OCC ESP Exhibit No. _____

FILE

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company For Authority to Establish a Standard Service Offer Pursuant to R.C. § 4928.143 in the Form Of an Electric Security Plan.	)))))))	Case No. 10-388-EL-SSO

DIRECT TESTIMONY
OF
JONATHAN WALLACH

Resource Insight, Inc.

ON BEHALF OF
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL
10 West Broad Street, Suite 1800
Columbus, Ohio 43215

JULY 27, 2010

Q1: PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A1: My name is Jonathan F. Wallach. I am Vice President of Resource Insight, Inc., 5 Water Street, Arlington, Massachusetts.

Q2: HAVE YOU TESTIFIED IN OHIO RECENTLY?

A2: Yes. I testified in December 2009 in Case No. 09-906-EL-SSO, a case filed in October 2009 by the Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company ("FirstEnergy Ohio" or "the Companies") for approval of a proposed auction process ("competitive bid process" or "CBP") for procuring wholesale supply for Standard Service Offer ("SSO") retail generation service starting on June 1, 2011. I refer to that case as the "MRO Case," a reference to the words "Market Rate Offer" in the caption of the Companies' application.

Q3: PLEASE SUMMARIZE YOUR PROFESSIONAL EDUCATION AND EXPERIENCE.

A3: As stated in my written, pre-filed testimony in the MRO Case, I have worked as a consultant to the electric-power industry since 1981. From 1981 to 1986, I was a research associate at Energy Systems Research Group. In 1987 and 1988, I was an independent consultant. From 1989 to 1990, I was a senior analyst at Komanoff Energy Associates. I have been in my current position at Resource Insight since September of 1990.

Over the last twenty-nine years, I have advised clients and testified on a wide range of economic, planning, and policy issues including: electric-utility restructuring; wholesale-power market design and operations; transmission pricing and policy; market valuation of generating assets and purchase contracts; power-procurement strategies; integrated resource planning; cost allocation and rate design; and energy-efficiency program design and planning.

My resume is attached as Attachment JFW-1.

Q4: PLEASE SUMMARIZE YOUR EXPERIENCE WITH REGARD TO THE COMPETITIVE PROCUREMENT OF WHOLESALE SUPPLY FOR STANDARD SERVICE RETAIL LOAD.

A4: I participated in the MRO Case, testifying on behalf of the Office of the Ohio Consumers' Counsel ("OCC") regarding the CBP proposed by FirstEnergy Ohio. I proposed modifications to that proposal.

For more than ten years, I have participated on behalf of the Maryland Office of People's Counsel in the process of designing, implementing, and monitoring the Standard Offer Service procurement mechanism for the four Maryland investor-owned utilities. I participated in the negotiations that established Maryland's procurement approach, and designed the mechanism for screening price offers against a benchmark market price. Since then, I have monitored every round of bidding, and assisted the Office of People's Counsel in the annual stakeholder process regarding modifications to the procurement mechanism. Finally, I have

testified on the People's Counsel's behalf in every investigation by the Maryland Public Service Commission of alternative procurement approaches, and was lead investigator for a major study of expected costs and risks associated with alternative procurement approaches.

Similarly, in Connecticut, I participated in the Standard Service procurement process for the two investor-owned utilities. On behalf of the Connecticut Office of Consumer Counsel, I have participated in the development of requests for proposals, independently evaluated price offers on bid day, participated in the selection of winning bids, and appeared at hearings by the Connecticut Department of Public Utility Control regarding the selection of winning bids. In addition, I am currently involved in a collaborative effort to procure medium- and long-term contracts for Standard Service supply.

Finally, since 2003, I assisted the Cape Light Compact in the solicitation and acquisition of retail supply to serve the aggregated load of 21 towns on Cape Cod and Martha's Vineyard, Massachusetts.

Q5: ON WHOSE BEHALF ARE YOU TESTIFYING?

A5: I am testifying on behalf of the OCC.

Q6: WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A6: The principal subject matter of my testimony in the MRO Case – the CBP for the Companies' SSO power supply that will begin in June 2011– remains unresolved.

The procurement process proposed by FirstEnegy Ohio in the MRO Case involved, among other matters, a June 2010 auction that did not take place. The Companies' proposed CBP has changed, and I address those changes in the context of my previous testimony in the MRO Case.

