



State of Rhode Island and Providence Plantations

DEPARTMENT OF ATTORNEY GENERAL

150 South Main Street • Providence, RI 02903

(401) 274-4400

TDD (401) 453-0410

*Patrick C. Lynch, Attorney General*

March 30, 2007

**By Electronic and Regular Surface Mail**

Luly Massaro, Clerk  
Public Utilities Commission  
89 Jefferson Blvd.  
Warwick, RI 02888

**Re: National Grid Gas Energy Efficiency  
Programs – Commission Docket No. 3790**

Dear Ms. Massaro:

Enclosed for filing in the above-captioned proceeding are an original and nine (9) copies of the testimony of Mr. Timothy Woolf, Vice President of Synapse Energy Economics, Inc., on behalf of the Division of Public Utilities and Carriers. Copies of this letter and its enclosure will be filed with you electronically, and provided to all persons on the service list for this docket.

Very truly yours,

William K. Lueker (R.I. Bar No. 6334)  
Special Assistant Attorney General  
Tel. (401) 274-4400, ext. 2299  
Fax (401) 222-3016

Encl.

cc: Servic List PUC Docket No. 3790

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**BEFORE THE**  
**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS**  
**PUBLIC UTILITIES COMMISSION**

**IN RE: NATIONAL GRID GAS )**  
**ENERGY EFFICIENCY )**  
**PROGRAMS )**

**DOCKET NO. 3790**

**Direct Testimony of**

**Timothy Woolf**

**On Behalf of**

**The Division of Public Utilities and Carriers**

**Regarding National Grid's**  
**Gas Energy Efficiency Programs**

March 29, 2007

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1 **Q. What is your name, position and business address?**

2 A. My name is Timothy Woolf. I am the Vice-President of Synapse Energy  
3 Economics, Inc., 22 Pearl Street, Cambridge, MA 02139.

4 **Q. Please describe Synapse Energy Economics.**

5 A. Synapse Energy Economics is a research and consulting firm specializing in  
6 utility regulation, planning, and analysis. Synapse works for a variety

7 of clients, with an emphasis on consumer advocates, regulatory commissions, and  
8 environmental advocates.

9 **Q. Please describe your experience in the area of utility regulation, and in  
10 particular energy efficiency.**

11 A. My experience is summarized in my resume, which is attached as Exhibit TW-1. In  
12 my current position at Synapse, I investigate a variety of issues related to electric  
13 and gas utility regulation and planning; with a focus on energy efficiency,  
14 renewable resources, air quality, environmental policies, and many aspects of  
15 consumer protection. Since 1987 my work has covered all aspects of energy  
16 efficiency program design and implementation, including efficiency measure  
17 assessment, program delivery options, program budgeting, cost-benefit analyses,  
18 utility performance incentives and other relevant regulatory policies.

19 **Q. Please describe your professional experience before beginning your current  
20 position at Synapse Energy Economics.**

21 A. Before joining Synapse Energy Economics, I was the Manager of the Electricity  
22 Program at Tellus Institute, a consulting firm in Boston, Massachusetts. In that  
23 capacity I managed a staff that provided research, testimony, reports and

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1 Economics from the London School of Economics, a BS in Mechanical  
2 Engineering and a BA in English from Tufts University.

3 **Q. On whose behalf are you testifying in this case?**

4 A. I am testifying on behalf of the Division of Public Utilities and Carriers (the  
5 Division).

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1 **Q. Please provide a summary of National Grid's proposed Gas Energy**  
2 **Efficiency Programs.**

3 A. National Grid currently has a gas energy efficiency surcharge of \$0.063 per  
4 decatherm, applicable from January through June 2007. The Company is  
5 proposing to increase this surcharge to \$0.114 per decatherm, for the period July  
6 2007 through December 2008. These surcharges will provide the Company with  
7 total revenues of roughly \$7.5 million, for gas efficiency programs to be  
8 implemented during the 18-month period of July 2007 through December 2008.

9 National Grid proposes to offer five residential and eight commercial and  
10 industrial gas efficiency programs. The programs are intended to address all the  
11 key gas end-uses, and to be available to all types of gas customers. In total, the  
12 gas efficiency programs are expected to save 198,908 MMBtu per year, and a  
13 total of 3,078,531 MMBtu over the lifetimes of the efficiency measures. The  
14 program designs are described in Attachments 1 and 2 of the Settlement.

