assess alternative resource procurement strategies for an aggregated group of customers with more than 500 MW of electricity consumption. Evaluated the ability to offer green power solutions to its customer group as well as the opportunity to participate in equity ownership of green facilities.

- Worked with the Rhode Island League of Cities and Towns in the development and issuance of an RFP representing the load following interests of a group of 37 municipalities in Rhode Island. Directed RFP development, participated in the review of proposals and negotiations for the final award of contract. Involved with this client's competitive procurement of electricity, issuing four separate RFPs, since 1998.
- For BG Group, investigated market issues, regulatory issues, and operational plans of a portfolio of generation assets throughout the world, including India, Italy, England, the US, and Ireland in order to provide an independent critical review of the projected proformas of each asset to management.
- Advised a number of confidential clients in the assessment of opportunities, risks and financial alternatives in the consideration of an acquisition. For Tyr Energy, directed a team of experts in the development of an independent market investigation to support acquisition of assets in the MISO footprint.
- Provided generation output and revenue projections to support appraisal reports of traditional generation and renewable generation in all of the North American markets.

Strategy, Business and Energy Planning

- For Hoosier Energy Rural Electric Cooperative and for New York Power Authority, led a team that provided strategic and technical facilitation of the C-level executives as they considered short and long term opportunities for enhancement to their business model. Services included interviews with key team members to develop a slate of issues for consideration as the team developed strategy, as well as preparing issue workbooks and team meeting approaches to keep discussion and debate moving and to determine actionable plans for implementation.
- Directed the creation of an independent long term energy plan for several major utilities and customers including Long Island Power Authority, a major upper Midwestern Investor Owned Utility, Massachusetts Institute of Technology, and Massachusetts Health and Education's Facilities Authority's PowerOptions aggregated buying group. These plans incorporating new generation technology, demand response programs, energy efficiency and load reduction programs, new construction, repowering, and renewable resources. Methodologies used in these assignments utilized traditional planning methods coupled with scenario planning and the incorporation of probabilistic risk to more fully understand the impact of resource decisions and the risk of resource shortages. These approaches included an assessment of the implications for local and regional economic development and growth.
- Facilitated strategy development for a major East Coast developer interested in expanding its renewable energy resource base. For an Association of Iowa Electric Cooperatives, provided technical facilitation and policy development services to a cross section of 20 representatives of the more than forty members – resulting in the creation of positions with respect to climate change requirements. The positions and strategies included development of a wide range of approaches to legislative and regulatory policy development on global warming solutions including, in particular, energy efficiency levels and standards, demand response, renewable portfolio standards, and net metering for community resources.
- Provided a strategic plan to the Geothermal Development Corporation of Kenya in which was provided a long term market perspective on need for facilities and pricing, ability of the organization to provide the geothermal output to support project development, and identified the improvements in internal and external resources necessary to achieve production potential.

- Directed and completed a three-phase project working with the Iowa Association of Electric Cooperatives. Phase 1 involved the facilitation of a restructuring task force comprised of member cooperatives working together to strategize and formulate their joint restructuring position to be used for regulatory filings, negotiation, and discussion. Phase 2 required both facilitation and technical knowledge and focused on negotiation strategy and implementation of that strategy, resulting in the cooperative association taking a leadership role in state restructuring legislation development. Phase 3 developed and implemented an education series for cooperative managers, directors and employees to prepare for industry restructuring issues and anticipated market changes whether adopted or rejected.
- Worked with several municipal utilities and joint action power agencies in separate projects to assess the impact of competition on their operations, develop strategies for the businesses to grow, and facilitate the development of implementation plans for successful growth. Facilitated strategic planning sessions for several cooperative and municipal utilities boards to establish strategies for a competitive market framework.
- Reviewed Grid Modernization plans filed by utilities in Massachusetts for the Massachusetts Department of Energy Resources. Work involved analysis of stakeholder recommendations and development of policy positions for the Department.
- For an Association of Iowa Electric Cooperatives, provided technical facilitation and policy development services to a cross section of 20 representatives of the more than forty members – resulting in the creation of positions with respect to climate change requirements. The positions and strategies included development of a wide range of approaches to legislative and regulatory policy development on global warming solutions including, in particular, energy efficiency levels and standards, demand response, renewable portfolio standards, and net metering for community resources.

