

CURRICULUM VITAE DE M. ROBERT C. YARDLEY JR.

Robert C. Yardley, Jr.
Senior Vice President

Mr. Yardley has been an advisor to private and public organizations in the energy industry on regulatory, public policy, and strategic issues for 35 years. During that time, he has served as Chairman of the Massachusetts Department of Public Utilities for two years and has been active in public policy matters as a speaker, facilitator, and expert witness. As Chairman, Mr. Yardley regulated the electricity, natural gas, water, telecommunications and the transportation industries in Massachusetts. He has substantial executive leadership experience in the energy consulting industry. Trained as an economist with strong analytical skills, Mr. Yardley has an in-depth understanding of the competitive challenges facing regulated and unregulated energy firms as well as the policy challenges facing government agencies responsible for overseeing the restructuring of the energy industry, including the "Utility of the Future" concepts.

AREAS OF STRENGTH

- 1. Regulatory Advisory:** expert testimony, case strategy, filing, witness training, regulatory environment assessment, stakeholder relations, collaborative design and leadership, independent investigations and prudence reviews, witness training.
- 2. Expert Testimony and Reports:** regulatory policy, cost of service and rate design, incentive regulation, earnings attrition, earnings sharing mechanisms, electric resource planning, distribution system planning, emergency response, economic development, utility innovation models, M&A savings treatment, FERC pipeline regulation, and consolidated tax treatment.
- 3. Team Leadership/Project Management:** merger integration, due diligence, unbundling implementation, pilot program design and implementation, strategic planning, collaborative design and leadership, meeting planning & facilitation services.

CONSULTING AND LEADERSHIP EXPERIENCE**Regulatory Advisory Services**

General advisory, client team leadership/case management, and expert testimony in generic policy setting cases and litigation of proposals initiated by company filings. Frequently called upon to provide advisory services to assist clients in presenting an effective case before a regulatory agency and in improving their relations with regulators and other outside stakeholders. Developed program for facilitated stakeholder discussions on emerging issues in the natural gas industry for a southeastern LDC designed to improve regulatory relations. Provided witness training to a large southeastern electric utility. Have also provided advice to the Ontario Energy Board on regulatory approaches to ensure compliance in a more competitive marketplace.



- Utility of the Future: advising investor-owned utilities in the ongoing New York REV proceeding. Drafting of several regulatory filings related to implementation of REV and preparations by one of the New York utilities to serve as the Distributed System Platform provider. Development of a tariff assessment and strategy for a mid-western electric utility. Team member for a Massachusetts utility's Grid Modernization Plan. Workshop development and delivery for two electric utilities.
- Ratemaking and Tariff Design: Expert testimony on cost-of-service, rate design, and the role of competition before the FERC and several state regulatory commissions. Expert testimony on earnings sharing mechanisms for a 2013 Hydro-Québec case. Recently completed a report for the American Gas Foundation examining ratemaking approaches to address accelerated investments by US natural gas distribution companies to enhance the integrity of their distribution networks. Co-author of a 2010 Power Advisory LLC report for the Ontario Energy Board on the pricing of OPG's regulated generation. Development of a model for the Ontario Energy Board to estimate the rate impacts of expansion of provincial networks to incorporate renewable energy projects. Co-author of a Power Advisory LLC report and testifying witness on the appropriate charge determinants for purposes of establishing transmission rates for Hydro One. Team member and advisor to Columbia Gas of Massachusetts for preparation of 2009 decoupling proposal and testimony. Facilitated a meeting among corporate regulatory, company leadership, expert witnesses and regulatory counsel to develop the case strategy for this Columbia Gas of Massachusetts filing. Provided expert testimony on behalf of Unil Electric and Connecticut Light and Power on earnings attrition.
- Resource Planning –Advisor to OG&E on the development of their resource planning process and on several subsequent resource plans and resource approval filings. Facilitation of several OG&E stakeholder meetings. Preparation of Integrated Resource Plans for electric and natural gas distribution companies as well as advisory services related to specific contracting decisions, including oversight of portfolio optimization modeling efforts. Contributor to the development of a long-term energy plan for the state of Maryland, focusing on energy efficiency programs. Preparation of RFPs for demand-side and supply-side resources. Preparation of an assessment of the costs and benefits of an aggressive DSM commitment for an eastern state. Served as an advisor to the OEB on development of a standard methodology for measuring the system benefits of distributed generation.
- Performance Based Ratemaking – Advisor to a Canadian electric utility in the development of an incentive regulation plan to be filed in late 2015. Co-authored a report on the potential application of incentive ratemaking to the regulated generation assets of Ontario Power Generation. Expert testimony on behalf of Southern Connecticut Gas Company and Energy East in a rate proceeding. Expert testimony provided for Wisconsin Gas in support of a "GNPD-X" proposal; advisor to Bay State Gas Company, which negotiated and filed a settlement implementing a PBR rate proposal with service quality measures. Preparation of Initial and Reply Comments on behalf of Bay State Gas Company in a Massachusetts generic policy proceeding on Incentive Regulation. Advisory services provided to two LDCs, which were considering filing a Gas Cost Incentive Mechanism proposal.