15 Each of the programs is estimated to be cost-effective, with benefit-cost ratios  
16 exceeding one. On average, the residential programs are estimated to have a  
17 benefit-cost ratio of 3.25, and the commercial and industrial programs are  
18 estimated to have a benefit cost ratio of 3.68. The programs are expected to result  
19 in total benefits of \$22.8 million, and net benefits (after subtracting out costs) of  
20 roughly \$16 million.<sup>1</sup> The benefit-cost analysis is presented in Attachment 8 of  
21 the Settlement.

22 **Q. Please explain why the Division supports the Company's Gas Efficiency**  
23 **Programs.**

24 A. There are many reasons why the Division supports the Company's Gas Efficiency  
25 Programs:

26 First, the program funding levels are consistent with the Comprehensive Energy  
27 Conservation, Efficiency and Affordability Act of 2006 (2006 Act). The Act  
28 allows the Company to implement a surcharge of up to \$0.15 per decatherm.

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<sup>1</sup> Both of these figures are in present value dollars.

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1 While the surcharges for 2007 and 2008 are somewhat lower than this maximum  
2 amount, they have been set to provide the Company with as much funding as is  
3 needed for this initial 18-month period. New energy efficiency programs  
4 typically require several years to ramp up to a mature level, and the Company  
5 estimates that the proposed budgets are all that they could efficiently spend during  
6 this initial ramp-up period.

7 Second, the gas efficiency program budgets are properly balanced across  
8 customer classes, where the programs budgets for each sector (residential versus  
9 commercial/industrial) are roughly equal to the amount of revenues contributed  
10 by the that sector. Furthermore, within the residential sector a considerable  
11 portion of the program funds have been dedicated to programs serving low-  
12 income customers – i.e., the *EnergyWise* program and the Single Family Low  
13 Income program.

14 Third, several of the Company's gas efficiency programs are offered through  
15 GasNetworks, a regional collaborative of natural gas distribution companies that  
16 coordinate natural gas efficiency programs throughout Maine, Massachusetts,  
17 New Hampshire and, now, Rhode Island. This is a very sensible approach to  
18 offering gas programs in Rhode Island, as it builds upon the experience developed  
19 in other states and it creates efficiencies through regional coordination.

20 Fourth, several of the Company's gas efficiency programs are already being  
21 provided by KeySpan Energy Delivery (KeySpan). Furthermore, the Company  
22 will employ KeySpan staff to assist with the development and implementation of  
23 the gas efficiency programs. KeySpan has several years of experience in offering  
24 gas efficiency programs in other states, and is recognized as a leader in gas  
25 efficiency programs in the region. Again, this is a sensible approach that will

26 increase the effectiveness of the Company's new gas efficiency programs.

27 Fifth, to the extent possible the gas efficiency programs will be coordinated with,  
28 and offered in conjunction with, the Company's electric efficiency programs.  
29 This coordination will make both the gas and electric programs more effective  
30 and more efficient. This coordination is especially important for those programs

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1 that involve home energy audits (for the residential customers) or technical  
2 assessments (for commercial and industrial customers), where all cost-effective  
3 energy efficiency improvements can be identified and provided with financial  
4 support, regardless of whether the end-use requires electricity or natural gas.

5 Finally, the programs are designed to address all key gas end-uses, and to be made  
6 available to all customer types. This is important to ensure that gas efficiency  
7 services are comprehensive, and to promote customer equity across the efficiency  
8 programs.

9 **Q. Does the Settlement include any provisions regarding shareholder incentives**  
10 **for energy efficiency activities?**

11 **A.** Yes. The proposed shareholder incentive is similar to that which is in place for  
12 the National Grid electric efficiency programs. The Company must achieve 60%  
13 of the savings goal before it can earn any shareholder incentive, and then it will be

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1 **Q. Does the Division support the shareholder incentive mechanism proposed in**  
2 **the Settlement?**

3 A. Yes. The Division believes that the shareholder incentive mechanism proposed in  
4 the Settlement strikes the appropriate balance between (a) providing the Company  
5 management with the proper to incentive to conduct successful efficiency  
6 programs, and (b) maintaining as much of the available efficiency funds as  
7 possible for the purpose of achieving gas efficiency savings and reducing  
8 customers' gas bills.