Rates and Regulation

- Directed a technical review of a proposal to implement an Accelerated Pipe Replacement Plan (APRP) by Washington Gas Light (WGL) on behalf of the DC Public Service Commission as part of a rate case submission. This review investigated other accelerated replacement programs and their objectives, evaluated filed testimony, confidential documents, data requests, industry databases and similar programs at other utilities to determine the appropriateness of WGL's proposal. Directed the drafting of Commission Staff briefings and ultimately recommended a redirection of the plan's investment to incorporate larger pipe sizes than originally proposed and to focus first on those pipes of an older vintage and located in higher populated areas first.
- For the Virgin Islands Water and Power Authority, completed an independent assessment of the avoided costs for a proposed waste technology generation facility and acted as an arbitrator for project discussions. Updated the avoided cost calculations for both electric and water as the next step in the process.
- For the Washington DC Public Service Commission, directed an assessment of the decisions relative to undergrounding the distribution assets of PEPCO. Analysis included a review of the PEPCO investigations previously completed and added to the record by corroborating the cost information and offering an independent evaluation of the decision criteria that should be considered by the Commission when reviewing such activities. The recommendation was to consider such investments only when there are sufficient infrastructure improvement activities by other utilities or companies in geographically constrained areas to result in economic investment. Although there was a significant

improvement in the reliability of the worst performing circuits, the cost of a system wide initiative would not be sufficient to justify the investment.

- Directed the development of a portfolio of DSM programs, including electric energy efficiency and demand response strategies for Northern Indiana Public Service Company (NIPSCO) for inclusion in its 2007 Integrated Resource Plan (IRP) filed with the Indiana Utility Regulatory Commission (IURC) and sponsored and provided testimony in support of the plan. Also provided a report and support to regulators and stakeholders of NIPSCO's gas efficiency programs during 2006.
- Since 2013, directs a team of internal and external consultants, serving as technical advisor to the Guam Public Utilities Commission. These numerous advisory engagements address both power and water and wastewater utilities. Recommendations on diverse technical regulatory filings included: rate and cost of service, integrated resource plans, revenue bond issuances, net metering programs, review of resource acquisition approaches, adopting energy efficiency and renewables, and whitepapers on time of use rates, feed-in-tariffs, and compressed air energy storage. Manages client relationships with both the Commission and the regulated utilities to ensure proper communication of case needs, management of information requests, development of summary memos, and development of final reports for use in Commission orders. Most recent efforts involved the development of DSM programs with the on island utility and a review of the electric utility's plans for system expansion.
- Directed and participated in efforts with Newfoundland Labrador Hydro to develop a revised cost of service and redesigned its retail and wholesale rates for several rate cases. Evaluated the potential for supporting regulatory capitalization of startup costs for a Canadian utility. Also investigated and recommended the adoption of conservation programs by its wholesale power customer, Newfoundland Power, through changes in the wholesale pricing structure.
- Advised the CEO of Vermont Electric Cooperative as they prepared to file a rate case after its organizational improvement review with regard to the appropriate framework for the rate increase request. Recommendations resulted in the adoption of a framework in which the rate increase need was demonstrated by documenting the environment in which VEC was and expected to operate, the costs that had increased or were expected to increase such as union contracts, and the risks and mitigation strategies anticipated or managed to date that had driven the need to increase rates to its members. The filing was held up as an industry standard in the state and the full increase was granted.
- Participated in the application of the FERC Seven Factor Test to distribution and transmission assets for a major Midwestern utility and advised the client on strategic issues relative to application.
- Directed rate case analysis and preparation for numerous utilities including NIPSCO, Terasen (formerly Centra Gas British Columbia) a division of Kinder Morgan, Newfoundland Labrador Hydro, Boston Edison, Centra Gas Manitoba, SLEMCO, Fayetteville Public Works, and others.
- Advised a client in the application of the FERC Seven Factor Test to distribution and transmission assets for a major Midwestern utility.
- For NIPSCO, developed a rate case educational seminar designed to provide cost of service and rate design theories, practices, and precedent to a broad audience including C-level staff, engineering contributors, legal advisors both internal and external, metering staff, customer service staff, and cost of service and rate design practitioners.
- Directed and participated in efforts with Newfoundland Labrador Hydro to develop a revised cost of service and redesigned its retail and wholesale rates for its 2003 rate case. Evaluated the potential for supporting regulatory capitalization of startup costs for a Canadian utility.

