



John G. Athas

Principal Consultant and Vice President

John provides clients with valuable insights and strategic perspective based on his diverse electric industry experience on matters including utility resource planning, energy efficiency program design, utility ratemaking, and competitive markets. John has appeared as an expert before U.S. state and Canadian provincial regulatory agencies.

SELECTED 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.

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.
- Provided expert testimony on behalf of the Georgia Public Service Commission regarding the Georgia Power's Renewable Cost Benefit analysis and its incorporation into their IRP.
- Provided an Independent Expert Consultant review and testimony for the Manitoba Public Utility Board in their review of Efficiency Manitoba's three-year energy efficiency plan review proceeding
- Provided an Independent Expert Consultant review and testimony for the Manitoba Public Utility Board in their NFAT review of Manitoba Hydro's proposal to invest \$20 billion in the development of 2000 MW of new hydroelectric generation facilities
- Provided review of IRP of Dominion – Virginia's Integrated Resource Plan and analysis for the Southern Environmental Law Center
- Provided review of IRP of Duke Power – Carolinas' Integrated Resource Plan and analysis for the Southern Environmental Law Center

- 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

- Directed a scenarios-based market outlook of energy prices and carbon composition of the ISO-NE energy market for Yale University in support of the sustainability and decarbonization planning activities
- 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 Daymark Energy Advisors' 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.

Rates and Regulation

- Provided expert testimony on behalf of the New York Utility Intervention Unit (UIU) concerning Con Edison Rate Design issues
- Provided Expert Testimony on behalf of the Rhode Island Division of Public Utilities and Carriers regarding National Grid Rate Design
- Provided expert testimony on behalf of the Nova Scotia Small Business Advocate regarding Nova Scotia Power Inc. proposed tariffs and regulations concerning Sales of Renewable Low Impact Electricity Generated within Nova Scotia by a Retail Seller to a Retail Customer, and the Special Tariff – Extra Large Industrial Active Direct Control, Shore Power Rates and Automated Metering Infrastructure, AMI, investment proposed by Nova Scotia Power.
- Provided Expert Testimony regarding utility Automated Metering Infrastructure, AMI, investment proposed by Entergy Arkansas on behalf of the APSC General Staff.
- Serves as Primary Advisor to the Manitoba Public Utility Board in their Cost of Service Methodology review proceeding
- Provided expert testimony on behalf of the New Brunswick Public Intervenor regarding Cost of Service methodologies for New Brunswick Power
- 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).

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

- Provided Expert Testimony on behalf of Newfoundland and Labrador Power regarding issues surrounding their generation outage during a general rate case
- 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.

- Project Principal and Witness in the review of acquisition of generation resources in Arkansas (EAI –KGEN Hot Springs, AECC – Suez Hot Spring Plant), as well as several utility acquisitions utilizing RFPs for solar photovoltaic of wind turbine generation capacity via power purchase agreements and own and operation of facilities.
- Directed analysis of analysis of costs and benefits on behalf of Green Mountain Power in their renegotiation of a large import power contract with Hydro- Quebec
- Directed an analysis of the energy cost impact to Vermont of the retirement of Vermont Yankee nuclear facility
- Directed the development of a proposal to sell the existing Oklahoma Cogeneration Facility to OG&E through their RFP, including performing competitive analysis
- 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.

EMPLOYMENT HISTORY

Daymark Energy Advisors, Inc.	Worcester, MA
<i>Vice President & Principal Consultant</i>	<i>2016–Present</i>
<i>Treasurer & Princiapal Consultant</i>	<i>2009-2016</i>
<i>Managing Consultant</i>	<i>2006–2009</i>
Direct Energy North America	Stamford, CT
<i>Independent Consultant</i>	<i>2005</i>
<i>Assignment – New England Market Entry Business Plan, Channel Management Plan Development</i>	

Cambridge Energy Research Associates

Cambridge, MA

Associate Director, North American Electric Power

2001 – 2005

Eastern North American Energy Service Principal

2001 – 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 <i>Master of Business Administration</i>	Storrs, CT 1987
Rensselaer Polytechnic Institute – HGC <i>M.S., Mechanical Engineering</i>	Troy, NY 1982
Cooper Union <i>B.E., Mechanical Engineering</i> <i>Elected to Pi Tau Sigma – Mechanical Engineering Honorary Fraternity</i>	New York, NY 1977