Q7: PLEASE DESCRIBE FIRSTENERGY OHIO'S ORIGINAL PROPOSAL FOR THE DESIGN OF THE COMPETITIVE BID PROCESS.

A7: Starting in June of 2010, the Companies proposed to conduct two descending-price clock auctions per year (in June and October) to purchase wholesale supply to serve SSO retail load. In the first two auctions, in June and October of 2010, the Companies would solicit offers for 12-, 24-, and 36-month contracts for delivery starting in June of 2011. In subsequent annual cycles, with auctions in June and October of each year, the Companies would solicit solely 36-month contracts with delivery starting in June of the following year.

In each auction, FirstEnergy Ohio's SSO load would be divided into "tranches" representing one percent of total SSO load across service territories and all rate classes. The first two auctions in 2010 would have sought to procure supply offers to meet a total of 34 tranches of SSO load with 12-month contracts, 34 tranches with 24-month contracts, and 32 tranches with 36-month contracts. If all of these tranches were successfully filled by the conclusion of the auction in October of 2010, then the Companies would have acquired enough wholesale supply to serve all of SSO load between June of 2011 and May of 2012, two-

thirds of SSO load between June of 2012 and May of 2013, and one-third of SSO load between June of 2013 and May of 2014.

In subsequent annual cycles, FirstEnergy Ohio would solicit offers to meet either 32 or 34 tranches of SSO load with 36-month contracts. As a result, at the conclusion of each annual cycle, the Companies would have acquired enough supply to serve all of SSO load for the upcoming delivery year, and about two-thirds and one-third of SSO load for the following two delivery years, respectively.

Q8: DID THE COMPANIES' CBP PROPOSAL CHANGE AFTER THEIR PROPOSAL IN THE MRO CASE?

A8: Yes. The Companies' filed a Stipulation and Recommendation ("Initial Stipulation") on March 23, 2010 as part of its application in this case (the "ESP Case," referring to the words "Electric Security Plan" in the caption) that contained a modified "ESP CBP Schedule." According to that schedule, the Companies proposed to conduct two descending-price clock auctions in 2010 (in July and October) to purchase wholesale supply to serve SSO retail load. In these first two auctions, the Companies would solicit offers for 12-, 24-, and 36-month contracts for delivery starting in June of 2011, and each auction would contribute half of the power supply solicited in 2010. In each 2010 auction, the Companies would solicit 17 tranches of 12-month contracts, 17 tranches of 24-month contracts, and 16 tranches of 36-month contracts.

In July 2011, the Companies would (again, according to the Initial Stipulation) solicit 24-month contracts for 34 tranches for delivery starting in June of 2012. In July of 2012, the Companies would solicit 12-month contracts for 34 tranches for delivery starting in June of 2013. The power supply solicited by the entire, proposed process would end on May 31, 2014.

The modified "ESP CBP Schedule," which contained a proposal for a July 2010 bid, is outdated because the auction did not take place.

Q9: DID THE COMPANIES' PROPOSAL FOR CBP AUCTION DATES CHANGE AFTER THE ONE CONTAINED IN THEIR INITIAL STIPULATION?

A9: Yes. While a Supplemental Stipulation filed by the Companies in June of 2010 and a Second Supplemental Stipulation filed by the Companies in July of 2010 did not address a change in the CBP auction dates, a newly modified CBP proposal by FirstEnergy Ohio is contained in the Supplemental Testimony of William R. Ridmann filed on July 23, 2010 in this ESP Case.[1] In this pre-filed testimony, the auction proposed in the Initial Stipulation for July 2010 would be eliminated, and all of the 12-, 24-, and 36-month contracts for delivery beginning in June of 2011 would be solicited in a single auction in October of 2010. Otherwise, the Companies' proposal remains the same as that in the Initial Stipulation, which calls for additional auctions in July of 2011 and July of 2012.

[1] Supplemental Testimony of William R. Ridmann, page 6 ("the competitive bidding process in Attachment A is no longer possible").

Q10: DO YOU HAVE ANY CONCERNS WITH REGARD TO THE COMPANIES' CURRENT PROPOSAL FOR THE AUCTION SCHEDULE?