- **Merger & Acquisition** – Testimony preparation for a midwestern merger review. Member of due diligence team evaluating the acquisition of a minority interest in a United States utility by an investment fund. Mr. Yardley worked with Unital’s executive team to lead and manage the integration of Northern Utilities, a gas distribution company that it had acquired from NiSource. Mr. Yardley was a member of the leadership team that planned for the integration of approximately 50 functional areas and the execution of these plans by functional teams. The integration affects almost every area of a utility business including customer service, accounting and finance, corporate communications, distribution field operations, gas supply and control, engineering and operations, corporate functions and infrastructure. Other experience includes preparation of expert report on merger synergies for a large multi-state LDC. Expert opinion on the treatment of merger-related savings in a large commercial litigation matter. Advisor and leader of due diligence teams on two potential utility acquisitions in 2001 and 2002. Led US Market and Regulatory Intelligence effort on behalf of a European Utility. Expert witness in commercial litigation involving a failed merger. Advisor to NiSource on regulatory matters related to its offer to acquire Columbia Energy. As a member of the regulatory approval advisory team, drafted the testimony of Bay State Gas Company’s policy witness in three state jurisdictions for approval of its merger with NiSource. Regulatory advisor to the team supporting the regulatory approval efforts of Southern Union Gas Company for their northeastern LDC acquisitions.
- **Economic Development**: Principal author of a report on the Highest and Best Use of Philadelphia Gas Works as an agent to support sustainable economic development in the City of Philadelphia.
- **Utility Performance Assessment**: Principal author and expert witness with respect to a “self-assessment” of Unital’s response to a 2008 Ice Storm.
- **Consolidated Tax Treatment**: Advisor to a Texas utility seeking legislation to change the treatment of affiliate tax losses in the establishment of regulated utility rates. Preparation of regulatory policy testimony on the treatment of consolidated tax losses for a Midwestern electric utility.
- **International and Other** – Advisor to the Zambia Energy Regulation Board.

Wholesale Energy Market Services

Advisory services related to emerging competitive wholesale markets and the valuation of formerly regulated assets in these markets.

- **Wholesale Electricity Markets** – Submitted expert reports in Federal District Court related to actions by the states of Maryland and New Jersey to develop new generation. Submitted a 2012 report to the Public Service Commission on the need for generation in SWMAAC on behalf of a North American power development company.
- **Electric Generation Asset Valuation** - Asset valuation services provided on behalf of both sellers and buyers for property tax valuation, asset bids, and asset sale purposes. These analyses employ the fair market value approach, which produces an estimate of asset value based on the use of the facilities to generate electricity for sale in the regional market and include an assessment of operating revenue risk factors. Member of an advisory team that



evaluated the investment merit of the generation assets divested by Boston Edison. Advisor to Bay State Gas Company on the sale of a cogeneration and small power production facility.

