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#### Integrated Energy Resources

# PHILIP H. MOSENTHAL PARTNER

Mr. Mosenthal has over 25 years experience in energy efficiency consulting, including facility energy management, utility and state planning, program design, implementation, evaluation and research. He has particular expertise in the commercial, industrial and institutional sectors. Mr. Mosenthal has developed numerous utility, state and region integrated resource and DSM plans, and designed and evaluated residential, commercial and industrial energy efficiency programs throughout North America and in Europe and China. He has also been the lead analyst on numerous energy efficiency potential assessments. Mr. Mosenthal has played key roles in utility collaboratives and has successfully worked to build consensus among diverse parties in various assignments. Mr. Mosenthal also has designed program implementation procedures, managed implementation contracts, trained efficiency program and planning staff, and performed over 400 commercial and industrial facility energy efficiency analyses for end

# **Professional Experience**

#### Optimal Energy, Incorporated

Founding Partner, 1996-present

Bristol, VT

Consult with electric and gas utilities, governments and other non-utility parties on energy efficiency, resource planning and regulatory issues. Develop strategies for achieving energy efficiency and least-cost resources, including administrator funding and incentive mechanisms, and program and market design and analysis. Current or recent projects include:

- Lead advisor for the Illinois Attorney General's Office on efficiency program planning, design, implementation, evaluation and general oversight of utility electric and gas efficiency programs.
- Team leader and contract manager, as well as a lead C&I advisor, to the MA Energy Efficiency Advisory Council. This project includes all aspects of review and oversight of all electric and gas utility programs in Massachusetts, including advising and promoting best practices for planning, regulatory frameworks, program design, implementation and evaluation.
- C&I team lead advisor for the Rhode Island Energy Efficiency Resource Management Council overseeing all aspects of National Grid's RI efficiency procurement.
- Lead researcher on energy efficiency issues for EPA's Clean Energy Partnerships with State and Local Government to advance State Clean **Energy Action Plans**
- Manager of electric and natural gas efficiency and renewable potential assessments for New York State Energy Research and Development Authority

Optimal Energy 14 School Street Bristol, VT 05443 • (V) 802-453-5100 • (f) 802-453-5001 www.optenergy.com • info@optenergy.com

- Chief architect of Efficiency Vermont, the nation's first and only state efficiency utility, as well as advisor on C&I planning and program design to Efficiency Vermont
- Advising two provincial governments in China on development of efficiency efforts that would serve as a model for long term national efforts

# Resource Insight, Incorporated

Middlebury, VT

Senior Research Associate, 1995-1996

Consulted on DSM planning, program design, monitoring and evaluation, and resource characterization, specializing in the commercial and industrial sectors. Projects performed on behalf of utility and non-utility parties, in both cooperative settings and in contested regulatory proceedings.

# Xenergy, Incorporated (now Kema)

Allendale, NJ

Chief Consultant, 1990-1995

Managed the consulting division for Xenergy's (now Kema's) Research, Planning and Evaluation Group (RP&E) in its Mid-Atlantic Region. Responsibilities included direct utility consulting, as well as marketing, administration and staff management for RP&E. Consulting activities focused on assessment of DSM technology potential, DSM planning, program design and development, and process and impact evaluation for electric and gas utilities.

# Center for Energy and the Environment, Univ. of Pennsylvania Philadelphia, PA Research Associate, 1990

Prepared water, air, and solid and hazardous waste permit applications for state and federal agencies on behalf of industry clients.

#### **Private Consultant**

Philadelphia, PA

1988-1990

Clients included non-profit, governmental and private entities. Performed energy-related research, developed and analyzed potential energy efficiency programs, wrote reports and proposals, aided in contract negotiations and performed building energy audits.

# Community Energy Development Corp. (CEDC)

Philadelphia, PA

Acting Executive Director, 1986–1988

With simultaneous positions as General Manage of Citizens Coalition for Energy Efficiency (C2E2) and General Manager of Community Energy Consumers (CEC), managed all aspects of CEDC, C2E2 and CEC operations including: program design and development; program implementation; provision of energy efficiency consulting services for multifamily and institutional building owners; and delivery of a fuel oil cooperative program. CEDC and C2E2 were non-profit organizations providing direct energy efficiency services and energy policy research, respectively. CEC was a for-profit CEDC subsidiary that brokered fuel oil for commercial and residential customers.