A10: Yes. I have concerns regarding both the timing and frequency of the auctions under the Companies' most-recent CBP design proposal. Specifically, I am concerned that the Companies propose to conduct only one auction per year, and propose to conduct each annual auction either eight months (for the 2010 auction) or eleven months (for the 2011 and 2012) in advance of the delivery date for the contracts procured in those auctions. Procuring all of the market-priced supply at one time would expose ratepayers to the risk of adverse market-price movements at that time.[2] Procuring all of the SSO supply eight or eleven months in advance of delivery would expose bidders to substantial load and price uncertainty over that period: bidders would likely reflect such uncertainty in their price bids.

Q11: HOW SHOULD THE CBP AUCTION DESIGN BE MODIFIED TO ADDRESS THESE CONCERNS?

A11: I recommend that the Companies conduct two auctions per procurement cycle, in October and January preceding the contract delivery date. Specifically, I recommend that the Companies conduct auctions in:

- October 2010 and January 2011 to procure contracts for June 2011 delivery;
- October 2011 and January 2012 to procure contracts for June 2012 delivery; and
- October 2012 and January 2013 to procure contracts for June 2013 delivery.

[2] If forward prices were to spike at the time of the auction, such price increases would likely be reflected in bid prices in the auction.

This recommended auction schedule balances a number of competing objectives.

The recommended schedule allows for two auctions rather than one auction per procurement cycle, and allows for a reasonable amount of time between these two auctions, in order to reduce the risk of adverse market timing.[3] On the other hand, the recommended auction schedule allows for only two auctions per procurement cycle in order to minimize the lead time between the first auction of the cycle and the delivery date for contracts procured in that auction. Finally, the recommended January date for the second auction of the cycle minimizes the lead time between this auction and contract delivery date, but awards contracts early enough to allow winning bidders to effectively participate in PJM's Auction Revenue Right/Financial Transmission Right ("ARR/FTR") process.[4]

To conclude, adopting the auction schedule that I recommend would likely reduce risks to bidders and ratepayers, and consequently lead to lower SSO prices than achievable under the CBP proposed by Mr. Ridmann.

[3] Even if market prices spiked at the time of one of the two auctions, this would affect the price paid for only half of the SSO supply contracts acquired over the two auctions.

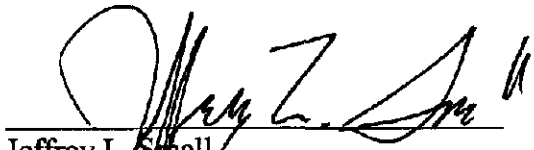
[4] As Mr. Ridmann notes in his supplemental testimony, if the auction were conducted after the ARR/FTR process, the Companies would have to participate in the ARR/FTR process on behalf of the yet-to-be determined winners of that auction. Supplemental Testimony of William R. Ridmann, page 6. According to Mr. Ridmann, this could increase bidders' congestion risk and, in turn, increase bidders' prices in the auction. Id.

Q12: DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

A12: Yes. However, I reserve the right to incorporate new information or supplement my testimony with information that may subsequently be made available to OCC.

CERTIFICATE OF SERVICE

It is hereby certified that a true copy of the foregoing the *Direct Testimony of Jonathan Wallach on Behalf of the Office of the Ohio Consumers' Counsel* has been served electronically this 27th day of July, 2010.



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Attachment JFW-1

Qualifications of

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SUMMARY OF PROFESSIONAL EXPERIENCE

1990–Present **Vice President, Resource Insight, Inc.** Provides research, technical assistance, and expert testimony on electric- and gas-utility planning, economics, regulation, and restructuring. Designs and assesses resource-planning strategies for regulated and competitive markets, including estimation of market prices and utility-plant stranded investment; negotiates restructuring strategies and implementation plans; assists in procurement of retail power supply.

1989–90 **Senior Analyst, Komanoff Energy Associates.** Conducted comprehensive cost-benefit assessments of electric-utility power-supply and demand-side conservation resources, economic and financial analyses of independent power facilities, and analyses of utility-system excess capacity and reliability. Provided expert testimony on statistical analysis of U.S. nuclear plant operating costs and performance. Co-wrote *The Power Analyst*, software developed under contract to the New York Energy Research and Development Authority for screening the economic and financial performance of non-utility power projects.

1987–88 **Independent Consultant.** Provided consulting services for Komanoff Energy Associates (New York, New York), Schlissel Engineering Associates (Belmont, Massachusetts), and Energy Systems Research Group (Boston, Massachusetts).

1981–86 **Research Associate, Energy Systems Research Group.** Performed analyses of electric utility power supply planning scenarios. Involved in analysis and design of electric and water utility conservation programs. Developed statistical analysis of U.S. nuclear plant operating costs and performance.