- As Pricing and Marketing Department Manager at Eversource, directed the development of cost allocation methods, retail and wholesale tariffs and filing requirements for rate cases. Successfully implemented the use of creative utility pricing tactics including economic development rates, customer retention rates, and time of use rates. Positioned the utility as the first in the region capable of regional real time pricing through negotiated model development and successful customer pilot of hourly day ahead pricing. Educated and trained corporate personnel on pricing strategy, positioning and tactics. Testified on rate policy changes as part of the Industry Restructuring investigation led by the MA DPU. Developed and implemented successful responses to competitive retention challenges with several major customers.

Policy and Planning Analysis

- A recent engagement with a utility association evaluated the potential implications of increased distributed generation adoption. Through facilitation of collaborative workshops, utility directors and managers attained a greater understanding of the potential opportunities and risks associated with distributed generation adoption and a greater coordination was developed through the forum's discussion of the issues and concerns impacting their members.
- For the Matanuska Electric Association, Provided an assessment of alternative generating facility proposals for a rural electric cooperative, by modeling the Alaska Railbelt system using optimization software that supports scenario analysis of multiple resource opportunities to fulfill need. The analysis included hourly production cost modeling of five proposals, plus consideration and impact analysis of two potential system sales options.
- Directed the development of a ten-year forecast of North American copper demand resulting from electric industry expansion in generation, transmission and distribution segments for the Copper Development Association, which is a business trade association.
- For the Edison Electric Institute, directed the design of a survey of major utilities in the US relative to the implementation of Sarbanes Oxley Regulations in their organizations. Interviewed 15 CEO's and more than 75 C-Level officers to obtain their estimate of the costs, staffing impacts, concerns, and policy changes resulting from passage of the law. Prepared and delivered a report for CEO's and for the C-level staff and EEI to provide to its membership and presented the results to EEI.
- Conducted a strategic business assessment of ownership and operations options for the First Church Christ Scientist's district cooling plant. Completed an economic and strategic assessment of the facility's operations, identified the range of possible business solutions and alternatives to current ownership and operation of facility, estimated the financial impact to institution of various alternative options, and recommended a business plan for the facility.
- Key representative for Boston Edison's electric industry restructuring plan, evaluating strategic financial, operational and customer impacts of the proposed plan and building consensus both within and outside the corporation. Participated in the team that negotiated solutions with regulators and third parties resulting in settlement of major issues. Identified the structure and resources necessary to meet the demands of the new competitive energy market. Developed strategies for business infrastructure implementation and coordinated regulatory strategy and witness preparation. Expert witness on rate design, implementation issues and customer education requirements. Company representative on industry working groups investigating and negotiating statewide restructuring issues and the public spokesperson with area trade associations, businesses and customers on industry restructuring.

Management Consulting and Strategic Planning

- Participated in business process improvements throughout career; providing independent reviews for clients and advising teams working within their own organizations to improve work flow and information security.
- For a large Generation and Transmission Cooperative, asked by the CEO to investigate and provide advice relative to concerns over the investment decision making for numerous alternative energy facilities. Team interviewed all senior staff involved in the process and developed process flows for comparison to standardized decision making and project management techniques used by the organization. Recommendations shifted corporate responsibility for investment decisions, moved responsibility for project management implementation to a completely separate team, modified the accounting process and reporting requirements, and established key performance indicators that were designed to quickly flag errant projects. The report recommended that certain projects be sold to reduce losses and that others be halted or significantly modified to reduce risk to the organization.
- For Scotia Bank, directed a business management review of a large pipe manufacturing organization to advise an investor relative to recent losses and the potential that such losses were directly related to poor business processes, management, and decision-making. Directed a team of investigators as they reviewed management reports and documentation, interviewed the president and c-level staff as well as staff throughout the organization. Visited operational facilities to observe work flow and sampled specific “client engagements” that were reviewed from sales call through order installation and commissioning and through closure of the records at the organization. The findings included a number of concerns that, if not addressed, could lead to future losses. The report offered a significant number of organizational structure modifications, personnel changes, management process improvements, communication and reporting steps enhancements, and extensive sales and product development modifications.
- Directed a team of Lummus Consultants and Hoosier Energy, REC Supply Chain professionals in the development of a new process for the organization to follow when obtaining strategic equipment and services. This required the development of a number of standard tools for the users including a SharePoint site upon which all procedures and process support documentation resided, the development of a new client outreach program in which the manager of the supply chain area would regularly interact with other managers and users to provide information about their services and to gather information for improvements, benchmarking of services internally including a dashboard summarizing - for the organization as a whole, by division and by department - the service guarantee and metrics demonstrating ability to meet the guarantee on a monthly or quarterly basis, as needed. The system was well received and had been developed with a significant level of user input.
- Directed an assessment of the process and organizational effectiveness for a major Midwestern cooperative including corporate services and plant management and operations for a 1,000 MW coal fired facility. This engagement resulted in recommendations for immediate and longer term process and organizational improvements, culture change requirements, and implementation and monitoring plans to achieve success. Since the initial assessment, directed three follow-on evaluations, intended to monitor the organization’s progress toward achieving success, and, as a result, making recommendations for improvement in implementation and for areas not originally addressed.
- Worked with Senior Management of Nova Scotia Power Company to provide advice and counsel relative to their ability to achieve productivity gains and efficiencies in the management and operations of their generation facilities. The review included management talent, standardization of processes, use of procedures, common planning and reporting, and approaches to work management and planning. Recommendations included a greater focus on asset management and an implementation

