

ATTACHMENT 4

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

New York Independent System Operator, Inc.

Docket No. ER08-____-000

**AFFIDAVIT OF
EUGENE T. MEEHAN**

Mr. Eugene T. Meehan declares:

1. I have personal knowledge of the facts and opinions herein and if called to testify could and would testify competently hereto.

I. Purpose of this Affidavit

2. The purpose of my affidavit is twofold. First, I present and describe the independent report and analyses that the NYISO relied on in its instant filing to update the Demand Curves. I was, as described later herein, responsible for preparing that report and those analyses. Second, I review the Demand Curves filed by the NYISO relative to the Demand Curve analyses in the report. The Demand Curve analyses in that report contain an independent statistical analysis of energy and ancillary service profits, an independent assessment of construction costs of peaking technologies, a methodology for determining an appropriate amortization period to reflect merchant risk that was integrated with the zero crossing point of the Demand Curves, and assumptions to implement the methodology for determining an appropriate amortization period to reflect merchant risk. In formulating the Demand Curves, the NYISO filing modifies two of the assumptions used to implement the modeling methodology of the amortization period. It is my opinion that those changes are within the range of reasonable assumptions and that the Demand Curves filed by NYISO, are reasonable.

II. Qualifications

3. I am a Senior Vice President with NERA Economic Consulting (NERA) and have over thirty years of experience consulting with electric and gas utilities. I have testified as an expert witness before numerous state and federal regulatory agencies, and in federal court and arbitration proceedings.
4. My consulting practice at NERA focuses on the areas of electricity tariff design, electricity procurement, wholesale power market design, electricity costing and pricing, market power analysis and mitigation, power contract analysis, and power cost risk management.
5. I have worked extensively on electric utility issues in New York State. I have provided consulting services for New York utilities on a continuous basis since 1980, advising the utilities on production cost modeling, transmission expansion, competitive bidding and reliability and marginal generating capacity cost quantification. In 1987, I prepared and sponsored the New York Power Pool's position paper on competitive bidding for IPP supplies. That paper set forth the Pool's policy position on the establishment of competitive bidding processes, power purchase contracts based on avoided cost, and the various implementation issues. Many of these positions were adopted by the New York Public Service Commission (NYPSC). I provided testimony on behalf of the New York State investor-owned electric utilities concerning the proper methodology to use when analyzing the cost-effectiveness of conservation programs. This methodology was adopted by the NYPSC and used as the basis for demand-side management evaluation in New York from 1982 through 1988.
6. I worked with the NYISO as well PJM and ISO-NE in 2003 and 2004 to study the joint capacity market design proposal known as the Centralized Resource Adequacy Market or (CRAM) and was a co-author of NERA's CRAM report.
7. I was retained by National Grid to advise the load serving entities in New England with respect to the ISO-NE forward capacity market settlement negotiations and attended many of the settlement sessions.

8. I directed NERA's recent and ongoing efforts with respect to the update of the NYISO's ICAP Demand Curves. As part of that work, I developed the methodology for converting the total capital costs of the peaking unit to a levelized cost.
9. My Curriculum Vitae is attached as Exhibit A hereto.

III. Current NYISO Proposal for ICAP Demand Curves

10. In accordance with the Services Tariff provisions, in the third quarter of 2006, the NYISO solicited proposals from qualified consultants to identify appropriate methodologies and to develop the ICAP Demand Curve parameters for the three Capability Years beginning in May 2008. The NYISO selected the team of NERA, with Sargent and Lundy (S&L) as a subcontractor to NERA. We began our analysis in December 2006 and met, either in person or telephonically, with interested parties on thirteen occasions between December 2006 and August 2007. All NYISO market participants and interested parties had an opportunity to provide input to, and comments on, our proposed assumptions, analysis, methodology, cost estimates, and preliminary and final results for the study. On August 15, 2007, we released our final report for stakeholder review and comment ("NERA/S&L Report").¹ The NERA/S&L Report is attached as Exhibit B.
11. After considering the NERA/S&L Report, the NYISO management and staff made certain adjustments to the proposed ICAP Demand Curves. The NYISO's final recommendations to its Board of Directors were issued on August 31, 2007 and updated on October 5, 2007.² The NYISO's proposal contains its recommended ICAP Demand Curves to be applicable for the three Capability Years beginning May 1, 2008 through April 30, 2011. In preparing its recommendations to the Board, the NYISO took into account the