EDUCATION

BA, Political Science with honors and Phi Beta Kappa, University of California, Berkeley, 1980.

Massachusetts Institute of Technology, Cambridge, Massachusetts. Physics and Political Science, 1976–1979.

PUBLICATIONS

"The Future of Utility Resource Planning: Delivering Energy Efficiency through Distributed Utilities" (with Paul Chernick), *International Association for Energy Economics Seventeenth Annual North American Conference* (460–469). Cleveland, Ohio: USAEE. 1996.

"The Price is Right: Restructuring Gain from Market Valuation of Utility Generating Assets" (with Paul Chernick), *International Association for Energy Economics Seventeenth Annual North American Conference* (345–352). Cleveland, Ohio: USAEE. 1996.

"The Future of Utility Resource Planning: Delivering Energy Efficiency through Distribution Utilities" (with Paul Chernick), *1996 Summer Study on Energy Efficiency in Buildings* 7(7.47–7.55). Washington: American Council for an Energy-Efficient Economy, 1996.

"Retrofit Economics 201: Correcting Common Errors in Demand-Side-Management Cost-Benefit Analysis" (with John Plunkett and Rachael Brailove). In proceedings of "Energy Modeling: Adapting to the New Competitive Operating Environment," conference sponsored by the Institute for Gas Technology in Atlanta in April of 1995. Des Plaines, Ill.: IGT, 1995.

"The Transfer Loss is All Transfer, No Loss" (with Paul Chernick), *Electricity Journal* 6:6 (July, 1993).

"Benefit-Cost Ratios Ignore Interclass Equity" (with Paul Chernick et al.), *DSM Quarterly*, Spring 1992.

"Consider Plant Heat Rate Fluctuations," *Independent Energy*, July/August 1991.

"Demand-Side Bidding: A Viable Least-Cost Resource Strategy" (with Paul Chernick and John Plunkett), *Proceedings from the NARUC Biennial Regulatory Information Conference*, September 1990.

"New Tools on the Block: Evaluating Non-Utility Supply Opportunities With *The Power Analyst*, (with John Plunkett), *Proceedings of the Fourth National Conference on Microcomputer Applications in Energy*, April 1990.

REPORTS

"Green Resource Portfolios: Development, Integration, and Evaluation" (with Paul Chernick and Richard Mazzini) report to the Green Energy Coalition presented as evidence in Ontario EB 2007-0707.

"Risk Analysis of Procurement Strategies for Residential Standard Offer Service" (with Paul Chernick, David White, and Rick Hornby) report to Maryland Office of People's Counsel. 2008. Baltimore: Maryland Office of People's Counsel.

"Integrated Portfolio Management in a Restructured Supply Market" (with Paul Chernick, William Steinhurst, Tim Woolf, Anna Sommers, and Kenji Takahashi). 2006. Columbus, Ohio: Office of the Ohio Consumers' Counsel.

"First Year of SOS Procurement." 2004. Prepared for the Maryland Office of People's Counsel.

"Energy Plan for the City of New York" (with Paul Chernick, Susan Geller, Brian Tracey, Adam Auster, and Peter Lanzalotta). 2003. New York: New York City Economic Development Corporation.

"Peak-Shaving–Demand-Response Analysis: Load Shifting by Residential Customers" (with Brian Tracey). 2003. Barnstable, Mass.: Cape Light Compact.

"Electricity Market Design: Incentives for Efficient Bidding; Opportunities for Gaming." 2002. Silver Spring, Maryland: National Association of State Consumer Advocates.

"Best Practices in Market Monitoring: A Survey of Current ISO Activities and Recommendations for Effective Market Monitoring and Mitigation in Wholesale Electricity Markets" (with Paul Peterson, Bruce Biewald, Lucy Johnston, and Etienne Gonin). 2001. Prepared for the Maryland Office of People's Counsel, Pennsylvania Office of Consumer Advocate, Delaware Division of the Public Advocate, New Jersey Division of the Ratepayer Advocate, Office of the People's Counsel of the District of Columbia.

"Comments Regarding Retail Electricity Competition." 2001. Filed by the Maryland Office of People's Counsel in U.S. FTC Docket No. V010003.

"Final Comments of the City of New York on Con Edison's Generation Divestiture Plans and Petition." 1998. Filed by the City of New York in PSC Case No. 96-E-0897.