- Electric Asset Competitive Solicitations – Recently assisted a large US developer in preparation of a bid into a 2012 Maryland RFP. Advisor to Oklahoma Gas & Electric for its bid into a neighboring utility's RFP for base load capacity. The EPC contract was a major component of the bid. Preparation of testimony for recovery of approximately \$1B rate base addition.
- Electric Transmission Markets – Represented the Massachusetts Division of Energy Resources in discussions with NEPOOL and the New England state regulatory commissions to develop the Independent System Operator proposal filed by NEPOOL with the FERC on December 31, 1996.
- Natural Gas Wholesale Markets – Expert testimony on the public interest concerns raised by drilling wells in close proximity to an underground natural gas storage field. Expert witness in several FERC regulatory proceedings on behalf of LDC shippers. Preparation of market power study for storage developer. Advisor and prospective expert witness (civil litigation settled) to Fleet National Bank on the value of LNG assets in a restructured natural gas industry.

Retail Energy Market Services

Litigation support, pilot program design, collaborative leadership, and implementation team project management services.

- Policy Development – Contributing to the development of changes in the retail energy markets in New York as part of the REV proceeding. Development of a policy statement on the regulation of CNG. Led the executive team at a Northeast electric utility through a strategic planning exercise that examined alternative “second-stage” retail market structures. Organized and led collaborative efforts to design one of the most aggressive residential pilot programs in the country on behalf of Bay State Gas in 1996 and 1997. Organized and led the facilitation of a collaborative effort to offer choice to all of Bay State’s customers in 1998. Led the Bay State litigation team and served as a witness in the Massachusetts generic natural gas unbundling policy proceeding.
- Competitive Market Services - Completed a business plan for the formation of a retail energy marketing affiliate, including the identification and assistance in the negotiation of partnership relationships. Provided market intelligence services to firms that are considering competing in the northeast energy market. Advisor on regulatory matters to a team representing a group of industrial customers seeking to obtain electricity on more competitive terms and conditions.
- Retail Choice Implementation – Provided project management services to an internal Bay State team responsible for implementing systems and processes to provide customer choice to pilot customers. Developed a comprehensive Integrated Unbundling Plan to address all implementation and policy advocacy issues related to the introduction of customer choice and then worked closely with a client director to oversee the effort for the first year.



Collaborative Leadership

Design, leadership and facilitation of collaborative efforts sponsored by utilities and government agencies.

- Working with a group of participants to provide consolidated comments in the New York REV proceeding.
- Co-led the 2004/05 Massachusetts Distributed Generation Collaborative, to satisfy directives set by the Massachusetts Department of Telecommunications and Energy.
- Facilitated multi-party discussions on the restructuring of the electric utility industry in New Hampshire on behalf of the New Hampshire Public Utilities Commission.
- Facilitated off-site discussions among leaders of organizations as part of long-term strategic planning initiatives.
- Led three Bay State Gas collaborative efforts over a two-year period to develop pilot and comprehensive programs to introduce customer choice.
- Participated as an advisor to a Wisconsin Public Service Commission collaborative addressing low-income issues related to customer choice

Strategic Planning

Working closely with senior executives, leadership of internal teams to perform long-term or next-year strategic planning exercises.

- Development of a strategy to impact economic development on behalf of a Northeast LDC.
- Facilitation of a Canadian Electricity Association workshop as an input to a long-term strategic plan.
- Co-leadership of an internal team at Brooklyn Union charged with developing long-term (10 years) visions of the energy industry, the characteristics of firms likely to succeed in a radically restructured service delivery environment, and the development of a specific strategic and tactical response.
- Leadership of an internal team at Commonwealth Electric Company to develop a long-term strategic plan.
- Participated on a consulting team that developed a capital investment allocation model for a southeastern LDC.
- Work with senior executives, leadership of internal teams to perform long-term or next-year strategic planning exercises at two northeast LDCs.
- Facilitated discussions between and LDC and an electric distribution company to identify opportunities to work jointly and realize synergies.

Other Advisory Services

- Design of an economic development model to estimate the impact of a regional facility to store spent nuclear fuel.