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

LICENSES, TESTIMONY & PRESENTATIONS

Licenses

Licensed Professional Engineer in the State of Connecticut

Expert Testimony

FORUM	ON BEHALF OF	MATTER
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Public Utilities Act, R.S.N.S. 1989, c.380, as amended Application by NS Power for approval of the 2023 Annual Capital Expenditure Plan Matter No. M10366
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	In the Matter of the Application of Southwestern Electric Power Company for approval of a general change in Rates and Tariffs December, 2021 re: retirement of Coal Generating Capacity
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Application of the NSPML Maritime Link Project Capital Cost and 2022 Assessment Approval Application

FORUM	ON BEHALF OF	MATTER
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	In the Matter of the Petition of Entergy Arkansas LLC for Approval of Financing Structure(s) to Acquire a Renewable Resource and for All Other Related Approvals May. 2021
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Application by Nova Scotia Power Inc. (NSPI) for amendments to the Wholesale Market Backup/Top-up Service Tariff December, 2020
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Application by Nova Scotia Power Inc. (NSPI) for approval for the 2021 Annually Adjusted Rates (AAR's) Matter No. M09898. January 2021.
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Formula Rate Plan Filings of Oklahoma Gas & Electric Company Pursuant to APSC Docket No. 16-052-U Docket No. 18-046-FR
Manitoba Public Utilities Board	Independent Expert Consultant for the Manitoba Public Utilities Board	Efficiency Manitoba's Three-year Energy Efficiency Plan (2020/2021 - 2022/2023) Application
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Application of Southwestern Electric Power Company for Approval to Acquire Winds Generating Facilities Pursuant to the Arkansas Clean Energy Development Act Docket No. 19-035-U
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Matter No.09420 IN THE MATTER OF an Application by Nova Scotia Power (NS Power) for approval of an Extra Large Industrial Active Demand Control Tariff (ELIADC)
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Matter No.09277 IN THE MATTER OF THE NSPML Interim Assessment Application
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Public Utilities Act, R.S.N.S. 1989, c.380, as amended Application by EfficiencyOne for approval of the 2020-2022 DSM Plan
Georgia Public Service Commission	Georgia Public Service Commission Public Interest Advocacy Staff	Georgia Power Company's 2019 Integrated Resource Plan and Application for Certification of Capacity from Scherer Unit 3 and Plant Goat Rock Units 9-12 and Application for Decertification of Plant Hammond Unit 1-4, Plant Macintosh Unit 1, Plant Estatoah Unit 1, Plant Langdale Units 5-6, and Plant Riverview Units 1-2 Docket No. 42310
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Application of the Empire District Electric Company for approval Holding Company Interests in Renewable Wind Generation Facilities Docket No. 18-029-U
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Public Utilities Act, R.S.N.S. 1989, c.380, as amended Application by NS Power for approval of the 2019 Annual Capital Expenditure Plan Matter No. M08984

FORUM	ON BEHALF OF	MATTER
Rhode Island Public Utilities Commission	Division of Public Utilities and Carriers	The Narragansett Electric Company d/b/a National Grid investigation as to the propriety of proposed tariff changes Docket No. 4770
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Application of the Empire District Electric Company for approval of its Customer Savings Plan, which addressed the acquisition of wind generation assets and a coal generating unit retirement Docket No. 17-061-U
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Application of Southwestern Electric Power Company for approval to acquire a wind generating facility and to construct a dedicated generation tie line Docket 17-038-U
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Public Utilities Act, R.S.N.S. 1989, c.380, as amended CI 47124 – NS Power Advanced Metering Infrastructure Project Application Matter No. M08349
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Public Utilities Act, R.S.N.S. 1989, c.380, as amended CI 29807 - Tusket Falls Main Dam Refurbishment Project Matter No. M08162
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Entergy Arkansas, Inc. application for an order finding the deployment of advanced metering infrastructure to be in the public interest and exempt from certain application rules Docket 16-060-U
Oklahoma Corporation Commission	Oklahoma Hospital Association	Application of Oklahoma Gas & Electric, for an order from the Commission to modify its rates, charges, and tariffs for retail electric service in Oklahoma Cause No. PUD 201500273
New Brunswick Energy and Utilities Board	New Brunswick Public Intervener	Review of New Brunswick Power Corporation's Class Cost Allocation Study (CCAS) methodology Matter 271
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	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 Matter No. M06214
Newfoundland and Labrador Board of Commissioners of Public Utilities	Newfoundland & Labrador Hydro	2013 AMENDED General Rate Application Prudence Review Docket No. P.U. 28(2013)
Oklahoma Corporation Commission	Oklahoma Hospital Association	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 Cause No. PUD 201500208