"Response Comments of the City of New York on Vertical Market Power." 1998. Filed by the City of New York in PSC Case Nos. 96-E-0900, 96-E-0098, 96-E-0099, 96-E-0891, 96-E-0897, 96-E-0909, and 96-E-0898.

"Preliminary Comments of the City of New York on Con Edison's Generation Divestiture Plan and Petition." 1998. Filed by the City of New York in PSC Case No. 96-E-0897.

"Maryland Office of People's Counsel's Comments in Response to the Applicants' June 5, 1998 Letter." 1998. Filed by the Maryland Office of People's Counsel in PSC Docket No. EC97-46-000.

"Economic Feasibility Analysis and Preliminary Business Plan for a Pennsylvania Consumer's Energy Cooperative" (with John Plunkett et al.). 1997. 3 vols. Philadelphia, Penn.: Energy Coordinating Agency of Philadelphia.

"Good Money After Bad" (with Charles Komanoff and Rachel Brailove). 1997. White Plains, N.Y.: Pace University School of Law Center for Environmental Studies.

"Maryland Office of People's Counsel's Comments on Staff Restructuring Report: Case No. 8738." 1997. Filed by the Maryland Office of People's Counsel in PSC Case No. 8738.

"Protest and Request for Hearing of Maryland Office of People's Counsel." 1997. Filed by the Maryland Office of People's Counsel in PSC Docket Nos. EC97-46-000, ER97-4050-000, and ER97-4051-000.

"Restructuring the Electric Utilities of Maryland: Protecting and Advancing Consumer Interests" (with Paul Chernick, Susan Geller, John Plunkett, Roger Colton, Peter Bradford, Bruce Biewald, and David Wise). 1997. Baltimore, Maryland: Maryland Office of People's Counsel.

"Comments of the New Hampshire Office of Consumer Advocate on Restructuring New Hampshire's Electric-Utility Industry" (with Bruce Biewald and Paul Chernick). 1996. Concord, N.H.: NH OCA.

"Estimation of Market Value, Stranded Investment, and Restructuring Gains for Major Massachusetts Utilities" (with Paul Chernick, Susan Geller, Rachel Brailove, and Adam Auster). 1996. On behalf of the Massachusetts Attorney General (Boston).

"Report on Entergy's 1995 Integrated Resource Plan." 1996. On behalf of the Alliance for Affordable Energy (New Orleans).

"Preliminary Review of Entergy's 1995 Integrated Resource Plan." 1995. On behalf of the Alliance for Affordable Energy (New Orleans).

"Comments on NOPSI and LP&L's Motion to Modify Certain DSM Programs." 1995. On behalf of the Alliance for Affordable Energy (New Orleans).

"Demand-Side Management Technical Market Potential Progress Report." 1993. On behalf of the Legal Environmental Assistance Foundation (Tallahassee)

"Technical Information." 1993. Appendix to "Energy Efficiency Down to Details: A Response to the Director General of Electricity Supply's Request for Comments on Energy Efficiency Performance Standards" (UK). On behalf of the Foundation for International Environmental Law and Development and the Conservation Law Foundation (Boston).

"Integrating Demand Management into Utility Resource Planning: An Overview." 1993. Vol. 1 of "From Here to Efficiency: Securing Demand-Management Resources" (with Paul Chernick and John Plunkett). Harrisburg, Pa.:Pennsylvania Energy Office

"Making Efficient Markets." 1993. Vol. 2 of "From Here to Efficiency: Securing Demand-Management Resources" (with Paul Chernick and John Plunkett). Harrisburg, Pa.: Pennsylvania Energy Office.

"Analysis Findings, Conclusions, and Recommendations." 1992. Vol. 1 of "Correcting the Imbalance of Power: Report on Integrated Resource Planning for Ontario Hydro" (with Paul Chernick and John Plunkett).

"Demand-Management Programs: Targets and Strategies." 1992. Vol. 1 of "Building Ontario Hydro's Conservation Power Plant" (with John Plunkett, James Peters, and Blair Hamilton).

"Review of the Elizabethtown Gas Company's 1992 DSM Plan and the Demand-Side Management Rules" (with Paul Chernick, John Plunkett, James Peters, Susan Geller, Blair Hamilton, and Andrew Shapiro). 1992. Report to the New Jersey Department of Public Advocate.