¹ "Independent Study to Establish Parameters of the ICAP Demand Curve for the New York Independent System Operator," August 15, 2007, prepared by NERA Economic Consulting, *available at* http://www.nyiso.com/public/webdocs/committees/bic_icapwg/meeting_materials/2007-08-24/ICAPWG_Demand_Curve_Study_Report_final_82407.pdf.

² "Proposed NYISO Installed Capacity Demand Curves for Capability Years 2008/2009, 2009/2010, and 2010/2011," August 31, 2007, amended October 5, 2007 ("NYISO Report"), *available at* http://www.nyiso.com/public/webdocs/committees/bic_icapwg/meeting_materials/2007-09-12/ICAP_demand_curve_proposal_83107.pdf.

NERA/S&L Report, the recommendations of the NYISO's independent Market Advisor, and the views of interested parties.

12. The NERA/S&L Report contained four basic elements. These elements are: (1) an independent statistical analysis of energy and ancillary service profits, (2) an independent assessment of construction costs of peaking technologies, (3) a methodology for determining an appropriate amortization period to reflect merchant risk that was integrated with the zero crossing point of the Demand Curves, and (4) assumptions to implement the methodology for determining an appropriate amortization period to reflect merchant risk.
13. In formulating the Demand Curves, the NYISO filing relies on the statistical analysis of energy and ancillary service profits,³ used an update of the independent assessment of LMS-100 costs, and utilized the methodology for determining an appropriate amortization period to reflect merchant risk that was integrated with the zero crossing point of the Demand Curves. The NYISO also implemented a construction costs escalation factor based on the Handy-Whitman Index. The NYISO filing changed two of the assumptions used to implement the modeling methodology.
14. As the NYISO filing utilizes the statistical analysis of energy and ancillary service profits and the methodology, I will not comment further on those items. I will discuss below the specific changes made by the NYISO filing.
15. The NYISO filing updates the LMS-100 cost estimate provided by S&L. Given that LMS-100 equipment costs are currently experiencing rapid escalation, I believe it is reasonable to have requested and utilized an update of construction costs. The NYISO also elected to determine escalation factors for future construction costs as reflected in the CONE using recent values of the Handy-Whitman Index of Electric Utility Construction Costs for Other Production Plant. The Handy-Whitman Index is a commonly used index, and the recent cost escalation in the construction market makes the use of such an index appropriate.

³ The analysis was modified slightly by NERA (resulting in an increase in estimated energy and ancillary service profits by roughly \$ 2 per KW year) in August 2007 after the report was issued to reflect input from the NYISO market advisor concerning historical information with respect to scarcity price implementation.

16. The NYISO filing changes two of the assumptions underlying the methodology for determining the amortization period. The use of a model to determine the appropriate amortization period that reflects merchant risk, particularly the risks associated with the effect of excess capacity on revenues earned from the Demand Curve, was an innovation implemented this year to account for the fact that revenues under the Demand Curve will not be constant. Instead, over time they will be biased to levels below the revenues associated with the reference point, as there historically has been a bias toward excess capacity resulting from procedures to avoid capacity going below the minimum requirements. Hence capacity levels will not oscillate around the minimum requirement but around a higher quantity. The minimum capacity requirement is just that: a minimum target, not an average target.
17. As explained in the NERA/S&L Report: "Many of the inputs to the Demand Curve model requirements are based on judgment. The inputs used will be described below. As a result of the judgmental nature of the inputs, it is important to note that in selecting inputs, we are guided also by the result produced. The results produced show implied amortization periods of 13.5-15.5 years in ROS and NYC, which reflects measurable, but not extreme merchant risks." (Page 58) The NYISO filing changes two assumptions used in the model and hence changes those amortization periods.
18. The NERA/S&L Report included an assumption that an investor had a 20% probability of achieving only 50% of the necessary revenue from the capacity markets. The NYISO Staff Report used a zero probability for this regulatory risk. This parameter does require judgment and while my judgment was that an explicit allowance for regulatory risk is appropriate, there is no way to empirically quantify this value. I would not find that a decrease in this one assumption to zero is unreasonable as some regulatory risks may be reflected in other assumptions such as the level of excess capacity.
19. The NYISO Board approved changing the assumed excess capacity level for the NYCA or ROS demand curve, i.e., the level around which actual capacity will oscillate, from 102.8% to 101.5% of the minimum requirement. The filing as approved by the Board did not adjust the assumed levels of excess of 104% for New York City and Long Island.