FORUM	ON BEHALF OF	MATTER
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	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 Matter No. M06733
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Petition of Entergy Arkansas, Inc. requesting approval of the acquisition of a generating unit at the Union Power Station to serve its retail customers Docket 14-118-U
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Petition of Entergy Arkansas, Inc. for a declaratory order regarding a purchase power agreement for a renewable resource Docket 15-014-U
New Brunswick Energy and Utilities Board	New Brunswick Public Intervener	Review of New Brunswick Power Corporation's General Rate Application Matter 272
Michigan Public Service Commission	Michigan Environmental Council National Resources Defense Council	Consumers Energy Company general electric rate case GRC-U-17735. April 2015.
Manitoba Public Utilities Board	Independent Expert Consultant for the Manitoba Public Utilities Board	Needs for and alternatives to (NFAT) review of Manitoba Hydro's proposal for the Keeyask and Conawapa generating stations (2013/14). In this proceeding, the filing of reports by Daymark Energy Advisors were the basis for cross examination of Mr. Athas.
Commonwealth of Virginia, State Corporation Commission	Southern Environmental Law Center	Virginia Electric and Power Company's integrated resource plan filing pursuant to § 56-597 et seq. of the Code of Virginia Case No. PUE-2013-00088
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Application by Nova Scotia Power Incorporated for approval of its 2014 Annual Capital Expenditure Plan Matter No. M05994
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	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 Docket No.13-033-U
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Application by Nova Scotia Power Incorporated for approval of capital expenditures for 2013 for the South Canoe Wind Project - CI#42127 for \$93,091,536 Matter No. M05416

FORUM	ON BEHALF OF	MATTER
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Application by Nova Scotia Power Incorporated for approval of its 2013 Annual Capital Expenditure Plan Matter No. M05339
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Application of Oklahoma Gas & Electric Company for an order approving a temporary surcharge to recover the costs of a renewable wind generation facility Docket No. 12-067-U
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Entergy Arkansas, Inc.'s request for approval of certain wholesale base load capacity to serve Entergy Arkansas customers and a proposed rider recovery mechanism for these and other capacity costs Docket No. 12-038-U
Indiana Utility Regulatory Commission	Citizen's Action Coalition of Indiana	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) granting I&M future rate relief as may be necessary and appropriate Cause No. 44182
Michigan Public Service Commission	Michigan Environmental Council	Indiana Michigan Power Company application for a certificate of necessity pursuant to MCL 460.6s and related accounting authorizations Docket No. U-17026
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Arkansas Electric Cooperative Corporation's request for approval of the acquisition of the Hot Spring Generating Facility near Malvern, Arkansas Docket No. 12-012-U
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Application by Pacific West Commercial Corporation and NSPI for a load retention rate Matter No. M04862
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Proposed amendments to Nova Scotia Power Inc.'s load retention tariff Matter No. M04175
Nova Scotia Utility and Review Board	Nova Scotia Small Business Advocate	Nova Scotia Power Incorporated's Main Computer Centre Upgrade, Capital Work Order CI# 40314 Matter No. M04892
Arkansas Public Service Commission	Arkansas Public Service Commission General Staff	Entergy Arkansas, Inc.'s request for approval of the acquisition of the Hot Spring Plant to serve its retail customers Docket No. 11-069-U
Oklahoma Corporation Commission	Oklahoma Attorney General	Integrated resource planning and baseload coal requests for proposals in 2006 through 2007 Causes Nos. PUD 200500516, 200600030, 200700012

FORUM	ON BEHALF OF	MATTER
Connecticut Department of Public Utility Control (DPUC)	Select Energy	Retail licensing application in 2000
Connecticut Department of Public Utility Control (DPUC) Massachusetts Department of Public Utilities	Northeast Utilities	Several electric industry restructuring proceedings, providing testimony on customer impacts, pricing levels and utility planning
Connecticut Department of Public Utility Control (DPUC)	Northeast Utilities	Several requests for approval of special contracts
Connecticut Department of Public Utility Control (DPUC)	Northeast Utilities	Part of the Connecticut Natural Gas 1991 Rate Application regarding the compatibility of the company's proposal for a natural gas fired chiller promotion program on the basis that it was equivalent to electric utility energy efficiency programs