plan that would move the company forward with regard to centralized asset decisions and implications of emission control strategies on operations and asset life.

- Directed a detailed mapping of the "request for new service" business processes for New Hampshire Electric Cooperative using facilitated collaborative cross-functional teams together with one-on-one interviews to develop the numerous relate and contributory processes. This effort identified numerous risky process related activities, including duplicative databases – which increased the risk of errors in financial reporting, lack of a single process management tool to ensure that no customer was dropped mid-stream, ineffective communication across the organization, an internal focus that left customers in the dark and frustrated, and lack of closure to the process resulting in poor records management and potential for unsecure customer information. The team produced a series of process maps showing the "as is" which was used to collaboratively create the "what should be" and establish consensus approaches to implementation. This process touched nearly every area of the organization including numerous field operations departments, customer communications, accounting, financial reporting, and purchasing, planning, and senior management.
- Directed a team of professionals to review and evaluate the efficiency and effectiveness of the management and business processes of the third largest utility in Vermont, Vermont Electric Cooperative, which included working with the utility Board of Directors, senior management, utility staff, and regulators. The effort was significant in that regulators were seriously considering the need to seek new ownership or a complete new management team. The effort and intervention resulted in a turnaround that has created a new relationship with regulators. The team prepared a report providing a detailed discussion of the methodology, findings, conclusions and recommendations to improve efficiency, management, operations, communication, regulatory relationships, culture, and member relations.
- Completed a review of the distribution planning and reliability of a major Northeastern IOU which evaluated the business processes and procedures utilized to complete distribution system planning and evaluated the resulting contribution to reduced or increased reliability. These efforts also assessed the philosophy of distribution planning and reliability as well as evaluating the procedures, processes, systems, and results for reporting to the utilities regulators and audit team.
- Directed a "sales process" review for a major EPC process firm, interested in reducing the time and cost to develop a customer from lead to close. Using an interviewing approach that was typically one on one with the C-level staff and several group sessions with production organizations, her team interviewed nearly 300 contributors in two months. The process mapping identified a number of concerns: lack of standardization in the use of the process in some cases to the fact that the process was not sufficiently external facing. The nature of the process had become too internally focused using too many "gates" to control development costs resulting in poor client focus. This lack of client focus reduced the necessary attention to client needs sufficient and required to win a project. The recommendations covered a wide variety of changes: cultural focus, fear of failure and retaliation, duplication of effort, lack of clarity, focus on procedure and not clients, and over-standardization required in the process.
- Completed an evaluation of the implementation progress relative to a prior consultants' report on T&D improvements needed in the planning, construction, reporting, and IT areas of a Canadian Crown Corporation.
- Directed the review and comparison to market of the salary structure of an East Coast Water Utility.
- Worked with a major west coast water utility to identify cost reduction opportunities and provided regulatory strategy on cost of service issues.