20. The NYCA requirements are roughly 40,000 MW and a capacity oscillation assumption set at 1.5 % of those requirements allows for excess capacity equivalent to a full new combined cycle plant – i.e., over 500 MW. I allowed for a higher value of excess than 1.5% in consideration of the fact that historically the NYCA, in which the New York City and Long Island Localities are included, has had significant excess capacity and that capacity from adjacent RTOs or utilities can be imported to NYCA. To the extent that excess capacity in those adjacent RTOs or utilities declines, however, it is possible that a lower excess capacity level may on average prevail. As stated in the NERA/S&L Report, at 64, in discussing excess capacity level assumptions: “Ideally, we would have an empirical basis for this assumption, but there is not sufficient history to develop one. Arguments could be made ranging from 101.4 to 104.” Hence, I do not believe that the change to a 1.5% average excess capacity level for NYCA is unreasonable.
21. After the assumption changes are implemented, the resulting amortization period for NYCA or ROS is 20.5 years versus 14.5 in the report and for NYC the resulting amortization period is 17.5 years versus 15.5 years in the report. As indicated in the report, these results can serve as a check on the assumptions. The amortization period resulting from the two assumption changes made by NYISO are a move toward reflecting a degree of merchant risk for NYC as it is lower than the 20 years used in the prior update and is integrated with the zero crossing point of the Demand Curve. The amortization period resulting from the two assumption changes made by NYISO reflect a status quo in reflecting a merchant risk for ROS as it is just about equal to the 20 years used in the prior update and is integrated with the zero crossing point of the Demand Curve. As such, I believe that the Demand Curves filed by NYISO, while somewhat different from the curves resulting from the assumptions in the NERA/S&L Report, are reasonable. While I would advise the use of shorter amortization period for ROS that reflects a move toward greater recognition of merchant risk, the NYISO filing reflects the amortization period methodology and is reasonable, particularly if one believes that excess capacity and imports from adjacent areas will not be prevalent in the future.

This concludes my Affidavit.

ATTESTATION

I am the witness identified in the foregoing affidavit. I have read the affidavit and am familiar with its contents. The facts set forth therein are true to the best of my knowledge, information, and belief.



Eugene T. Mechan

EXHIBIT A

NERA

Economic Consulting

EXHIBIT A

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EUGENE T. MEEHAN

SENIOR VICE PRESIDENT

Mr. Meehan is a Senior Vice President at NERA. He has over thirty years of experience consulting with electric and gas utilities and has testified as an expert witness before numerous state and federal regulatory agencies, as well as appeared in federal court and arbitration proceedings.

At NERA, Mr. Meehan's practice concentrates on serving energy industry clients, with a focus on helping clients manage the transition from regulatory to more competitive environments. He has performed consulting assignments for over fifty large electric, gas, and combination utilities in the areas of retail access, regulatory strategy, strategic planning, financial and economic analysis, merger and acquisition advisory services, power contract analysis, market power and market definition, stranded cost analysis, power pooling, power markets and risk management, ISO and PX development, and costing and pricing. In addition, he has advised numerous utilities on power procurement issues and administered power procurements on behalf of utilities and regulators.

Mr. Meehan has experience leading NERA's advisory work on several major restructuring and unbundling assignments. These assignments were multi-year projects that involved integration of regulatory and business strategy, as well as development of regulatory filings associated with the recovery of stranded cost and rate unbundling.

Education

Boston College, BA, Economics, *cum laude*
New York University (NYU), Graduate School of Business, completed core courses for the doctoral program.