Invited Speaker, Papers & Conference Presentations

- *Fulfilling on the Promises of Deregulation*, paper published in 1999 on the Select Energy website and presented at the Utility Restructuring Conference in New York City.
- *A Practitioner's Toolkit for Current Issues*, presented at EUCI's Resource Planning Conference in 2012.
- Presented at the U.S. Chamber of Commerce's *Satellite Seminar Series* on deregulation
- Presented at the Massachusetts HEFA-sponsored conference on organizing energy buying groups
- Presented at multiple INFOCAST seminars on negotiating power contracts
- Interviewed on a nationally syndicated news show, *First Business*, on energy deregulation



Douglas A. Smith

Vice President and Principal Consultant

Doug provides clients with strategic insights and customized analysis of the impacts of market dynamics and policy choices on infrastructure development. He advises project developers, utilities, and regulators who are navigating through new business opportunities and market environments. He has extensive experience forecasting wholesale electricity prices, leading market and power system analyses, and directing integrated resource planning processes and evaluations. He manages our team's financial operations and serves as our Treasurer.

SELECTED PROFESSIONAL EXPERIENCE

Wholesale Market Analytics

- For Central Maine Power, led a team that provided analysis, advisory services and testimony in support of the New England Clean Energy Connect (NECEC); provided market analytical modeling and analysis to assess cost implications, benefits, and risks to customer and the client; led presentations of results to internal and external parties. The effort led to filed reports to the Federal Energy Regulatory Commission and Maine Public Utilities Commission as well as multiple rounds of oral and written testimony.
- For Central Maine Power, managed the analysis of a combined proposal for wind energy and transmission in northern New England; assisted team members in understanding the impacts of various quantities of wind energy and the respective transmission needed to deliver wind energy and crafted scenario analysis to quantify the range of potential benefits, all of which resulted in two public reports as components of responses to the 2016 Clean Energy RFP by Massachusetts, Connecticut and Rhode Island.
- For NRG Energy Inc, analyzed the regional benefits related to the proposed Canal 3 peaker plant; advised and managed the Daymark team regarding emissions impact scenarios, with the plant operating as either an energy unit or a reserve unit; investigated state emissions policies and their potential impact on plant operations.
- For a confidential client, led the creation of a proof of concept model of the Southern Company balancing authority and surrounding areas, including benchmarking to available public data and forecasting of potential future capacity expansion outcomes.

Market Analysis

Decision Modeling

- As an input to several economic studies for NYSERDA, provided review and critical analysis of a third-party, long-term forecast of growth and pricing in New York's energy and capacity markets.
- Managed the review of a large generation owner's internal electric market price forecasting process relied upon to evaluate business decisions; provided recommendations for 1) process improvements designed to more-closely align forecasting efforts to better address internal requirements, 2) updated and extended the client's New York modeling capabilities using the

AURORA production cost model, and 3) recommended key benchmarking tools that should be utilized to evaluate specific forecasting results.

- Analyzed budgetary and other cost-related data on behalf of the National Railroad Passenger Corporation (Amtrak); interacted with the client on a monthly basis to provide analysis of power cost drivers, track monthly power costs, and deliver other accounting and electric consulting services; provides assistance in periodic power procurement activities.

Non-Transmission Alternative Assessments

- Assisted in evaluating non-transmission alternatives (NTAs) as compared to a set of proposed transmission upgrades in Vermont; assisted in the development of an economic scorecard designed to facilitate the comparison of transmission and non-transmission solutions on equal footing and compared potential rate impacts of the proposed solutions.
- Assisted in evaluating non-transmission alternatives (NTAs) as compared to a set of proposed transmission upgrades in Maine; evaluated the economics of transmission and non-transmission solutions and leveraged market simulation models to estimate the impact of solutions on energy clearing prices in Maine and in New England.
- On behalf of Vermont-based utility, developed and analyzed non-transmission alternatives (NTAs) to a set of proposed transmission upgrades that would impact the distribution-level supply system; developed an economic tool to evaluate the cost of operating “pre-contingency” generation options