#### Pennsylvania Energy Center

Philadelphia, PA

Director of Technical Services, 1983 - 1986

Managed, designed and developed energy services for the Southeast Regional branch of the Pennsylvania State Energy Office. Designed and developed technical energy services for commercial, industrial and institutional building owners; supervised staff of energy auditors and subcontractors; performed over 400 commercial and industrial energy audits; and taught energy management workshops.

## Education

M.S., Energy Management and Policy, University of Pennsylvania, Philadelphia, PA, 1990, 4.0 GPA.

B.A., Design of the Environment, University of Pennsylvania, Philadelphia, PA, 1982. Certificate in Electrical Engineering, Pennsylvania State University, Ambler, PA, 1984.

# **Highlights Of Project Experience**

# **Efficiency Program Design and Planning**

- Team Manager and senior advisor for the commercial and industrial programs and plans for Massachusetts, on behalf of the Massachusetts Energy Efficiency Advisory Council. Responsible for leading a team of consultants representing non-utility parties interests on the planning, design, development, implementation and evaluation of all Massachusett's utility programs, and a lead advisor specifically related to C&I sector issues. This project involves supporting the EEAC and utilities in developing and implementing a set of SBC-funded programs with the most aggressive savings goals in the U.S. (1999 – present)
- Lead advisor on C&I planning, program design and implementation on behalf of the Rhode Island Energy Resource Management Council. Role includes oversight and advising on all aspects of National Grid's planning, design, implementation, evaluation and regulatory framework on behalf of the EERMC. (2006 – present)
- Advisor on program design, development and planning for Efficiency Vermont, the world's first Energy Efficiency Utility, as part of multi-organizational enterprise operating under a \$30 million contract with the Vermont Public Service Board to deliver statewide energy-efficiency programs for the customers of Vermont's twenty-one electric utilities. Includes design, development and start-up of programs to serve the commercial, industrial, institutional and agricultural sectors in Vermont. (2000 present)
- Manager of NY statewide gas resource assessment and program design and analysis for all gas territories in NY. Responsible for coordinating a large multidisciplinary team to assess residential, commercial and industrial gas efficiency potential, and design and analyze a portfolio of efficiency programs to be delivered statewide. For NYSERDA (2005 – 2009)

- Lead advisor to the Ohio Office of Energy Efficiency on planning and program
  design on behalf of U.S. EPA's Clean Energy Partnerships with State and
  Local Government's to advance State Clean Energy Action Plans. Project
  includes reviewing past performance and current plans and funding, and
  advising on new programs and funding commitments. (2006 2009)
- Managed redesign and development of new incentive offerings and forms for Cape Light Compacts C&I efficiency programs. Included promotion of Energy Star products and new emerging technologies. For Cape Light Compact (2005 — 2006)
- C&I consultant for the MECO, WMECO, and NSTAR Collaboratives, representing the Massachusetts Collaborative Non-Utility Parties, on the regional CoolChoice and MotorUp programs. Lead planning, program design and goal setting negotiations related to MA participation in these programs. Also provide consulting on cross-utility program and planning and policy issues. (1999 – 2006)
- Consulting team C&I leader on development and assessment of demand-side management investment portfolios for China, for the Natural Resources Defense Council. This project includes developing and analyzing the potential for a portfolio of efficiency programs to serve as model programs for China. It includes addressing political and regulatory barriers, long term funding mechanisms and development of an administrative organizational structure. (July 2003 – 2007)
- Designing a portfolio of C&I program incentive forms for Cape Light Compact.
   Revising current offerings to improve and expand, and to bring greater consistency with other MA utility programs. (2005)
- Assist the Connecticut Municipal Electric Consortium to design and develop a
  portfolio of municipal efficiency programs. This project includes analysis of
  opportunities and design and development of program designs, and
  implementation services including development of tracking systems and
  provision of technical services directly to C&I customers. (2005 present)
- Assist the Vermont Electric Power Company to analyze and propose resource solutions to address a T&D constrained area in southern VT. Analyzed the efficiency potential in the region and proposed and designed a portfolio of efficiency programs to avoid or defer the need for substantial T&D upgrades. (2005 – 2008)
- Report and testimony on performance of DSM initiatives and proposed shareholder performance incentives for administrators of conservation and load management programs in Connecticut, on behalf of Connecticut Office of Consumer Counsel. Led C&I analysis. (2003 – 2004)
- Led the development and analysis of a portfolio of C&I market transformation and retrofit programs for the Long Island Power Authority. Currently advising the project team on implementation issues related to the development and delivery of these initiatives. This project includes program design of utility and regional market transformation programs targeting new and replacement