Professional Experience

1999-	NERA Economic Consulting Senior Vice President
1996-1999	Vice President
1973-1980	Senior Economic Analyst; Research Assistant
1994-1996	Deloitte & Touche Consulting Group Principal
1980-1994	Energy Management Associates, Inc. Vice President

Areas of Expertise

Restructuring/Stranded Cost Recovery

Mr. Meehan has directed several multi-year projects associated with restructuring and stranded cost recovery. These projects involved facilitating the development of an integrated regulatory and business strategy and formulating regulatory filings to accomplish strategy. As part of these assignments, Mr. Meehan facilitated sessions with senior management to set and track filing strategy. Clients include Public Service Gas & Electric and Baltimore Gas and Electric.

Unbundling/Generation Pricing

Mr. Meehan has formulated unbundling strategies, with a specialization in generation pricing. He has advised several utilities in standard offer pricing and has testified on shopping credits on behalf of First Energy and Baltimore Gas and Electric.

Power Procurement

Mr. Meehan has been involved in power procurement activities for a variety of utilities and regulatory agencies. He has advised utilities in developing and implementing evaluation processes for new generation, with the objective of achieving the best portfolio evaluation. He has helped regulators in Ireland and Canada design and implement portfolio evaluation processes. He has testified before FERC and state regulatory agencies on competitive power procurement. In addition, Mr. Meehan helped to design and implement the New Jersey BGS auction process.

Power Contracts

Mr. Meehan has extensive experience with power contracts and power contract issues. He has reviewed and testified on the three principal types of power contracts: integrated utility to integrated utility contracts, IPP to utility contract, and integrated or wholesale utility to distribution utility contracts. He has testified in power contracts disputes on behalf of Carolina Power and Light, Duke Power Company, Southern Company, Orange and Rockland Utilities, and Tucson Electric Power. He has also advised Oglethorpe Power Corporation in the reform of its wholesale contracts with its distributor cooperative members.

Retail and Wholesale Settlements

In addition to his expertise on power pooling issues, Mr. Meehan has significant experience with assignments related to the settlement process. He has focused on the issues of credit management as new entrants appear in retail and wholesale markets and has designed efficient specifications for retail settlement systems, including the use of load profiling, and examined the risk and cost allocation issues of alternative settlement systems.

Risk Management

Mr. Meehan has advised several large utilities on price risk management. These assignments have included evaluation of price management service offers solicited from power marketers in association with management of assets and entitlements, as well as provision of price managed service for various terms.

Marginal Costs

Mr. Meehan has provided comprehensive marginal cost analyses for over 25 North American Utilities. These assignments required detailed knowledge of utility operations and planning.

Power Supply and Transmission Planning

Mr. Meehan has advised electric utilities on economic evaluations of generation and transmission expansion. He has testified on the economics of particular investments, the prudence of planning processes, and the prudence of particular investment decisions.

Generation Strategy

Mr. Meehan has led NERA efforts on a client task force charged with developing an integrated generation asset/power marketing strategy.

Power Pooling

Mr. Meehan has in-depth working knowledge of the operating, accounting, and settlement processes of all United States power pools and representative international power pools. He has provided consulting services for New York Power Pool members on a continuous basis since

1980, advising the Pool and its members on production cost modeling, transmission expansion, competitive bidding and reliability, and marginal generating capacity cost quantification. In NEPOOL, he has quantified the benefits of continued utility membership in the Pool and the impact of the Pool settlement process on marginal cost. He has worked with a major PJM utility to explore the impact of PJM restructuring proposals upon generating asset valuation and examine the implications of alternative restructuring proposals. He has consulted for Central and Southwest Corporation, Entergy, and Southern Company on issues that involved the internal pooling arrangements of the utility operating companies of those holding companies, as well as for various utilities on the impact of pooling arrangements on strategic alternatives.

Representative Assignments

Worked with Public Service Electric & Gas Company (PSE&G) to direct a three year NERA advisory effort on restructuring. Facilitated a two-day senior management meeting to set regulatory strategy in 1997. Throughout 1997 and 1998, worked over half time at PSE&G to help implement that strategy and advised on testimony preparation, cross-examination, and briefing. Also advised PSE&G on business issues related to securitization, energy settlement and credit requirements for third party suppliers. During 1999, advised PSE&G during settlement negotiations and litigation of the settlement. PSE&G achieved a restructuring outcome that involved continued ownership of generation by an affiliate and the securitization of \$2.5 billion in stranded costs.