Expert Testimony

<u>Forum</u>	<u>On Behalf of:</u>	<u>Topic</u>
Indiana Utility Regulatory Commission	Indiana & Michigan (I&M)	I&M DSM Plans, Incentive Structure and Cost Recovery, and Speed of Program Adoption, Cause No. 43306, October 2008
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company (NIPSCO)	DSM Cost Recovery and Incentive Proposal, Cause No. 43618 December, 2008
Massachusetts Department of Public Utilities	Eversource (formerly Boston Edison Company)	Review of Boston Edison's Electric Restructuring Plan, Testimony on Rate Plan, D.P.U. 96-23, 1996 - 1997
New Jersey Board of Public Utilities	New Jersey Board of Public Utilities Audit Staff	Investigated and audited utilities electric restructuring. Provided testimony regarding findings and recommendations for improvement. Rockland Electric Company, Restructuring Plan Aspects, Docket No. EA97060398
Massachusetts Department of Public Utilities	Eversource (formerly Boston Edison Company)	Investigation into Industry Restructuring, Testified and Participated in Technical Sessions on Policies, Issues and Rate Design including Real Time Pricing, D.P.U. 95-30, 1995 -1997.
Massachusetts Department of Public Utilities	Eversource (formerly Boston Edison Company)	Testified in support of DSM Budgets, DSM Cost Recovery and Incentive Plan, DSM Monitoring and Evaluation Plan, D.P.U. 90-335, 1990-1992.
Massachusetts Department of Public Utilities	Eversource (formerly Boston Edison Company)	Testified in D.P.U. 89-100 in Support of Rate Changes, 1989 - 1990
Massachusetts Department of Public Utilities	Eversource (formerly Boston Edison Company)	Periodic testimony relative to DSM implementation plans, evaluation results and cost recovery projections and reconciliations. 1985 - 1994
Massachusetts Energy Facilities Siting Council	Eversource (formerly Boston Edison Company)	Periodic testimony to support long term energy and demand forecasts. 1979 – 1984

EMPLOYMENT HISTORY

Daymark Energy Advisors Inc. (formerly La Capra Associates) <i>Principal Consultant</i>	Boston, MA February 2016 – Present
Lummus Consultants International, Inc. (formerly Stone & Webster Management Consultants) <i>Director and Practice Lead, Utility and Strategy Practice (March 2001 – 2015)</i> <i>Executive Consultant (March 1997 – February 2001)</i>	Boston, MA 1997 – 2015
Boston Edison Company (currently Eversource) <i>Director, Regulation and Restructuring</i> <i>Rates and Marketing Manager</i> <i>Manager of DSM Evaluation</i> <i>Manager of DSM Planning</i> <i>Division Manager of Rate Design</i> <i>Division Manager of Demand and Revenue Forecasting</i> <i>Forecasting Analyst, Senior Analyst</i>	Boston, MA 1994 – 1997 1991 – 1994 1987 – 1991 1985 – 1987 1983 – 1985 1979 – 1983 1977 – 1979

EDUCATION

Northeastern University <i>M.B.A., Finance</i>	Boston, MA 1987
University of Massachusetts <i>B.S., Mathematics</i> <i>A.B., Economics (Summa Cum Laude)</i>	Boston, MA 1976 1989

PROFESSIONAL TRAINING & SKILLS

Proficient in MS Office and knowledgeable in energy market simulation modeling programs.

PUBLICATIONS, PRESENTATIONS & CONFERENCES

Renewable Energy – Innovative Approaches to a Win-Win Renewable Solution, Paper presented at Renewable Energy World, December 2014.

Energy Efficiency – Providing Equivalent Incentives to Utilities, Presented to the RKS Research & Consulting Energy Efficiency Seminar, Dallas TX, March 2008.

Organizational Improvement – Strategies and Tactics, Presented to the CEO Conference, National Rural Electric Cooperative Association, Phoenix, AZ, January, 2006.

Cooperative Restructuring Issues, Paper presented at the 10th National Energy Services Conference, Tucson, AZ, December, 1999.

Issues and Trends in Pricing, Professional Pricing Society, Annual Conference, Chicago, IL, October 1995.

Selling Evaluation, Sixth International Energy Program Evaluation Conference, August 1993. Published.

A Brief History of a Measurement and Evaluation Department: Boston Edison Company, Edison Times, IRP Quarterly, April 1993.

Competition in the Energy Markets and its Impact on IRP, National Association of Regulatory Utility Commissioners (NARUC), May 1993.

Managing Evaluations, ACEEE Summer Study Program 1992. Published.

Several Industry Restructuring speaking engagements.

Several DSM speaking invitations, 1985 - 1994.

Several Forecasting speaking invitations, 1980 - 1984.

Numerous publications on such subjects as Demand Planning Process, Conservation and Load Management, DSM Monitoring, Evaluation, Forecasting, and Business Planning.