9 **Q. Are there other elements to the Settlement?**

10 A. Yes. One important additional element pertains to "self-directed" energy  
11 efficiency programs. The 2006 Act allows the Commission to exempt gas used  
12 for manufacturing processes from the energy efficiency surcharge where the  
13 customer has established a self-directed energy efficiency program. The parties to  
14 the Settlement request that the Commission address this important issue in a  
15 separate proceeding, in order to ensure that the Company's gas efficiency  
16 programs are allowed to proceed without delay. The parties to the Settlement  
17 have developed proposed guidelines for self-directed energy efficiency programs,  
18 in order to assist the Commission with that separate proceeding. These guidelines  
19 are provided in Attachment 5 of the Settlement.

20 **Q. Does this conclude your testimony at this time?**

21 A. Yes.

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# Timothy Woolf

Vice President  
Synapse Energy Economics  
22 Pearl Street, Cambridge, MA 02139  
(617) 661-3248 ext. 223 • fax: (617) 661-0599  
www.synapse-energy.com  
twoolf@synapse-energy.com

## PROFESSIONAL EXPERIENCE

**Synapse Energy Economics Inc.**, Cambridge, MA. Vice President, 1997-present.  
Conducting research, writing reports, and presenting expert testimony pertaining to consumer, environmental, and public policy implications of electricity industry regulation. Primary focus of work includes electricity industry regulation and restructuring, electric power system planning, energy efficiency programs and policies, renewable resources and related policies, power plant performance and economics, air quality, and many aspects of consumer and environmental protection.

**Tellus Institute**, Boston, MA. Senior Scientist, Manager of Electricity Program, 1992-1997.  
Responsible for managing six-person staff that provided research, testimony, reports and regulatory support to consumer advocates, environmental organizations, regulatory commissions, and state energy offices throughout the US.

**Association for the Conservation of Energy**, London, England. Research Director, 1991-1992.  
Researched and advocated legislative and regulatory policies for promoting integrated resource planning and energy efficiency in the competitive electric industries in the UK and Europe.

**Massachusetts Department of Public Utilities**, Boston, MA. Staff Economist, 1989-1990.  
Responsible for regulating and setting rates of Massachusetts electric utilities. Drafted integrated resource planning regulations. Evaluated utility energy efficiency programs.

**Massachusetts Office of Energy Resources**, Boston, MA. Policy Analyst, 1987-1989.  
Researched and advocated integrated resource planning regulations. Participated in demand-side management collaborative with electric utilities and other parties.

**Energy Systems Research Group**, Boston, MA. Research Associate, 1983-1987.  
Performed critical evaluations of electric utility planning and economics, including production cost modeling and assessment of power plant costs and performance.

**Union of Concerned Scientists and Massachusetts Public Interest Research Group**, Cambridge and Boston, MA. Energy Analyst, 1982-1983. Analyzed environmental and economic issues related to nuclear plants, renewable resources and energy efficiency.

## EDUCATION

Masters, Business Administration. Boston University, Boston, MA, 1993.  
Diploma, Economics. London School of Economics, London, England, 1991.  
B.S., Mechanical Engineering. Tufts University, Medford, MA, 1982.  
B.A., English. Tufts University, Medford, MA, 1982.