Worked on separate assignments for a large utility in the Northeast and a large utility in the Southeast, advising on the evaluation of risk management offers from power marketers. The assignments included reviewing proposals, attending interviews with marketers and providing advice on these, and the developing analytical software to evaluate offers.

Worked with government of Ontario beginning in 2004 to help design the RFP and economic evaluation process for the solicitation of 2500 Mw of new generating capacity. Supervising NERA's portfolio-based economic evaluation on behalf of the Ontario Ministry of Energy.

Testified on behalf of Pacific Gas & Electric Company before the FERC in a case benchmarking the PSA between the distribution utility and a soon-to-be-created generating company. This effort involved developing detailed expertise in applying the Edgar standard and a detailed review of DWR procurement during the western power crisis. In addition, this effort involved the review of more than 100 power contracts in the WECC.

Directed NERA's efforts, on behalf of the electricity regulator in Ireland, to design an RFP and implementation process for the purchase of 500 Mw of new generating capacity in 2003. NERA advised on the RFP, the portfolio evaluation method, and the power contract and also conducted the economic evaluation.

Reviewed the economic evaluation conducted by Southern Company Service for affiliated operating companies in connection with an RFP for over 2000 Mw of new generating capacity. Submitted testimony before FERC on behalf of Southern Company Service.

Worked with Baltimore Gas and Electric (BG&E) to conduct a one and one-half year consulting assignment that involved providing restructuring advice. The project began in March/April 1998 with senior management discussions and workshops on plan development and filing strategy. Advised BG&E in the development of testimony, rebuttal testimony, and public information dissemination. Worked to review and coordinate testimony from all witnesses and offered testimony on shopping credits and in defense of the case settlement. BG&E achieved a restructuring outcome enabling it to retain generation ownership. As part of this assignment, advised BG&E on generation valuation and unregulated generation business strategy.

Directed the efforts of a large Southeastern utility to develop a short-term power contract portfolio and to evaluate the relative value of power options, forwards, and unit contracts to determine the optimal mix of instruments to manage price risk.

Testified for XCEL Energy on the use of competitive bids for new generation needs. Examined whether XCEL was prudent not to explore a self-build plan and the reasonableness of relying on ten-year or shorter contracts as opposed to life-of-facility contracts, in order to meet needs and facilitate a possible future transition to competition. This project addressed the comparability of fixed bids to rate base plant additions.

Advised and testified on behalf of First Energy in the Ohio restructuring proceeding on the issues of generation unbundling and stranded cost. Defended the First Energy shopping credit proposal.

Advised Consolidated Edison and Northeast Utilities on merger issues and testified in Connecticut and New Hampshire merger proceedings. Testimony focused on retail competition in gas and electric commodity markets.

Directed NERA's effort to train selected representatives of a major European power company in American power marketing and risk management practices. The project involved numerous meetings and interviews with power marketing firms.

Led NERA's effort to advise the New England ISO on the development of an RTO filing. Examined performance-based ratemaking for transmission and market operator functions.

Examined ERCOT power market conditions during the period of time from 1997 to 1999 and testified on behalf of Texas New Mexico Power Company for the prudence of its power purchase activity.

Advised a Midwestern utility on restructuring of a wholesale contract with an affiliate. Involved forecasting of the unbundled wholesale cost-of-service and market prices, as well as development of a regulatory strategy for gaining approval of contract restructuring and the transfer of generation from regulated to EWG states.

Performed market price forecasts for numerous utility clients. These forecasts have employed both traditional modeling and newly developed statistical approaches.

Examined the credit issues associated with the entry of new entities into retail and wholesale settlement market. These assignments involved a review of current Pool credit procedures, examination of commodity and security trading credit requirements, coordination with financial institutions, and recommendations concerning credit exposure monitoring, credit evaluation processes, and credit requirements.