- building and equipment markets, and the estimation of the achievable potential for selected markets on Long Island. (1998 2000)
- Economic advisor to Northeast Energy Efficiency Partnerships, a not-for-profit regional consortium of utilities pursuing market transformation in efficiency markets. Economic analysis and report on cost-effectiveness of NEEP initiatives involving high-efficiency motors, CoolChoice unitary HVAC, clothes washers, and residential lighting. (On and off 1998 – 2004)
- Commercial programs consultant for the Cape Light Compact energy efficiency programs. Advised on planning, program design, measures, costeffectiveness, implementation issues and goal setting. (2003 – 2004)
- Commercial and industrial analysis and report on gas energy efficiency programs for Consolidated Edison of New York, on behalf of New York City Economic Development Corporation, NRDC, Pace Energy Project, Association for Energy Affordability and Public Utility Law Project. (April – May 2004)
- Commercial advisor on program planning and implementation of multi-year statewide energy-efficiency programs in the New Jersey Clean Energy Collaborative involving all the state's electric and gas utilities and the Natural Resources Defense Council. (April 2000 – June 2003, on behalf of NRDC). Co-directed collaborative work on program development, planning, and implementation for Conectiv. (November 1996 – 2000)
- Consultant to Citizens Utilities Corporation's Arizona Electric Division, developing a program strategy to capture maximum achievable potential among targeted sectors to effect immediate load reductions in response to energy shortages and rate shock from the California electric market. This project included assessing the efficiency and load reducing opportunities, and developing implementation strategies to capture them, among food processing and storage, wastewater treatment and school facilities. (2000 – 2001)
- Led the design and analysis of a portfolio of commercial, industrial and residential core DSM programs for the Vermont Department of Public Service to create the first ever efficiency utility. The project involved program design and development; measure characterizations; analysis of program impacts and costs; assessment of achievable market-driven and retrofit potential; modeling of program participation; economic screening; and development of monitoring and evaluation guidelines. In addition, developed criteria for the delivery of the core programs during a transition to the efficiency utility and electric utility restructuring, and established the proposed structure and role of the efficiency utility. (1995 2000)

#### Resource Planning and Policy

 C&I Technical Lead on development of electric and unregulated fuels efficiency potential and development of 20-year forecasts of expected Efficiency Vermont achievements under various policy, planning and funding scenarios. Includes zonal analysis to support distributed utility planning for transmission system reliability and for all 22 VT electric utilities distribution system planning. (2008 – present)