PUBLIC SERVICE

As Chairman of the Massachusetts Department of Public Utilities, Mr. Yardley managed a staff of 150 individuals responsible for regulating all investor-owned electric, natural gas, telecommunications and water utilities. Represented the Department's relationships with the Governor's office, state legislature, press, regulatory and industrial organizations and other stakeholder groups. Served on the National Association of Regulatory Commissioners (NARUC) Committee on Electricity; served as President of the New England Conference of Public Utility Commissioners; and served as Co-Chair of the New England Governors' Conference Power Planning Committee. In addition to these duties, Mr. Yardley was responsible for the following initiatives:

- Electric – Implemented Integrated Resource Planning Regulations to correspond with the emerging competitiveness of the generation sector of the industry, including rationalizing the evaluation and implementation of conservation and load management programs. Approved several economic development rate proposals, with conditions to protect the interests of all customers. Active in the region and in discussions with the FERC Commissioners on the role of regional transmission arrangements in a competitive industry, the need to provide access on fair terms to all users, and the shared jurisdiction on this and other electric industry restructuring matters.
 - Natural Gas – Led stakeholder discussions on the impact of Order 636 on the Department's regulation of local distribution utilities. Established and applied new standards of review for gas supply contracts consistent with the restructuring of the industry. Approved alternative firms service contract arrangements and changed cost allocation precedents to remove subsidies inherent in existing rate designs to set the stage for competitive environment.
 - Water – Regulator during the period when distribution companies were doubling and tripling their asset base in order to comply with stringent federally-mandated safe drinking water requirements.
 - Environment – Active participant in an inter-agency Clean Air Act Compliance task force and in regional discussions to advocate the development of a supra-regional NOx emissions credit reduction trading market.
 - Telecommunications – Issued several landmark decisions including orders directing NYNEX to provide competitors with access to its central offices (collocation) and to its street conduits. Approved an alternative form of regulation for AT&T, and established the lowest rates in the country for ISDN service.
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PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (March 2012 – Present)

Senior Vice President

Independent Consultant (2005 – 2012)

Executive Advisor to Concentric Energy Advisors, Power Advisory LLC and Levitan & Associates, Inc.

Navigant Consulting, Inc. (2000 – 2004)

Senior Managing Director, Executive Managing Director and leader of the firm's Energy Practice

Waterstone Group (1996 – 1999)

Founder

Massachusetts Department of Telecommunications and Energy (1991 – 1992)

Chairman

Reed Consulting Group

Co-Founder (1988 – 1990)

Executive Vice President (1993-1995)

R. J. Rudden Associates (1984 – 1988)

Stone & Webster Management Consultants (1980 – 1984)

EDUCATION

B.A., Georgetown University, Economics, 1976

ABD, Boston College, Economics: All course work completed with comprehensive written exams in Econometrics, Monetary Theory and International Trade. Did not complete dissertation.

EXPERT TESTIMONY (STATE COMMISSIONS AND FERC)