Oversight of EMA's consulting and software team in designing and implementing the LOLP capacity payment, a portion of the UK wholesale settlement system.

Advised Oglethorpe Power Corporation in the reform of its contracts with its distribution cooperative members and the evolution of full requirement power wholesale power contracts into contracts that preserve Oglethorpe's financial integrity and are suitable for a competitive environment.

Developed long run marginal and avoided costs of natural gas service, as well as avoided cost methods and procedures. These costs have been used primarily for the analysis of gas DSM opportunities. Clients include Consolidated Edison Company, Southern California Edison Company, Niagara Mohawk Power Corporation, and Elizabethtown Gas Company.

Review of power contracts and testimony in numerous power contract disputes.

Development of long run avoided costs of electricity service and avoided cost methods and procedures. These costs have been used to assess DSM and cogeneration, as well as to develop integrated resource plans. Clients include Public Service Company of Oklahoma, Central Maine Power Company, Duquesne Light Company, and the New York investor-owned utilities.

Advised Central Maine Power Company (CMP) on the development of a competitive bidding framework. This framework was implemented in 1984 and was the first of its kind in the nation. CMP adopted the framework outlined in EMA's report and won prompt regulatory approval.

Advised a utility in the development of an incentive ratemaking plan for a new nuclear facility. This assignment involved strategic analysis of alternate proposals and quantification of the financial impact of various ratemaking alternatives. Presented strategic and financial results in order to convince senior management to initiate negotiations for the incentive plan.

Advised and testified on behalf of the New York Power Pool utilities on the methodology for measuring pool marginal capacity costs. This work included development of the methodology and implementation of the system for quantifying LOLP-based marginal capacity costs.

Provided testimony on behalf of the investor-owned electric utilities in New York State, concerning the proper methodology to use when analyzing the cost-effectiveness of conservation programs. This methodology was adopted by the Commission and used as the basis for DSM evaluation in New York from 1982 through 1988.

Developed the functional design of a retail access settlement system and business processes for a major PJM combination utility. This design is being used to construct a software system and develop business procedures that will be used for retail settlements beginning January 1999.

Reviewed the power pool operating and interchange accounting procedure of the New York Power Pool, the Pennsylvania, New Jersey, Maryland Interconnection, Allegheny Power System, Southern Company, and the New England Power Pool as part of various consulting assignments and in connection with the development of production simulation software.

Summarized and analyzed the operational NEPOOL to examine the feasibility of incorporating NEPOOL interchange impacts with Central Maine and accounting procedure of the New England Power Pool Power Company's buy-back tariffs.

Developed and presented a two-day seminar delivered to electric industry participants in the UK (prior to privatization), outlining the structure and operation of power pools and bulk power market transactions in North America.

Benchmark analysis and FERC testimony of PGE's proposed twelve-year contract between PG&E and Electric Gen LLC (contract value in excess of \$15 billion).

Responsible for NERA's overall efforts in advising New Jersey's Electric Distribution Companies on the structuring and conduct of the Basic Generation Service auctions (the 2002 auction involved \$3.5 billion, and the 2003 and 2004 auctions involved over \$4.0 billion).

Testimony

Forums

Arkansas Public Service Commission

Federal Energy Regulatory Commission

Florida Public Service Commission

Maine Public Utilities Commission

Minnesota Public Service Commission

Nevada Public Service Commission

New York Public Service Commission

Nuclear Regulatory Commission – Atomic Safety and Licensing Board

Oklahoma Public Service Commission

Public Service Commission of Indiana

Public Utilities Commission of Ohio

Public Utilities Commission of Nevada

Public Utilities Commission of Texas

Public Utilities Commission of New Hampshire

United States District Court

United States Senate Committee on Energy and Natural Resources

Various arbitration proceedings

Clients

Arkansas Power & Light Company

Baltimore Gas & Electric

Carolina Power & Light Company

Central Maine Power

Consolidated Edison Company of New York, Inc.