Strategy & Decision Making

- Leads a team providing transmission planning and development advisory and analytical services to a confidential developer. Work spans multiple regions and involves consideration of multiple projects, alternatives and integration with potential renewable generation developers.
- For multiple confidential developers, leads teams to provide electric market analytical modeling and analysis supporting the development of multiple bids into a state procurement process seeking renewable generation. Team’s efforts resulted in reports detailing the economic benefits to the region of several separate portfolios of generating assets.
- For the Interconnection Rights Holders (IRH) Management Committee (IMC) of an HVDC transmission facility between HQ and ISO-NE, led a team to prepare a cost-benefits study to assess the merits of extending the agreement for a period of up to twenty years. The purpose of the study was to measure both ratepayer and shareholder impacts by isolating the net benefits that would potentially accrue to the contract holders. Project resulted in a comprehensive report documenting the cost and benefit analysis approach, assumptions and results and conclusions.
- For the Southern Environmental Law Center (SELC), led a team that reviewed the Integrated Resource Planning (IRP) performed by Duke Energy Carolinas and Duke Energy Progress and identified, modeled and compiled results of alternative resource plans that illustrated the benefits of a more aggressive renewable generation focus. Result was a report relied on by SELC in the formation of testimony in the docket.
- For a confidential developer, led a team that produced an offshore wind siting feasibility study related to a potential investment in offshore leasing. Investigated the project’s interconnection and market risks and opportunities.

Due Diligence and Project Review

Asset Valuation'

- For a confidential client, led a valuation of storage as a transmission asset designed to enhance transfer capability. Advised on potential operational outcomes and method for valuing impact on regional energy and capacity markets.
- For a confidential client, led a valuation of a hydropower asset in consideration of a potential sale. Evaluated the asset considering multiple potential ownership structures and reported the range of valuation.
- For Calpine Corporation, led a team that assessed the financial condition and cashflows of several nuclear plants located in New Jersey, Ohio, and Pennsylvania in light of the stranded cost payments determined at the time of the initial stranded cost determinations in 1999 and 2001 and compared them to the financial conditions as estimated based on actual market outcomes.
- For multiple clients, advised on and assisted with the creation of financial models of natural gas and hydro-electric facilities for tax valuation.

Independent Evaluator

- For the Maryland Office of Peoples' Counsel (MD OPC), provided advisory evaluation services regarding a certificate of public convenience and necessity related to a proposed competitive transmission project in Maryland. Assisted the MD OPC through review of the regulatory record and consideration of potential testimony options. Resulted in multiple rounds of written and oral testimony outlining the results of the review and potential alternative approaches to the transmission solution identified.
- For the Arkansas Public Service Commission Staff, led the review of a utility's proposal to use a tax equity partner in the acquisition of wind power plants. Analyzed the risks and benefits of the proposal to utility customers and reviewed potential alternative financing options. The analysis led to the provision of written testimony before the Arkansas Public Service Commission.
- Served as an Independent Expert Consultant to the Manitoba Public Utilities Board to provide an independent expert opinion of Manitoba Hydro's export revenue forecast as part of the utility's 2017/18 & 2018/19 General Rate Application (GRA). Directed the review of Manitoba Hydro's long-term market price forecast, its projection of surplus energy, existing contracts, the markets fundamentals, and a comprehensive review of the economics and decision-making behind one particular power sale and transmission construction project. This accuracy and reasonableness review culminated in public and confidential independent expert reports and oral testimony that together were key inputs to regulators' consideration of the utility's rate increase request.
- Assisted in the assessment of a request to the Arkansas Public Service Commission for a declaratory order; the request sought a finding that installation of environmental controls at the Flint Creek power plant was in the public interest.
- For the Michigan Public Service Commission, assisted in planning, managing, and performing an audit of actual and hypothetical purchased power costs for a Michigan utility; issues included 1) market valuation of potential sales, 2) proper treatment of a pumped storage unit, and 3) validation of commitment/dispatch logic. This project also involved a business process audit and review of large volumes of data involved in determining hypothetical system costs.

Due Diligence

- Managed a team to advise a confidential transmission developer's business development team regarding a bid into a regional request for proposal. The work included advising the client on various financial and transmission tariff related matters to ensure the client could properly account for regulated transmission requirements when bidding into a competitive solicitation.
- Provided advisory services to a confidential distribution utility regarding a regional transmission constraint and potential solutions to that constraint. Designed key aspects of the benefit-cost screening tools used to evaluate the options identified. Advised the client on use of the screening tools and considerations important to their review of potential solutions. The effort resulted in utility action to champion support for several transmission upgrade projects.
- For a confidential developer, led multiple investigations into potential competitive bid requests for proposal to assess client's likely competitive position relative to the market. This effort included assessment of RFP conditions, potential solutions, cost evaluation, evaluation of net benefits and advising on potential competition. Outcome of each effort was a bid / no bid decision in part based on the overall team recommendation.