Regulatory Policy

Utility Earnings Attrition

Performance Based Regulation

Cost of Service and Rate Design

Earnings Sharing Mechanisms

FERC Pipeline Regulation

Distribution System Planning

Emergency Response

M&A Savings Treatment

Consolidated Tax Treatment



PUBLICATIONS/PRESENTATIONS

- “Stimulating Innovation on Behalf of Canada’s Electric and Natural Gas Consumers”, presented at the Electric Utility Regulatory Innovations Workshop, Calgary Alberta, May 13, 2015.
- “Stimulating Innovation: An Alignment of Interests?”, presented to a meeting of the IESO Ontario Smart Grid Consortium, December 10, 2014.
- “The Integrated Grid: Back to the Future”, presented at the 2014 NECPUC Annual Symposium, June 16, 2014
- “Stimulating Innovation: An Alignment of Interests?”, presented to a meeting of the Canadian Gas Association and Canadian Electricity Association, November 28, 2013.
- “Emergency Response: The Storm after the Storm”, presented at the 2013 Mid-America Regulatory Conference, June 10, 2013.
- “Natural Gas Infrastructure: Opportunities and Challenges”, C2ES Conference, October 10, 2012.
- “Competition in Electric Markets – Lessons Learned and Future Challenges”, presented at CAMPUT, Halifax, Nova Scotia, May 10, 2004.
- “Impact of Regulatory Uncertainty in the Stability & Growth of the Power Industry”, Panel Participant at Power Industry Forum, May 8, 2003
- “Current Regulatory Issues”, presented to the New England Gas Association, November 20, 2003
- “Retail Competition Update”, presented to the American Public Gas Association, August 20, 2002
- “Transformation of Northeast Energy Markets”, April 4, 2000
- “Examining the Effects of National Energy Policy on Electric Markets”, presented at Power 2001, October 31, 2001
- “Energy Industry Drivers, Implications and Strategic Responses”, presented at the Connecticut Energy Corporation 1999 Senior Officers Planning Session, April 13, 1999.
- “The Challenge and Potential of Information Management in a Deregulated Market”, presented jointly with Cambridge Technology Partners to the 1998 Energy Conference of the New England Gas Association, March 19, 1998.
- “Energy Industry Restructuring: The Role of Pilot Programs”, presented to The 27th Annual Wichita Program, Appraisal for Ad Valorem Taxation, August 5, 1997.
- “Unbundling: Supplier Choice for Residential Customers”, presented to the American Gas Association Rate Committee Meeting, April 1, 1996.
- “Electric Industry Restructuring: Lessons from the Gas Industry”, presented to the National HydroPower Association Annual Conference, March 20, 1996
- “Unbundling – Facts and Figures”, presented to the NARUC Gas Committee Meetings, February 27, 1996.
- “The Effect of Gas Restructuring on LDC Resource Planning: Lessons for the Electric Industry”, presented to the New England Conference of Public Utility Commissioners, June 13, 1995.
- “Unbundling Services, Unbundling Rates”, presented to the New England Gas Association 1994 Rates School.



- “Alternatives to Traditional Ratemaking Proceedings”, presented at a Public Utility Regulation Conference sponsored by the New Hampshire Bar Association, December 8, 1993.
- “Utility Kickers for NUG Purchases”, presented to The 3rd Annual Northeast Power Market Conference”, May 23, 1993.
- “Environmental Externalities: A Utility Regulator’s Perspective”, presented to the 104th Annual Convention and Regulatory Symposium, National Association of Regulatory Utility Commissioners, November 16, 1992.
- “The Role of Regional Planning”, presented at the Forum on New England’s Energy Future, May 7, 1992.
- Speech on electricity transmission policy in New England, before a conference in Crystal City in 1992
- “The Clean Air Act and Utility Regulation: The Challenge of the 1990s”, presented to The Clean Air Marketplace Conference, April 23, 1992

AVAILABLE UPON REQUEST

Extensive client and project listings, and specific references.



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Alberta Energy Resources Conservation Board				
CrossAlta Gas Storage & Services LTD., TransCanada Pipelines Limited, TransCanada Energy LTD.	2013	Kallisto Energy Corp.	Application No. 1735722	Public Interest Standard as applied to the drilling of an oil well proximate to an underground storage field.
Arizona Corporation Commission				
Tucson Electric Power Company	2016	Tucson Electric Power Company	E-01 933 A-15-0239	Regulatory policy consideration related to utility-sponsored solar programs
Connecticut Department of Public Utility Control				
Southern Connecticut Gas Company	1999	Southern Connecticut Gas Company Rate Case	99-04-18	PBR and service quality plan
Connecticut Light and Power Company	2007	Connecticut Light and Power Company Rate Case	07-07-01	Distribution system planning, reliability, earnings attrition
Federal District Court				
Competitive Power Ventures	2013	PPL, EnergyPlus, et. al. v. Nazarian, et. al.	U.S. Dist. Ct. for the District of Maryland No. 12-cv-1286 (MJG)	History of industry regulation, state regulatory actions - authorized or required by state law -affecting the supply of or demand for wholesale electricity within PJM.
Competitive Power Ventures	2013	PPL EnergyPlus, LLC, et. al. v. Robert M. Hanna, et. al.	U.S. Dist. Ct. for the District of New Jersey No. 3:11-cv-754 (PGS-DEA)	
Federal Energy Regulatory Commission				
Southwest Gas Corporation	1989	Northwest Pipeline Corporation Rate Case	RP88-47	Rate design including seasonal and IT rates, rate design policy statement, pipeline flows Rate



SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
East of California LDCs	1989	El Paso Natural Gas Company Rate Case	RP88-44	Cost of service, cost classification and allocation, Mcf-mile study, rate design policy statement, rate design proposals
Western Gas Interstate Company	1990	Western Gas Interstate Company Rate Case	RP89-179	Rate design, cost allocation
City of Springfield, MO	1990	Williams Natural Gas Company Rate Case	RP89-183	Rate design, including Dth-mile study and zone boundaries
City of Springfield, MO	1992	Williams Natural Gas Company Rate Case	RP91-152	Rate design, including Dth-mile study and zone boundaries
Southwest Gas Corporation and Washington Water Power	1993	Northwest Pipeline Corporation Rate Case	RP93-5	Rate mitigation due to adoption of SFV rate design, billing determinants, IT rate design, rolled-in rate treatment of expansion capacity
Southwest Gas Corporation	1993	Paiute Pipeline Company Rate Case	RP93-6	Rate mitigation due to adoption of SFV rate design
Wisconsin LDCs	1995	ANR Pipeline Company Rate Case	RP94-43	Order 636 implementation, ANR's bifurcated market environment, cost of service including affiliate allocations, cost allocation, rate design, discount adjustment, rolled-in rate treatment, billing determinants, reclassification of storage gas
Pacific Northwest Shippers Group (Washington & Oregon LDCs)	2007	Gas Transmission Northwest Corporation Rate Case	RP06-407	The shifting of costs and risks associated with heavily discounted and undersubscribed capacity; market conditions and the dependence of the LDC clients on GTN; billing determinants; rate treatment for a major expansion project
Maine Public Utilities Commission				
Maine Natural Gas Company	2015	Maine Natural Gas Multi-Year Plan	2015-00005	Prudence of Gas Expansion



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Maryland Public Service Commission				
Competitive Power Ventures	2012	Maryland Public Service Commission – Inquiry regarding the need for new generation	Case No. 9214	Resource Planning, Demand Response, Need for Capacity in Maryland and SWMAAC
Massachusetts Department of Public Utilities				
Fitchburg Gas & Electric Company	2009	Fitchburg Gas & Electric Company	09-01-A	Storm emergency response
New Hampshire Public Utilities Commission				
Unitil Energy Systems, Inc.	2005	Unitil Energy Systems, Inc. Rate Case	DE-05-178	Earnings attrition
Ontario Energy Board				
Hydro One, Inc.	2010	Hydro One, Inc. Rate Case	EB-2010-0002	Transmission rate design
Régie de l'énergie				
Hydro-Québec	2013	Hydro-Québec	R-3842-2013	Earnings Sharing Mechanism
Gaz Métro Limited Partnership	2015	Gaz Métro Limited Partnership	R-3879-2014	Earnings Sharing Mechanism
Hydro-Québec	2016	Hydro-Québec Distribution	R-3897-2014	Performance Based Regulation
Hydro-Québec	2017	Hydro-Québec Transmission	R-3897-2014	Performance Based Regulation
Texas Public Utility Commission				
Southern Public Service Company	2007	Southern Public Service Company Rate Case	32766	Rate treatment of consolidated taxes



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Tucson Electric Power Company				
Tucson Electric Power Company	2016	Tucson Electric Power Company	E-01 933 A-15-0239	Regulatory policy considerations related to utility-sponsored solar programs
Wisconsin Public Service Commission				
Wisconsin Gas Company	1993	Wisconsin Gas Company	6650-GR-112	Performance-based Regulation