- Lead energy efficiency analysis, research and product development for EPA's Clean Energy Partnership with State and Local Governments to advance State Clean Energy Action Plans. Projects included development of a Clean Energy Fund Manual to guide state planners in development of Clean Energy Action Plans; development of an energy efficiency potential assessment guide as part of the EPA's National Action Plan on the use, value and performance of efficiency and renewable potential assessments; and development of multi-year plans for efficiency programs for Ohio Office of Energy Efficiency. For EPA (2006 2009)
- Lead technical advisor on development of a New England-wide efficiency potential study on behalf of the Northeast Energy Efficiency Partnerships. (2009 - 2010)
- Advisor on Missouri utility IRP process, efficiency potential and planning issues on behalf of the MO Department of Natural Resources (2006-2009) and NRDC (2010)
- Principal investigator and author of an assessment of electric efficiency potential for Texas. Analyzed the residential, commercial and industrial potential for electric load reductions from efficiency programs, appliance standards, enhanced building codes, demand response and combined heat and power programs as an alternative to coal plants to meet reliability constraints. Also recommended policy and programmatic changes to advance efficiency in Texas. For NRDC and Ceres (2006 — 2009)
- Manager of NY statewide gas resource assessment and program design and analysis for all gas territories in NY. Responsible for coordinating a large multidisciplinary team to assess residential, commercial and industrial gas efficiency potential, and design and analyze a portfolio of efficiency programs to be delivered statewide. For NYSERDA (2005 – 2009)
- Developed an innovative "efficiency rate tariff" designed to benchmark commercial facilities energy efficiency and price electricity to them based on their efficiency levels. This electric rate would develop threshold efficiency levels by facility type with increasing block rates that remove current disincentives to efficiency that exist with traditional electric rate design. For Wal-Mart™ (2005 — 2006)
- Consulting team C&I leader providing technical assistance supporting rulemaking to implement energy-efficiency provision of renewable portfolio standard for Pennsylvania, on behalf of Citizens for Pennsylvania's Future (PennFuture). Developed mechanisms and sample verification protocols for inclusion of efficiency resources to meet RPS standards. (February 2005 – 2006)
- Assist the Vermont Electric Power Company to analyze and propose resource solutions to address a T&D constrained area in southern VT. Analyzed the efficiency potential in the region and proposed and designed a portfolio of efficiency programs to avoid or defer the need for substantial T&D upgrades. (2005 – 2007)

- Commercial analysis project lead for consulting team assessing technical, achievable and economic potential for energy-efficiency and renewable resources in New York State and five sub regions over 5, 10 and 20 years, on behalf of New York State Research and Development Authority. This project set the standard for national efficiency potential efforts, analyzing over 2000 commercial measures throughout NY. (January 2002 – August 2003)
- C&I project lead, including report and testimony, for consulting team projecting
  potential for demand-side resources to defer the need for major transmission
  upgrades, on behalf of Vermont Electric Power Company. This project
  included analyzing the economic and achievable potential in a transmissionconstrained area to determine the least cost solution to reliability problems.
  (November 2001 December 2004)
- C&I project lead for consulting team updating statewide projection of economically achievable efficiency potential for state of Vermont, on behalf of the Vermont Department of Public Service. (October 2001 – 2003)
- C&I project lead for consulting team supporting utilities in targeting demandside resources to optimize distribution investment planning in statewide distributed utility planning collaborative, on behalf of the Vermont Department of Public Service. This project included developing a unique "distributed utility screening tool" that allowed small municipal and cooperative utilities to easily estimate rough achievable potential in their jurisdiction as a first step in least cost distributed utility planning. (September 2001 – December 2002)
- Analyzed the C&I electric efficiency achievable potential for the State of Maine, on behalf of the Office of Consumer Advocate. This project included estimated economic and achievable opportunities over 10 years, in support of development of a statewide efficiency administration model. (2002)
- Analyzed the C&I electric efficiency achievable potential for the State of Michigan, on behalf of the American Council for an Energy Efficient Economy (ACEEE). This project included estimated economic and achievable opportunities over 10 years, in support of potential development of a statewide efficiency administration model. (2002 - 2003)

## **Evaluation, Monitoring and Assessment**

- Team leader on development of a statewide Technical Reference Manual for the State of Massachusetts in collaboration with the MA electric and gas utilities.
- Development of M&V protocols and mechanisms for two Chinese provinces to sell energy efficiency portfolio carbon dioxide savings into the Clean Development Mechanism (CDM) established under the Kyoto Protocol. For Natural Resources Defense Council (2004 — 2007)
- Market assessment support to the NYSERDA Small C&I Lighting Program.
  This project included advising on scope of analysis and interpretation of
  interview and survey data, and review and recommendations on program
  design and implementation. (2003 2005)

- Advisor on development of numerous M&V plans and technical reference manuals in a number of jurisdictions, including recent projects in: IN, IA, OH, PA, MD, MA, and DE.
- Advisor to Efficiency Vermont on C&I evaluation planning and coordination with Department of Public Service on evaluation and savings estimation and verification. Negotiator for Efficiency Vermont with the VT DPS on C&I savings estimates and verification. (2000 – present)
- Lead advisor to Long Island Power Authority on its C&I baseline analysis and market assessment. Project included support in developing program and market theory, evaluation plans and RFP, review of proposals, and ongoing advise and critique on third party analysis. (1999 - 2001)