EMPLOYMENT HISTORY

Daymark Energy Advisors, Inc.	Worcester, MA
<i>Principal Consultant</i>	2021 – Present
<i>Treasurer</i>	2016 – Present
<i>Managing Consultant</i>	2017 – 2021
<i>Various Consulting Positions</i>	2004 – 2017
The Sports Authority	Ft. Lauderdale, FL
<i>Senior POS/EDP Programmer/Analyst</i>	2002 – 2004
SHL USA Inc.	Boulder, CO
<i>Software Engineer</i>	2000 – 2001
Strategic Technologies Group	Boulder, CO
<i>Senior Consultant</i>	1995 – 2000

EDUCATION

Syracuse University	Syracuse, NY
<i>B.S., Accounting, Summa Cum Laude</i>	1991

PUBLICATIONS & TESTIMONY

Publications

Independent Expert Consultant Report: SaskPower Contract-Economic Review; Confidential Report prepared for the Manitoba Public Utilities Board regarding Manitoba Hydro's 20-year power contract with SaskPower and associated transmission, December 15, 2017. Contributing Author.

Independent Expert Consultant Report: Export Pricing and Revenues Review; Confidential Report prepared for the Manitoba Public Utilities Board regarding Manitoba Hydro's 20-year forecast of its export revenues submitted in its 2017/18 and 2018/19 General Rate Application, November 16, 2017. Contributing Author.

MCPC Project Benefits; Quantitative and Qualitative Benefits, Confidential Report prepared for Central Maine Power regarding the benefits of the Maine Clean Power Connection, a 345-kV transmission expansion accompanied by 1100 MW of wind energy project development offered in the Massachusetts RFP for Clean Energy Resources, July 27, 2017. Contributing Author.

NECEC Project Benefits; Quantitative and Qualitative Benefits, Confidential Report prepared for Central Maine Power and H.Q. Energy Services regarding the benefits of the New England Clean Energy Connection, 1200 MW HVDC transmission expansion accompanied by 1090 MW of hydropower and wind energy project development offered in the Massachusetts RFP for Clean Energy Resources, July 27, 2017. Contributing Author.

MREI Project Benefits; Direct, Indirect, Qualitative and Other Benefits, prepared for Central Maine Power Company and Emera Maine regarding the benefits of the Maine Renewable Energy Initiative, a 345 kV transmission expansion accompanied by 1200 MW of wind energy project development, January 28, 2016. Contributing Author.

MCPC Project Benefits; Direct, Indirect, Qualitative and Other Benefits", prepared for Central Maine Power Company regarding the benefits of the Maine Clean Power Connection, a 345-kV transmission expansion accompanied by nearly 600 MW of wind energy project development, January 28, 2016. Contributing Author.

Maine Power Connection: Analysis of Benefits in Maine and New England, Report for Central Maine Power. September 5, 2014. Contributing Author.

Expert Testimony

FORUM	ON BEHALF OF	MATTER
The Maryland Public Service Commission	The Maryland Office of Consumer Advocates	Prefiled Direct and Surrebuttal testimony and expert witnessing regarding the Application of Transource Maryland, LLC for a CPCN to construct new transmission lines in Maryland. Testimony related to proposed settlement and stipulation and addressed applicant's forecasted economic impacts of proposed transmission. Docket No. 9471. April 2019, May 2019, June 2019, December 2019, February 2020
The Arkansas Public Service Commission	The General Staff of the Arkansas Public Service Commission	Application of the Empire District Electric Company for Approval to Acquire Renewable Wind Generation Facilities and to Establish a Regulatory Asset. Testimony addressed reasonableness of applicant's proposal to use tax equity financing. Docket No. 17-61-U. February 2018
The Arkansas Public Service Commission	The General Staff of the Arkansas Public Service Commission	Application of the Empire District Electric Company for Approval to Acquire Renewable Wind Generation Facilities and to Establish a Regulatory Asset. Testimony addressed reasonableness of applicant's proposal to use tax equity financing. Docket No. 17-61-U. February 2018
The Public Utilities Board of Manitoba	Daymark Energy Advisors <i>(independent expert consultant, under contract to the Public Utilities Board)</i>	Manitoba Hydro 2017/18 & 2018/19 General Rate Application - independent expert for the review of specific issues regarding Manitoba Hydro's forecast of export revenues and review of MH power contracts. Testimony addressed reasonableness of forecast methods and results. January 2018
Maine Public Utilities Commission	Central Maine Power	Witness in support of CMP's request for approval of a certificate of finding of public convenience and necessity for the New England Clean Energy Connect construction of a 1,200 MW HVDC transmission line from the Quebec-Maine border to Lewiston, Maine. Testimony addressed the economic benefits associated with interregional transmission connection and associated clean energy development benefits. Docket No. 2017-00232. December 2017, April 2018, August 2018, November 2018, January 2019
Maine Public Utilities Commission	Central Maine Power	Emera Maine's application for approval of the Maine Power Connection Transmission project. Testimony addressed the economic benefits associated with interregional transmission connection and associated wind energy development benefits. Docket No. 2014-00048. September 2014