Dayton Power and Light Company

Florida Coordinating Group

Houston Lighting & Power Company

Minnesota Power and Light Company

Nevada Power Company

Niagara Mohawk Power Corporation

Northern Indiana Public Service Company

Oglethorpe Power Corporation

Pacific Gas and Electric Company

Power Authority of the State of New York

Public Service and Electric Company

Public Service Company of Oklahoma

Sierra Pacific Power Company

Southern Company Services, Inc.

Tucson Electric Power Company

Texas-New Mexico Power Company

Recent Expert Testimony and Expert Reports

Supplemental Testimony on behalf of Texas-New Mexico Power Company, Docket No. 15660, September 5, 1996.

Direct Testimony on behalf of Long Island Lighting Company before the Federal Energy Regulatory Commission, September 29, 1997.

Rebuttal Testimony on behalf of Texas-New Mexico Power Company, SOAH Docket No. 473-97-1561, PUC Docket No. 17751, March 2, 1998.

Prepared Testimony and deposition testimony on behalf of Central Maine Power Company, United States District Court Southern District of New York, 98-civ-8162 (JSM), March 5, 1999.

Prepared Direct Testimony Before the Public Service Commission of Maryland on behalf of Baltimore Gas & Electric Company, PSC Case Nos. 8794/8804, June 1999.

Rebuttal Testimony Before the Maryland Public Service Commission, on behalf of Baltimore Gas & Electric Company, PSC Case Nos. 8794/8804, March 22, 1999.

NORCON Power Partners LP v. Niagara Mohawk Energy Marketing, before the United States District Court, Southern District of New York, June 1999.

Prepared Supplemental Testimony Before the Maryland Public Service Commission, on behalf of Baltimore Gas & Electric Company, PSC Case Nos. 8794/8804, July 23, 1999.

Prepared Supplemental Reply Testimony Before the Maryland Public Service Commission, on behalf of Baltimore Gas & Electric Company, PSC Case Nos. 8794/8804, August 3, 1999.

Direct Testimony on behalf of Niagara Mohawk, Before the New York State Public Service Commission, PSC Case No. 99-E-0681, September 3, 1999.

Rebuttal Testimony on behalf of Niagara Mohawk, PSC Case No. 99-E-0681 Before the New York State Public Service Commission, November 10, 1999.

Arbitration deposition on behalf of Oglethorpe Power Corporation, last quarter of 1999.

Direct Testimony Before the Public Utilities Commission of Ohio on behalf of FirstEnergy Corporation, Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company, Case No. 99-1212-EL-ETP re: Shopping Credits.

Direct Testimony on behalf of Niagara Mohawk, Before the New York State Public Service Commission, PSC Case No. 99-E-0990, February 25, 2000.

Testimony on behalf of Consolidated Edison Company of New York, Inc., State of Connecticut, Department of Public Utility Control, Docket No.: 00-01-11, April 28, 2000 and June 30, 2000.

Testimony on behalf of Texas-New Mexico Power Company, Fuel Reconciliation Proceeding before the Texas PUC, June 30, 2000.

Testimony on behalf of Consolidated Edison Company of New York, Inc., Before the New Hampshire Public Service Commission, Docket No.: DE 00-009, June 30, 2000.

Rebuttal Testimony Before the Public Utilities Commission of the State of Colorado, Docket No. 99A-549E, November 22, 2000.

Testimony Before the Public Utilities Commission of the State of Colorado, Docket No. 99A-549E, January 19, 2001.

DETM Management, Inc. Duke Energy Services Canada Ltd., And DTMSI Management Ltd., Claimants vs. Mobil Natural Gas Inc., And Mobil Canada Products, Ltd., Respondents. American Arbitration Association Cause No. 50 T 198 00485 00, August 27, 2001.

State of New Jersey Board of Public Utilities, In the Matter of the Provision of Basic Generation Service Pursuant to the Electric Discount and Energy Competition Act of 1999, Before President Connie O. Hughes, Commissioner Carol Murphy on Behalf of the Electric Distribution Companies (Public Service Electric and Gas Company, GPU Energy, Consolidate Edison Company and Conectiv) Docket No.: EX01050303, October 4, 2001.

Direct Testimony Before the Federal Energy Regulatory Commission on behalf of Pacific Gas and Electric Company, Docket No.: ER02-456-000, November 30, 2001.