## Performance Contracting and Facility Energy Management

 Advising on development of business plan, financial model, and monitoring and verification needs for start-up private energy service company (ESCO) in Jiangsu Province, China. Project includes development of performance contracting offers, development of marketing and implementation procedures and materials, staff training, development of M&V protocols, and project marketing and analysis. (2004 – 2006)

## **Education and Training**

- Instructor, Association of Energy Service Professional DSM Training Series, 2007-2008.
- Instructor, Gas Efficiency Programs, National Best Practices, Association of Energy Service Professionals On-Line Seminars, Forthcoming, April 2006.
- Instructor and lead presenter, China State Grid Corporation DSM Instruction Center. Produced 2 instructional videos for utility staff throughout China on DSM. "Introduction To Demand-Side Management: The Usa Experience" and "Long-Term Energy-Efficiency Dsm Investment In The Northeastern U.S.", November 2004.

#### **Professional Affiliations**

- Co-Chair, Association of Energy Service Professionals, Marketing and Program Development Committee, 1996.
- Project Leader, Association for Demand-Side Management Professionals, Committee on Program Design, Marketing and Implementation, 1995.
- Chair, Association for Demand-Side Management Professionals, Innovative Program Design Committee, 1994.
- Instructor, Association for Demand-Side Management Professionals, "On Target" DSM Workshops, 1994.
- Member, Southeast Pennsylvania Regional Energy Advisory Board, 1986 1989.
- Member, Mayor's Committee on Energy and Housing, Philadelphia, PA, 1986 1988.

Member, American Institute of Architects, Research and Technology Committee, 1984 - 1987.

#### **Publications**

- "Advancing Clean Energy Funds, Options for Administration and Funding," (with Loiter, J.), prepared for the U.S. EPA Climate Protection Partnerships Division, May 2008.
- "Guide for Conducting Energy Efficiency Potential Studies," (with Loiter, J.), A
  Resource of the National Action Plan for Energy Efficiency, U.S. EPA, November 2007.
- "Energy Efficiency Potential Studies: Why, How and So What?," American Council for an Energy Efficient Economy Conference on Energy Efficiency as a Resource, October 2007.
- "Integrated Resource Solutions to Localized Transmission and Distribution Reliability,"
  Proceedings of the International Energy Program Evaluation Conference, August 2007.
- "Removing Disincentives for Efficiency from Electric Rate Design," (with Galura, J., Gupta, A., Loiter, J.), 17<sup>th</sup> National Energy Services Conference Proceedings, Las Vegas, NV, February 2007.
- Power to Save: An Alternative Path to Meet Electric Needs in Texas, published by Natural Resources Defense Council and Ceres, New York, NY, January 2007.
- "Gas Efficiency Potential and a Portfolio of Integrated Gas and Electric Statewide Programs for New York," (with Hogan, E.), American Council for an Energy Efficiency Economy 2006 Summer Study Proceedings, Pacific Grove, California, Forthcoming August 2006.
- "Demand-Side Management Strategic Plan for Jiangsu Province, China: Economic, Electric and Environmental Returns from an End-Use Efficiency Investment Portfolio in the Jiangsu Power Sector," (with Finamore, B., Plunkett, J., Moscowitz, D., Slote, S., Wyatt, F.), American Council for an Energy Efficiency Economy 2006 Summer Study Proceedings, Pacific Grove, California, Forthcoming August 2006.
- "Purchasing Efficiency Power Plants in Jiangsu," (with Finamore, B., Plunkett, J., Moscowitz, D., Slote, S., Wyatt, F.), *Greener Management International*, Forthcoming August 2006.
- "Purchasing Efficiency Power Plants in Jiangsu and Shanghai" with (Song, H., Chen, R., and B. Finamore), *Rightlight 6 International Energy Efficiency Lighting Conference*, Shanghai, China, Forthcoming May 2005.
- "Transmission System Integrated Resource Planning: Leveling the Playing Field" (with S. Slote), *ACEEE 2002 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, California, August 2004.
- "Long-Term Energy-Efficiency and DSM Investment in the Northeast United States," (with J. Plunkett), presented at the *China-US Workshop on DSM Policy*