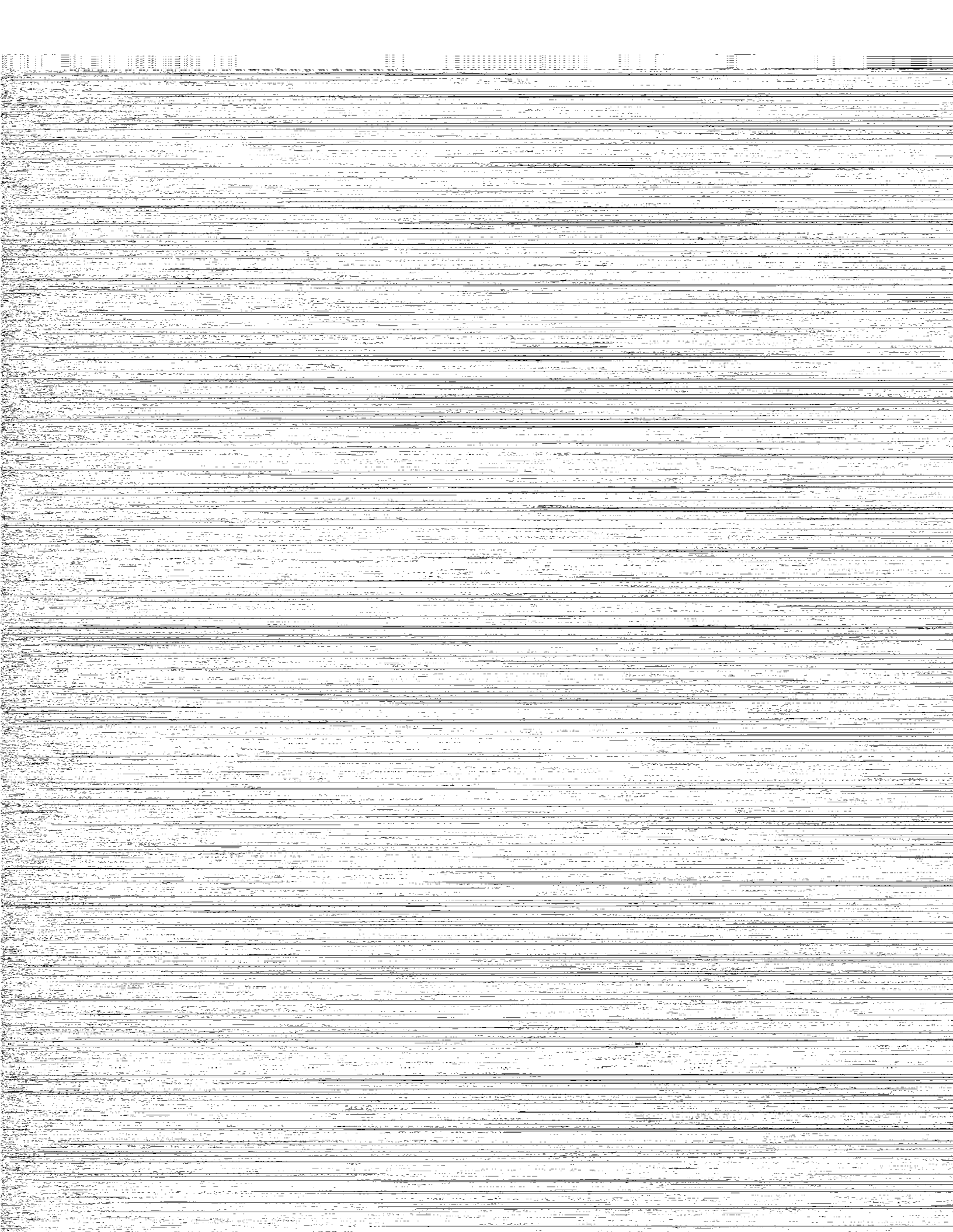
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## TESTIMONY

**Rhode Island Public Utilities Commission (Docket No. 3765).** Surrebuttal testimony regarding National Grid's Renewable Energy Standard Procurement Plan. On behalf of the Division of Public Utilities and Carriers. February 20, 2007.

**Rhode Island Public Utilities Commission (Docket No. 3765).** Direct testimony regarding National Grid's Renewable Energy Standard Procurement Plan. On behalf of the Division of Public Utilities and Carriers. January 17, 2007.

**Minnesota Public Utilities Commission (Docket Nos. CN-05-619 and TR-05-1275).** Direct testimony regarding the potential for energy efficiency as an alternative to the proposed Big Stone II coal project. On behalf of the Minnesota Center for Environmental Advocacy, Fresh Energy, Izack Walton League of America, Wind on the Wires and the Union of Concerned



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**Delaware Public Service Commission (DPSC 97-58).** Direct testimony on Delmarva Power and Light's request to merge with Atlantic City Electric. On behalf of the Delaware Public Service Commission Staff. May 1997.

**Delaware Public Service Commission (DPSC 95-172).** Oral testimony on Delmarva's integrated resource plan and DSM programs. On behalf of the Delaware Public Service Commission Staff. May 1996.

**Colorado Public Utilities Commission (5A-531EG).** Direct testimony on impact of proposed merger on DSM, renewable resources and low-income DSM. On behalf of the Colorado Office of Energy Conservation. April 1996.

**Colorado Public Utilities Commission (3I-199EG).** Direct testimony on impacts of increased competition on DSM, and recommendations for how to provide utilities with incentives to implement DSM. On behalf of the Colorado Office of Energy Conservation. June 1995.

**Colorado Public Utilities Commission (5R-071E).** Oral testimony on the Commission's integrated resource planning rules. On behalf of the Colorado Office of Energy Conservation. July 1995.