Jeffrey D. Bower

Managing Consultant

Jeff advises infrastructure developers, utilities, and regulators pursuing commercial opportunities and policies to develop and deploy renewable energy resources and enabling transmission projects. He has broad experience in integrated resource planning, power market modeling, and the integration of offshore wind, land-based renewable energy, and transmission into RTO/ISO markets. His work includes economic and operational cost-benefit analysis and assessments of strategies to meet utility and state decarbonization goals. Jeff has testified before FERC and before state regulatory agencies in Arkansas, Georgia, and Maine.

SELECTED PROFESSIONAL EXPERIENCE

Integrated Resource Planning

- Evaluated a multi-state IRP in the western U.S. on behalf of a state's public service commission staff, assessing models, methods, assumptions, and conclusions.
- Reviewed the IRP of a vertically-integrated utility in the southeastern U.S., with specific focus on evaluation of renewable resource options.

Economic Benefits Analysis

- Analyzed a midwestern utility proposal for a build-own-transfer transaction for a large solar facility. Provided expert witness testimony evaluating project need, consistency with IRP, and the utility's forecast of benefits to customers.
- Evaluated a large wind project proposed in the SPP RTO. Provided expert witness testimony regarding project benefits analysis, production cost modeling methodology, congestion risk, and associated transmission proposal benefits.
- Conducted detailed review of a utility proposal to repower 1 GW of existing wind projects, examining PTC qualification, economic benefits to ratepayers, and project risks.
- Evaluated the quantitative and qualitative benefits of multiple wind and transmission proposals in response to a New England multi-state competitive procurement for incremental clean energy and transmission.

Wholesale Market Advisory Services

- Providing ongoing advisory services for New York Utility Intervention Unit regarding wholesale energy market rules. Actively participating in NYISO stakeholder sessions and advising the NYUIU on the consumer impact of proposed market rule changes.
- Authored a market survey of PJM for an independent power producer considering plant acquisitions. Evaluated market opportunities and risks, as well as projections of plant revenues and impacts of policy changes.

- Evaluated a midwestern utility proposal to join a regional transmission organization (RTO). Analyzed the impacts of the transition on transmission and generation resource adequacy and planning, as well as retail rates

Clean Energy Strategy and Policy

- Evaluated a methodology for determining costs and benefits of renewable energy for a southeastern U.S. vertically-integrated utility. Advised state agency on avoided cost methodology, modeling techniques, and application of results to quantify system value of renewables.
- Analyzed Massachusetts' Alternative Energy Portfolio Standard, evaluating barriers to adoption of renewable thermal technologies and developing policy recommendations for the state agency to improve program participation and efficacy.
- Authored a market intelligence report for an offshore wind developer considering participation in a BOEM offshore wind lease auction. Summarized key market opportunities and barriers across multiple states and wholesale energy markets, including evaluation of renewable energy policies, market structures, and drivers of future demand for offshore wind and RECs.
- Advised a solar project developer, providing a comprehensive benefits evaluation to accompany its bid into a Maine competitive procurement for renewable resources.

INDUSTRY EXPERIENCE

Daymark Energy Advisors | www.daymarkea.com | Worcester, MA

Daymark Energy Advisors is a consultancy that bring deep knowledge of energy infrastructure, regulation, and markets to help our clients make well-informed business, capital investment, and policy decisions in the face of uncertainty.