- Research, sponsored by the China State Grid Corporation, Beijing, China, March 2004.
- "The Big Picture: An Overview of Energy Savings Opportunities," *PACE University Energy Law Center*, presented as plenary session at PACE Recharge Energy Conference, September 2003.
- "Energy Efficiency and Renewable Energy Resource Development Potential in New York State" (with C. Donovan, N. Elliott, D. Hill, S. Nadel, C. Neme, J. Plunkett), New York State Energy Research and Development Authority, August 2003.
- "Documentation of the Northwest Energy Efficiency Alliance Efforts to Support Energy Codes and Participate in the Federal Standards Setting Process" (with S. Slote and D. Baston), Northwest Energy Efficiency Alliance, 2003.
- "Efficiency And Renewable Electricity Potential Studies: Approaches, Results, Uses And Implications," *ACEEE 2003 Electricity Reliability Conference*, Berkeley, California, June 2003.
- "The Technical and Economic Potential for Energy-Efficient Products and Services," ACEEE 2003 National Symposium On Market Transformation, Washington DC, April 2003.
- "Light-Years Ahead: A New Approach to Transform Commercial Lighting" (with P. Richards and S. Lacey) ACEEE 2002 Summer Study on Energy Efficiency in Buildings, Pacific Grove, California, August 2002.
- "A Modified Delphi Approach to Predict Market Transformation Program Effects" (with R. Prahl, C. Neme and R. Cuomo) *ACEEE 2000 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, California, August 2000.
- "A Systematic Application of Theory-Based Implementation and Evaluation of Market Transformation Programs," (with S. Hastie and R. Prahl), *ACEEE 2000 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, California, August 2000.
- "The Link Between Program Participation and Financial Incentives in the Small Commercial Retrofit Market," (with M. Wickenden), 1999 International Energy Program Evaluation Conference, Denver, Colorado, August 1999.
- "Delivering Statewide Efficiency Programs In a Competitive Environment Vermont's Model," 1997 Annual Conference of the Association of Energy Service Professionals, Boca Raton, Florida, December 1997.
- "Marketing with Community Involvement," (with Shel Feldman, Jane Peters, Lynn Goldfarb and Bill Stieglemen), Panel presentation and discussion at the Association of Energy Service Professionals 1997 Annual Conference, Boca Raton, Florida, December 1997.
- "Vermont 'Efficiency Utility' to Deliver Core Efficiency Programs," (with S. Parker), Strategies, Vol. 8, No. 3, Association of Energy Service Professionals, Summer 1997.
- "The Power to Save: A Plan to Transform Vermont's Energy-Efficiency Markets" (with J. Plunkett), *Vermont Department of Public Service*, May 1997.

- "Capturing Comprehensive Benefits from Commercial Customers: A Comparative Analysis of HVAC Retirement Alternatives" (with J. Plunkett and M. Kumm). 1996 ACEEE Summer Study on Energy Efficiency in Buildings, Pacific Grove, CA, August 1996.
- "Achieving Market Transformation with Pepco's Save and Save Again Program" (with A. Flinchum). Association of Energy Service Professionals' 1995 Implementation Conference, Dallas, TX, March, 1995.
- "Potomac Electric Power Company's Early Chiller Retirement Option" (with G. Simpson), 1994 Annual Member Meeting of the Association for Demand Side Management Professionals, San Diego, CA, December 1994.
- "Innovative DSM Programs," Moderator of presentation session at the 1994 Annual Member Meeting of the Association for Demand Side Management Professionals, San Diego, CA, December 1994.
- "Home Energy Rating Systems," Moderator of presentation session at the 1994 Affordable Comfort Conference, Philadelphia, PA, March 1994.
- Demand-Side Management Planning and Implementation Guide, Association of Demand-Side Management Professionals, Boca Raton, FL, December 1991.
- Performance Based Hook-Up Fees: Issues and Options (with R. Wirtshafter, et al.). New York Power Pool and Staff of the New York Public Service Commission, Schnectady and Albany, NY, August 1990.
- Buyer's Guide to Energy Efficient Gas Furnaces. Citizens Coalition for Energy Efficiency, Philadelphia, PA, 1987.
- "Hot Water Heating Energy Savings", *Pennsylvania Energy Report*, Citizens Coalition for Energy Efficiency, Philadelphia, PA, Summer 1986.
- "Lighting: Sorting Through the Options", *Pennsylvania Energy Bulletin*, Pennsylvania Energy Center, Philadelphia, PA, January 1985.