**Colorado Public Utilities Commission (3I-098E).** Direct testimony on the Public Service

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*Study of Potential Mohave Alternative/Complementary Generation Resources*, Pursuant to CPUC Decision 04-12-016, prepared for Southern California Edison, with Sargent and Lundy, November 2005.

*Potential Cost Impacts of a Renewable Portfolio Standard in New Brunswick*, prepared for the New Brunswick Department of Energy, October 2005.

*Feasibility Study of Alternative Energy and Advanced Energy Efficiency Technologies for Low-Income Housing in Massachusetts*, prepared for the Low-Income Affordability Network, Action for Boston Community Development, and Action Inc., with Zapotec Energy, August 2005.

*The Cape Light Compact Energy Efficiency Plan: Phase III 2005-2007: Providing Comprehensive Energy Efficiency Services to Communities on Cape Cod and Martha's Vineyard*, prepared for the Cape Light Compact, April 2005.

*Review of Avoided Costs Used in Minnesota Electric Utility Conservation Improvement Programs*, prepared for the Minnesota Office of Legislative Auditor, November 2004.

*NEEP Strategic Initiative Review: Qualitative Assessment and Initiative Ranking for the Residential Sector*, prepared for the Northeast Energy Efficiency Partnerships, Inc., October 1, 2004.

*A Balanced Energy Plan for the Interior West*, prepared for the Hewlett Foundation Energy Series, with Western Resource Advocates and Tellus Institute, May 2004.

*OCC Comments on Alternative Transitional Standard Offer*, prepared for the Connecticut Office of Consumer Counsel, October 20, 2003.

*Potential Cost Impacts of a Vermont Renewable Portfolio Standard*, prepared for the Vermont Public Service Board, presented to the Vermont RPS Collaborative, October 16, 2003.

*Portfolio Management: How to Procure Electricity Resources to Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail Customers*, prepared for the Regulatory Assistance Project and the Energy Foundation, October 10, 2003.

*Air Quality in Queens: Cleaning Up the Air in Queens County and Neighboring Regions*, prepared for a collaboration of Natural Resources Defense Council, Keyspan Energy, and the Coalition Helping to Organize a Kleaner Environment, May 2003.

*The Maryland Renewable Portfolio Standard: An Assessment of Potential Cost Impacts*, prepared for the Maryland Public Interest Research Group, March 18, 2003.

*The Cape Light Compact Energy Efficiency Plan: Phase II 2003-2007: Providing Comprehensive Energy Efficiency Services to Communities on Cape Cod and Martha's Vineyard*, prepared for the Cape Light Compact, with Cort Richardson, the Vermont Energy Investment Corporation, and Optimal Energy Incorporated, March 2003.

*Green Power and Energy Efficiency Opportunities for Municipalities in Massachusetts: Promoting Community Involvement in Energy and Environmental Decisions*, prepared for the Massachusetts Energy Consumers Alliance, May 20, 2002.

*The Energy Efficiency Potential in Williamson County, Tennessee: Opportunities for Reducing the Need for Transmission Expansion*, prepared for the Harpeth River Watershed Association and the Southern Alliance for Clean Energy, April 4, 2002.

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*Electricity Restructuring Activities in the US: A Survey of Selected States*, prepared for the Arizona Corporation Commission Utilities Division Staff, March 15, 2002.

*Powering the South: A Clean and Affordable Energy Plan for the Southern United States*, prepared with and for the Renewable Energy Policy Project and a coalition of Southern environmental advocates, January 2002.

*Survey of Clean Power and Energy Efficiency Programs*, prepared for the Ozone Transport Commission, January 14, 2002.

*Proposal for a Renewable Portfolio Standard for New Brunswick*, prepared for the Conservation Council of New Brunswick, presented to the New Brunswick Market Design Committee, December 12, 2001.

*A Retrospective Review of FERC's Environmental Impact Statement on Open Transmission Access*, prepared for the North American Commission for Environmental Cooperation, with the Global Development and Environment Institute, October 19, 2001.

*Repowering the Midwest: The Clean Energy Development Plan for the Heartland*, prepared for the Environmental Law and Policy Center and a coalition of Midwest environmental advocates, February 2001.

*Marginal Price Assumptions for Estimating Customer Benefits of Air Conditioner Efficiency Standards*, comments on the Department of Energy's proposed rules for efficiency standards for central air conditioners and heat pumps, on behalf of the Appliance Standards Awareness Project, December 2000.