"Comments of Public Interest Intervenors on the 1993–1994 Annual and Long-Range Demand-Side Management and Integrated Resource Plans of New York Electric Utilities" (with Ken Keating et al.) 1992.

"Review of Jersey Central Power & Light's 1992 DSM Plan and the Demand-Side Management Rules" (with Paul Chernick et al.). 1992. Report to the New Jersey Department of Public Advocate.

"Review of Rockland Electric Company's 1992 DSM Plan and the Demand-Side Management Rules" (with Paul Chernick et al.). 1992.

"Initial Review of Ontario Hydro's Demand-Supply Plan Update" (with David Argue et al.). 1992.

"Comments on the Utility Responses to Commission's November 27, 1990 Order and Proposed Revisions to the 1991–1992 Annual and Long Range Demand Side Management Plans" (with John Plunkett et al.). 1991.

"Comments on the 1991–1992 Annual and Long Range Demand-Side-Management Plans of the Major Electric Utilities" (with John Plunkett et al.). Filed in NY PSC Case No. 28223 in re New York utilities' DSM plans. 1990.

"Profitability Assessment of Packaged Cogeneration Systems in the New York City Area." 1989. Principal investigator.

"Statistical Analysis of U.S. Nuclear Plant Capacity Factors, Operation and Maintenance Costs, and Capital Additions." 1989.

"The Economics of Completing and Operating the Vogtle Generating Facility." 1985. ESRG Study No. 85-51A.

"Generating Plant Operating Performance Standards Report No. 2: Review of Nuclear Plant Capacity Factor Performance and Projections for the Palo Verde Nuclear Generating Facility." 1985. ESRG Study No. 85-22/2.

"Cost-Benefit Analysis of the Cancellation of Commonwealth Edison Company's Braidwood Nuclear Generating Station." 1984. ESRG Study No. 83-87.

"The Economics of Seabrook 1 from the Perspective of the Three Maine Co-owners." 1984. ESRG Study No. 84-38.

"An Evaluation of the Testimony and Exhibit (RCB-2) of Dr. Robert C. Bushnell Concerning the Capital Cost of Fermi 2." 1984. ESRG Study No. 84-30.

"Electric Rate Consequences of Cancellation of the Midland Nuclear Power Plant." 1984. ESRG Study No. 83-81.

"Power Planning in Kentucky: Assessing Issues and Choices—Project Summary Report to the Public Service Commission." 1984. ESRG Study No. 83-51.

"Electric Rate Consequences of Retiring the Robinson 2 Nuclear Plant." 1984. ESRG Study No. 83-10.

"Power Planning in Kentucky: Assessing Issues and Choices—Conservation as a Planning Option." 1983. ESRG Study No. 83-51/TR III.

"Electricity and Gas Savings from Expanded Public Service Electric and Gas Company Conservation Programs." 1983. ESRG Study No. 82-43/2.

"Long Island Without the Shoreham Power Plant: Electricity Cost and System Planning Consequences; Summary of Findings." 1983. ESRG Study No. 83-14S.

"Long Island Without the Shoreham Power Plant: Electricity Cost and System Planning Consequences; Technical Report B—Shoreham Operations and Costs." 1983. ESRG Study No. 83-14B.

"Customer Programs to Moderate Demand Growth on the Arizona Public Service Company System: Identifying Additional Cost-Effective Program Options." 1982. ESRG Study No. 82-14C.

"The Economics of Alternative Space and Water Heating Systems in New Construction in the Jersey Central Power and Light Service Area, A Report to the Public Advocate." 1982. ESRG Study No. 82-31.

"Review of the Kentucky-American Water Company Capacity Expansion Program, A Report to the Kentucky Public Service Commission." 1982. ESRG Study No. 82-45.

"Long Range Forecast of Sierra Pacific Power Company Electric Energy Requirements and Peak Demands, A Report to the Public Service Commission of Nevada." 1982. ESRG Study No. 81-42B.

"Utility Promotion of Residential Customer Conservation, A Report to Massachusetts Public Interest Research Group." 1981. ESRG Study No. 81-47

PRESENTATIONS

"Office of People's Counsel Case No. 9117" (with William Fields). Presentation to the Maryland Public Utilities Commission in Case No. 9117, December 2008.

"Electricity Market Design: Incentives for Efficient Bidding, Opportunities for Gaming." NASUCA Northeast Market Seminar, Albany, N.Y., February 2001.