#### **Expert Testimony**

Jurisdiction	Proceeding Number/Dat es	On Behalf of:	Nature of Testimony
Connecticut DPUC	Docket No. 03-01-01, October 2003	Connecticut Office of Consumer Counsel	Critical review of Connecticut investor owned utility electric efficiency programs and goals, and recommendation of adoption of more aggressive goals and a performance incentive mechanism to reward utility shareholders for exemplary performance.
Florida PSC	Docket Nos. 080407-EG thru 080413- (E.G.,, July	Natural Resources Defense Council and	Review and Critique of 8 Florida utility DSM plans, goals, budgets and efficiency potential analyses.

Jurisdiction	Proceeding Number/Dat es	On Behalf of:	Nature of Testimony
	2009	Southern Alliance for Clean Energy	
Illinois ICC	Docket No. 07-0539, December 2007	Illinois Office of Attorney General	Testimony on 2008 – 2010 DSM Plans of Central Illinois Light Company (dba AmerenCILCO). Testimony addresses recommendations for modification of DSM Plans, as well as issues related to cost recovery and evaluation and verification of savings.
Illinois ICC	Docket No. 07-0540, December 2007	Illinois Office of Attorney General	Testimony on 2008 – 2010 DSM Plans of Commonwealth Edison. Testimony addresses recommendations for modification of DSM Plans, as well as issues related to cost recovery and evaluation and verification of savings.
Illinois ICC	Docket No. 07-0541, December 2007	Illinois Office of Attorney General	Testimony on 2008 – 2010 DSM Plans of Illinois Department of Commerce and Economic Opportunity. Testimony addresses recommendations for modification of DSM Plans, as well as issues related to cost recovery and evaluation and verification of savings.
Illinois ICC	Docket No. 10-0568, November 2010	Illinois Office of Attorney General	Testimony on 2012 – 2014 DSM Plans of Central Illinois Light Company (dba AmerenCILCO), Central Illinois Public Service) Company, (dba AmerenCIPS) and Illinois Power Company (dba AmerenIP). Testimony addresses appropriateness of EE goals and budgets, recommendations for modification of DSM Plans, as well as issues related to state statutes, cost recovery and evaluation and verification of savings.
Illinois ICC	Docket No. 10-0570, November 2010	Illinois Office of Attorney General	Testimony on 2012 – 2014 DSM Plans of Commonwealth Edison. Testimony addresses appropriateness of EE savings goals and budgets, interpretation of state statutes, recommendations for modification of DSM Plans, as well as issues related to cost recovery and evaluation and verification of savings.
Illinois ICC	Docket No. 10-0562,	Illinois Office of Attorney	Testimony on 2012 – 2014 DSM Plans of

Jurisdiction	Proceeding Number/Dat es	On Behalf of:	Nature of Testimony
	November 2010	General	Northern Illinois Gas Company (dba Nicor Gas Company). Testimony addresses recommendations for modification of DSM Plans, appropriateness of EE savings goals and budgets and compliance with Illinois Statutes, as well as issues related to opt-out provisions, transportation gas customer treatment, integration of gas and electric programs, cost recovery and evaluation and verification of savings.
Illinois ICC	Docket No. 10-0564, November 2010	Illinois Office of Attorney General	Testimony on 2012 – 2014 DSM Plans of North Shore Gas Company and The Peoples Gas Light & Coke Company. Testimony addresses recommendations for modification of DSM Plans, appropriateness of EE savings goals and budgets and compliance with Illinois Statutes, as well as issues related to optout provisions, transportation gas customer treatment, integration of gas and electric programs, cost recovery and evaluation and verification of savings.
Indiana URC	Cause No. 43114 and No. 43114 SI, May 2007	Citizens Action Coalition of Indiana, Save the Valley Coalition, Valley Watch, Sierra Club	Testimony in Duke Energy and Vectren rate cases regarding the need for a new IGCC power plant. Addressed the achievable potential for electric efficiency in Duke Energy and Vectren's territories, the associated costs and benefits, and the reliability impact of efficiency on their electric systems as an alternative to the IGCC plant. Addressed the need for establishment of a utility performance incentive mechanism to provide incentives for pursuit of energy efficiency initiatives.
New York PSC	CASE 06-G- 1322, March 2007	Natural Resources Defense Council, PACE Energy Project, Association for Energy Affordability	Presented analysis of the natural gas efficiency potential in Con Edison service territory, the associated costs and benefits to achieve it, and recommended funding levels and strategies to capture gas efficiency. Addressed the need for a revenue decoupling mechanism and performance incentives to overcome Con Edison disincentives to successfully administer efficiency programs.