*The Cape Light Compact Energy Efficiency Plan: Providing Comprehensive Energy Efficiency Services to Communities on Cape Cod and Martha's Vineyard*, prepared for the Cape Light Compact, November 2000.

*Comments of the Citizens Action Coalition of Indiana*, Workshop on Alternatives to Traditional Generation Resources, June 23, 2000.

*Investigation into the July 1999 Outages and General Service Reliability of Delmarva Power & Light Company*, prepared for the Delaware Public Service Commission Staff, with Exponent Failure Analysis, Docket No. 99-328, February 1, 2000.

*Market Distortions Associated With Inconsistent Air Quality Regulations*, prepared for the Project for a Sustainable FERC Energy Policy, November 18, 1999.

*Measures to Ensure Fair Competition and Protect Consumers in a Restructured Electricity Industry in West Virginia*, prepared for the West Virginia Consumer Advocate Division, Case No. 98-0452-E-GI, June 15, 1999.

*Competition and Market Power in the Northern Maine Electricity Market*, prepared for the Maine Public Utilities Commission, with Failure Exponent Analysis, November 1998.

*New England Tracking System*, a methodology for a region-wide electricity tracking system to support the implementation of restructuring-related policies, prepared for the New England Governors' Conference, with Environmental Futures and Tellus Institute, October 1998.

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*The Role of Ozone Transport in Reaching Attainment in the Northeast: Opportunities, Equity and Economics*, prepared for the Northeast States for Coordinated Air Use Management, with the Global Development and Environment Institute, July 1998.

*Grandfathering and Environmental Comparability: An Economic Analysis of Air Emission Regulations and Electricity Market Distortions*, prepared for the National Association of Regulatory Utility Commissioners, with the Global Development and Environment Institute, June 1998.

*Performance-Based Regulation in a Restructured Electric Industry*, prepared for the National Association of Regulatory Utility Commissioners, with Resource Insight, the National Consumer Law Center, and Peter Bradford, February 1998.

*Massachusetts Electric Utility Stranded Costs: Potential Magnitude, Public Policy Options, and Impacts on the Massachusetts Economy*, prepared for the Union of Concerned Scientists, MASSPIRG and Public Citizen, November 1997.

*The Delaware Public Service Commission Staff's Report on Restructuring the Electricity Industry in Delaware*, prepared for the Delaware Public Service Commission Staff, Tellus Study No. 96-99, August 1997.

*Preserving Public Interest Obligations Through Customer Aggregation: A Summary of Options for Aggregating Customers in a Restructured Electricity Industry*, prepared for the Colorado Office of Energy Conservation, Tellus Study No. 96-130, May 1997.

*Zero Carbon Electricity: the Essential Role of Efficiency and Renewables in New England's Electricity Mix*, prepared for the Boston Edison Settlement Board, Tellus Study No. 94-273, April 1997.

*Regulatory and Legislative Policies to Promote Renewable Resources in a Competitive Electricity Industry*, prepared for the Colorado Governor's Office of Energy Conservation, Tellus Study No. 96-130-A5, January 1997.

*Comments Regarding the Investigation of Restructuring the Electricity Industry in Delaware*, on behalf of the Staff of the Delaware Public Service Commission, Docket No. 96-83, Tellus Study No. 96-99, November 1996.

*Response of Governor's Office of Energy Conservation, Colorado Public Utilities Commission Questionnaire on Electricity Industry Restructuring*,. Docket No. 96Q-313E, Tellus No. 96-130-A3, October 1996.

*Position Paper of the Vermont Department of Public Service*. Investigation into the Restructuring of the Electric Utility Industry in Vermont, Docket No. 5854, Tellus Study No. 95-308, March 1996.

*Can We Get There From Here? The Challenge of Restructuring the Electricity Industry So That All Can Benefit*, prepared for the California Utility Consumers' Action Network, Tellus Study No. 95-208 February 1996.

*Promoting Environmental Quality in a Restructured Electric Industry*, prepared for the National Association of Regulatory Utility Commissioners, Tellus Study No. 95-056, December 1995.

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*Comments to the Pennsylvania Public Utilities Commission Regarding an Investigation into Electric Power Competition*, on behalf of the Pennsylvania Office of Consumer Advocate, Docket No. I-00940032, Tellus Study No. 95-260, November 1995.