Managing Consultant | 2022-Present

Senior Consultant | 2017–2022

Consultant | 2013–2017

Analyst | 2010–2013

Consulting practice includes:

- Power market modeling and price forecasting
- Power project financial pro-forma modeling and risk analysis
- Economic benefits analyses for generation and transmission infrastructure projects
- Energy policy analysis
- Integrated resource plan evaluation
- Competitive market design advisory services
- Potential assessment of renewable energy and energy efficiency resources
- Expert witness testimony

Climate Change Policy Partnership at Duke University | Durham, NC

Transportation Research Assistant | 2009–2010

- Transportation system modeling
- Clean transportation policy analysis

North Carolina Sustainable Energy Association | www.energync.org/ | Durham, NC

Wind Power Research Analyst Intern | 2009

- Developed a comprehensive guide to community wind power development

TESTIMONY & PUBLICATIONS

Expert Testimony

FORUM	ON BEHALF OF	MATTER
Georgia Public Service Commission	Georgia PSC Public Interest Advocacy Staff	Capacity and Energy Payments to Cogenerators Under PURPA. Docket Nos. 4822, 16573, 19279.
Arkansas Public Service Commission	Arkansas PSC General Staff	Petition of Entergy Arkansas, LLC for Approval of a Build-Own-Transfer Arrangement for a Solar Facility. Docket No. 20-067-U.
Arkansas Public Service Commission	Arkansas PSC General Staff	Petition of Entergy Arkansas, LLC for Approval of a Build-Own-Transfer Arrangement for a Solar Facility. Docket No. 20-052-U.
Arkansas Public Service Commission	Arkansas PSC General Staff	Application of Southwestern Electric Power Company for Approval to Acquire Wind Generating Facilities. Docket No. 19-035-U.
Arkansas Public Service Commission	Arkansas PSC General Staff	Petition of Entergy Arkansas, LLC for Approval of a Build-Own-Transfer Arrangement for a Solar Facility. Docket No. 19-019-U.
Maine Public Utilities Commission	Central Maine Power Company	Application for Certificate of Convenience and Public Necessity (CPCN) for the New England Clean Energy Connect. Provided analysis of economic benefits of HVDC transmission project. Docket No. 2017-00232.
FERC	New York Utility Intervention Unit	FERC Notice of Proposed Rulemaking (NOPR): Offer Caps in Markets Operated by Regional Transmission Organizations and Independent System Operators. Submitted comments addressing the adverse efficiency impact of setting the offer cap too high and of maintaining different caps in adjacent regions. No. RM16-5-000. April 2016.

Publications

- *Memorandum of Wyoming Public Utilities Commission Staff*, report summarizing evaluation and findings related to PacifiCorp (d/b/a Rocky Mountain Power) 2019 Integrated Resource Plan and associated Coal Retirement Study (Docket No. 90000-144-XI-19 and Docket No. 90000-147-XI-19), July 6, 2020. Contributing Author.
- *MCPC Project Benefits; Quantitative and Qualitative Benefits*, confidential report prepared for Central Maine Power regarding the benefits of the Maine Clean Power Connection, a 345-kV transmission expansion accompanied by 1,100 MW of wind energy project development offered in the Massachusetts RFP for Clean Energy Resources, July 27, 2017. Contributing Author.
- *NECEC Project Benefits; Quantitative and Qualitative Benefits*, confidential report prepared for Central Maine Power and H.Q. Energy Services regarding the benefits of the New England Clean Energy Connection, 1,200 MW HVDC transmission expansion accompanied by 1,090 MW of hydropower and wind energy project development offered in the Massachusetts RFP for Clean Energy Resources, July 27, 2017. Contributing Author.

- *Evolving Practices in Electric Company Resource Planning: Key Insights from a Review of 15 Recent Electric Company Resource Plans*, report prepared for the Electric Power Research Institute. May 2017. Contributing Author.
- *MREI Project Benefits; Direct, Indirect, Qualitative and Other Benefits*, prepared for Central Maine Power Company and Emera Maine regarding the benefits of the Maine Renewable Energy Initiative, a 345-kV transmission expansion accompanied by 1,200 MW of wind energy project development, January 28, 2016. Contributing Author.
- *MCPC Project Benefits; Direct, Indirect, Qualitative and Other Benefits*”, prepared for Central Maine Power Company regarding the benefits of the Maine Clean Power Connection, a 345-kV transmission expansion accompanied by nearly 600 MW of wind energy project development, January 28, 2016. Contributing Author.

EDUCATION

Master of Environmental Management | Nicholas School of the Environment at Duke University, Durham, NC | 2010

Certificate in Geospatial Analysis | Duke University, Durham, NC | 2010

B.A. Sociology | Tufts University, Medford, MA | 2004