Fourth Branch Associates/Mechanicville vs. Niagara Mohawk Power Corporation, January 2002 (Expert Report).

Arbitration Deposition on behalf of Oglethorpe Power Corporation, March 2002.

Direct Testimony and Deposition Testimony Before the Federal Energy Regulatory Commission on behalf of Electric Generation LLC in Response to June 12 Commission Order, Docket No.: ER02-456-000, July 16, 2002.

Rebuttal Testimony Before the Federal Energy Regulatory Commission on behalf of Electric Generation LLC in Response to June 12 Commission Order, Docket No.: ER02-456-000, August 13, 2002.

Direct Testimony Before the Public Utilities Commission of Nevada on behalf of Nevada Power Company, in the matter of the Application of Nevada Power Company to Reduce Fuel and Purchased Power Rates, PUCN Docket No. 02-11021, November 8, 2002 and subsequent Deposition Testimony.

Direct Testimony Before the Public Utilities Commission of Nevada on behalf of Sierra Pacific Power Company's Deferred Energy Case, Docket No. 03-1014, January 10, 2003.

Direct Testimony Before the Public Utility Commission Of Texas on behalf of Texas-New Mexico Power Company, Application Of Texas-New Mexico Power Company For Reconciliation Of Fuel Costs, April 1, 2003.

Rebuttal Testimony Before the Public Utilities Commission of Nevada on behalf of Nevada Power Company, PUCN Docket No. 02-11021, April 1, 2003.

Rebuttal Testimony Before the Public Utilities Commission of Nevada on behalf of Sierra Pacific Power Company, Docket No. 03-1014, May 5, 2003.

Testimony on behalf of Consolidated Edison Company of New York, Inc., Before the Public Service Commission of New York, Case No.: 00-E-0612, September 19, 2003.

State of New Jersey Board of Public Utilities, In the Matter of the Provision of Basic Generation Service Pursuant to the Electric Discount and Energy Competition Act of 1999, Before President Connie O. Hughes, Commissioner Carol Murphy on Behalf of the Electric Distribution Companies (Public Service Electric and Gas Company, GPU Energy, Consolidate Edison Company and Conectiv), September 2003.

Direct Testimony Before the Public Utilities Commission of Nevada on behalf of Nevada Power Company's Deferred Energy Case, November 12, 2003.

Direct Testimony Before the Public Utilities Commission of Nevada on behalf of Sierra Pacific Power Company's Deferred Energy Case, January 12, 2004.

Rebuttal Testimony Before the Public Utilities Commission of Nevada on behalf of Sierra Pacific Power Company's Deferred Energy Case, May 28, 2004.

Direct Testimony on behalf of Texas-New Mexico Power Company, First Choice Power Inc. and Texas Generating Company LP to Finalize Stranded Cost under PURA § 39.262, January 22, 2004.

Rebuttal Testimony on behalf of Texas-New Mexico Power Company, First Choice Power Inc. and Texas Generating Company LP to Finalize Stranded Cost under PURA § 39.262, April, 2004.

State of New Jersey Board of Public Utilities, In the Matter of the Provision of Basic Generation Service Pursuant to the Electric Discount and Energy Competition Act of 1999, Before President Connie O. Hughes, Commissioner Carol Murphy on Behalf of the Electric Distribution Companies (Public Service Electric and Gas Company, GPU Energy, Consolidate Edison Company and Conectiv), September 2004.

Direct Testimony Before the Public Utilities Commission of Nevada on behalf of Nevada Power Company's Deferred Energy Case, November 9, 2004.

Direct Testimony Before the Public Utilities Commission of Nevada on behalf of Sierra Pacific Power Company's Deferred Energy Case, January 7, 2005.

Expert Report on behalf of Oglethorpe Power Corporation, March 23, 2005.

Arbitration deposition on behalf of Oglethorpe Power Corporation, April 1, 2005.

Direct Testimony Before the Public Utilities Commission of Nevada on behalf of Sierra Pacific Power Company's December 2005 Deferred Energy Case.

Direct Testimony Before the Public Utilities Commission of Nevada on behalf of Nevada Power Company's 2006 Deferred Energy Case, January 13, 2006.

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