*Systems Benefits Funding Options*. Prepared for Wisconsin Environmental Decade, Tellus Study No. 95-248, October 1995.

*Achieving Efficiency and Equity in the Electricity Industry Through Unbundling and Customer Choice*, Initial and Reply Comments of the New Jersey Division of Ratepayer Advocate, in an investigation into the future structure of the electric power industry, Docket No. EX94120585Y, Tellus Study No. 95-029-A3, September 1995.

*Non-Price Benefits of BECO Demand-Side Management Programs*, prepared for the Boston Edison Settlement Board, Tellus Study No. 93-174, August 1995.

*Electric Resource Planning for Sustainability*, prepared for the Texas Sustainable Energy Development Council, Tellus Study No. 94-114, February 1995.

## ARTICLES AND PRESENTATIONS

*Managing Electricity Industry Risk with Clean and Efficient Resources*, The Electricity Journal, with John Nielson, David Berry and Ronald Lehr, Volume 18, Issue 2, March 2005.

*Local Policy Measures to Improve Air Quality: A Case Study of Queens County, New York*, Local Environment, Volume 9, Number 1, February 2004.

*Future Outlook for Electricity Prices in Massachusetts*, guest speaker before the Boston Green Buildings Task Force, December 18, 2003.

*A Renewable Portfolio Standard for New Brunswick*, guest speaker before the New Brunswick Market Design Committee, January 10, 2002.

*What's New With Energy Efficiency Programs*, Energy & Utility Update, National Consumer Law Center, Summer 2001.

*Clean Power Opportunities and Solutions: An Example from America's Heartland*, The Electricity Journal, July 2001.

*Potential for Wind and Renewable Resource Development in the Midwest*, speaker at WINDPOWER 2001, Washington, DC, June 7, 2001.

*Electricity Market Distortions Associated With Inconsistent Air Quality Regulations*, The Electricity Journal, April 2000.

*Generation Information Systems to Support Renewable Portfolio Standards, Generation Performance Standards and Environmental Disclosure*, on behalf of the Union of Concerned Scientists, presentation at the Massachusetts Restructuring Roundtable, March 2000.

*Grandfathering and Coal Plant Emissions: the Cost of Cleaning Up the Clean Air Act*, Energy Policy, with Ackerman, Biewald, White and Moomaw, vol. 27, no 15, December 1999, pages 929-940.



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*Challenges Faced by Clean Generation Resources Under Electricity Restructuring*, speaker at the Symposium on the Changing Electric System in Florida and What it Means for the Environment, Tallahassee Florida, November 1999.

*Follow the Money: A Method for Tracking Electricity for Environmental Disclosure*, The Electricity Journal, May 1999.

*New England Tracking System Project: An Electricity Tracking System to Support a Wide Range of Restructuring-Related Policies*, speaker at the Ninth Annual Energy Services Conference and Exposition, Orlando Florida, December 1998

*Efficiency, Renewables and Gas: Restructuring As if Climate Mattered*, The Electricity Journal, Vol. 11, No. 1, January/February, 1998.

*Flexible Pricing and PBR: Making Rate Discounts Fair for Core Customers*, Public Utilities Fortnightly, July 15, 1996.

*Overview of IRP and Introduction to Electricity Industry Restructuring*, training session provided to the staff of the Delaware Public Service Commission, April, 1996.

*Performance-Based Ratemaking: Opportunities and Risks in a Competitive Electricity Industry*, The Electricity Journal, Vol. 8, No. 8, October, 1995.

*Competition and Regulation in the UK Electric Industry*, speaker at the Illinois Commerce Commission's workshop on Restructuring the Electric Industry, August, 1995.

*Competition and Regulation in the UK Electric Industry*, speaker at the British Columbia Utilities Commission Electricity Market Review, Vancouver, British Columbia, February, 1995.

*Retail Competition in the Electricity Industry: Lessons from the United Kingdom*, The Electricity Journal, Vol. 7, No. 5, June, 1994.

*A Dialogue About the Industry's Future*, The Electricity Journal, June, 1994.

*Energy Efficiency in Britain: Creating Profitable Alternatives*, Utilities Policy, July 1993.

*It is Time to Account for the Environmental Costs of Energy Resources*, Energy and Environment, Volume 4, No. 1, First Quarter, 1993.

*Developing Integrated Resource Planning Policies in the European Community*, Review of European Community & International Environmental Law, Energy and Environment Issue, Vol. 1, Issue 2. 1992.