"Direct Access Implementation: The California Experience." Presentation to the Maryland Restructuring Technical Implementation Group on behalf of the Maryland Office of People's Counsel. June 1998.

"Reflecting Market Expectations in Estimates of Stranded Costs," speaker, and workshop moderator of "Effectively Valuing Assets and Calculating Stranded Costs." Conference sponsored by International Business Communications, Washington, D.C., June 1997.

EXPERT TESTIMONY

1989 **Mass. DPU** on behalf of the Massachusetts Executive Office of Energy Resources. Docket No. 89-100. Joint testimony with Paul Chernick relating to statistical analysis of U.S. nuclear-plant capacity factors, operation and maintenance costs, and capital additions; and to projections of capacity factor, O&M, and capital additions for the Pilgrim nuclear plant.

1994 **NY PSC** on behalf of the Pace Energy Project, Natural Resources Defense Council, and Citizen's Advisory Panel. Case No. 93-E-1123. Joint testimony with John Plunkett critiques proposed modifications to Long Island Lighting Company's DSM programs from the perspective of least-cost-planning principles.

1994 **Vt. PSB** on behalf of the Vermont Department of Public Service. Docket No. 5270-CV-1 and 5270-CV-3. Testimony and rebuttal testimony discusses rate and bill effects from DSM spending and sponsors load shapes for measure- and program-screening analyses.

1996 **New Orleans City Council** on behalf of the Alliance for Affordable Energy. Docket Nos. UD-92-2A, UD-92-2B, and UD-95-1. Rates, charges, and integrated resource planning for Louisiana Power & Lights and New Orleans Public Service, Inc.

1996 **New Orleans City Council** Docket Nos. UD-92-2A, UD-92-2B, and UD-95-1. Rates, charges, and integrated resource planning for Louisiana Power & Lights and New Orleans Public Service, Inc.; Alliance for Affordable Energy. April, 1996.

Prudence of utilities' IRP decisions; costs of utilities' failure to follow City Council directives; possible cost disallowances and penalties; survey of penalties for similar failures in other jurisdictions.

1998 **Massachusetts Department of Telecommunications and Energy** Docket No. 97-111, Commonwealth Energy proposed restructuring; Cape Cod Light Compact. Joint testimony with Paul Chernick, January, 1998.

Critique of proposed restructuring plan filed to satisfy requirements of the electric-utility restructuring act of 1997. Failure of the plan to foster competition and promote the public interest.

Massachusetts Department of Telecommunications and Energy Docket No. 97-120, Western Massachusetts Electric Company proposed restructuring; Massachusetts Attorney General. Joint testimony with Paul Chernick, October, 1998. Joint surrebuttal with Paul Chernick, January, 1999.

Market value of the three Millstone nuclear units under varying assumptions of plant performance and market prices. Independent forecast of wholesale market prices. Value of Pilgrim and TMI-1 asset sales.

1999 **Maryland PSC** Case No. 8795, Delmarva Power & Light comprehensive restructuring agreement, Maryland Office of People's Counsel. July 1999.

Support of proposed comprehensive restructuring settlement agreement

Maryland PSC Case Nos. 8794 and 8808, Baltimore Gas & Electric Company comprehensive restructuring agreement, Maryland Office of People's Counsel. Initial Testimony July 1999; Reply Testimony August 1999; Surrebuttal Testimony August 1999.

Support of proposed comprehensive restructuring settlement agreement

Maryland PSC Case No. 8797, comprehensive restructuring agreement for Potomac Edison Company, Maryland Office of People's Counsel. October 1999.

Support of proposed comprehensive restructuring settlement agreement

Connecticut DPUC Docket No. 99-03-35, United Illuminating standard offer, Connecticut Office of Consumer Counsel. November 1999.

Reasonableness of proposed revisions to standard-offer-supply energy costs. Implications of revisions for other elements of proposed settlement.

2000 **U.S. FERC** Docket No. RT01-02-000, Order No. 2000 compliance filing, Joint Consumer Advocates intervenors. Affidavit, November 2000.

Evaluation of innovative rate proposal by PJM transmission owners.

2001 **Maryland PSC** Case No. 8852, Charges for electricity-supplier services for Potomac Electric Power Company, Maryland Office of People's Counsel. March 2001.

Reasonableness of proposed fees for electricity-supplier services.

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Costs and benefits to ratepayers. Assessment of public interest.

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