Jurisdiction	Proceeding Number/Dat es	On Behalf of:	Nature of Testimony
Ontario Energy Board	EBRO 493/494, August 1996	Green Energy Coalition	Review and critique of Union Gas Company's 1997 DSM Plan
Ontario Energy Board	EBRO 487, 1998	Green Energy Coalition	Review and critique of Consumers Gas Company's 1999 DSM Plan
Texas Legislature	House Committee on Regulated Industries hearing on HB269, Feb. 2007	Public Citizen	Testimony on electric energy efficiency potential in Texas, reliability issues in ERCOT load zone, and benefits and costs of meeting new load growth with efficiency.
Vermont PSB	Docket No. N/A, 1996	Vermont Department of Public Service	Critical review and recommendations on Green Mountain Power's (GMP) performance and plans for C&I New construction programs.
Vermont Legislature	Senate Natural Resources and Finance Committee hearings on S62, 1997	On behalf of the Committee	Testimony electric restructuring bill (S62) addressing the benefits and costs to Vermonters and potential environmental and consumer impacts.
Vermont PSB	Docket No. 5980, August1997	Vermont Department of Public Service	Development and support of plan to establish a statewide energy efficiency utility (EEU), and present the efficiency programs and plans for the EEU.
Vermont PSB	Docket No. 5983, October 1997	Vermont Department of Public Service	Critique of GMP's analysis and decision to terminate its Small and Large Commercial and Industrial Retrofit Programs in 1994, in the context of Vermont regulatory requirements.
Vermont PSB	Docket No. 6018, February 1998	Vermont Department of Public Service	Testimony addressing cost recovery and lost revenue adjustments for CVPS's Small and Large C&I Retrofit Programs, and violations of agreements made in Dockets 5270 CV-1 & 3 and 5686 and in Dockets 5828 and 5835.

Jurisdiction	Proceeding Number/Dat es	On Behalf of:	Nature of Testimony
Vermont PSB	Docket No. 6107, September 1998	Vermont Department of Public Service	Critique of GMP's performance in delivery energy efficiency programs and appropriate cost recovery and lost revenue adjustments.
Vermont PSB	Docket No. 6120, October 1998	Vermont Department of Public Service	Review and critique of CVPS's DSM plans.
Vermont PSB	Docket No. 5980, May 1999	Vermont Department of Public Service	Phase 2: Present and defend modifications to the EEU efficiency plans.
Vermont PSB	Docket No. 6860, December 2003	Vermont Electric Power Company	Presentation and defense of Efficiency component of Vermont Electric Company's (VELCO) Transmission Integrated Resource Plan to assess the ability of efficiency to avoid or defer transmission upgrades.
Vermont Legislature	House Commerce Committee hearings on S. 52, April 2005	Efficiency Vermont	Testimony on aspects of s. 52, including the adoption of a VT renewable portfolio standard, inclusion of combined heat and power as eligible for funding under VT statewide electric energy efficiency programs, and mechanisms to allow large electric users to "opt-out" of energy efficiency utility funding surcharges.
Virginia SCC	Case No. PUE-2007- 00066, November 2007	Southern Environmental Law Center	Testimony regarding the need for a new coal-fired power plant proposed by Dominion Virginia Power. Addressed the achievable potential for electric efficiency in Dominion's Virginia territory as an alternative to new coal-fired supply, and the associated costs and benefits of efficiency initiatives.