

STATE OF NEW YORK  
SUPREME COURT

COUNTY OF ALBANY

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RETAIL ENERGY SUPPLY ASSOCIATION,  
INTERSTATE GAS SUPPLY, INC. d/b/a IGS Energy,  
ACCENT ENERGY MIDWEST GAS LLC d/b/a IGS Energy,  
and ACCENT ENERGY MIDWEST II LLC d/b/a IGS Energy,

Plaintiffs-Petitioners,

-against-

Index No. 870-16

PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK,  
AUDREY ZIBELMAN, PATRICIA L. ACAMPORA,  
GREGG SAYRE, and DIANE X. BURMAN, in their official capacities  
as Commissioners of the Public Service Commission of the State of  
New York, and KATHLEEN H. BURGESS, in her official capacity as  
Secretary of the Public Service Commission of the State of New York,

Defendants-Respondents.

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CITY OF WASHINGTON )  
DISTRICT OF COLUMBIA ) ss.:

I, JOHN R. MORRIS, being duly sworn, depose and state as follows:

**Introduction**

1. My name is John R. Morris. I am a Principal at Economists Incorporated, an economic consulting firm located at 2121 K Street, NW, Washington, DC 20037. I have a bachelor's degree in economics from Georgetown University, and I have a master's degree and a Ph.D. in economics from the University of Washington. I have been studying energy industries since joining the Federal Trade Commission in 1985. Since joining Economists Incorporated in 1992, I have consulted on many mergers involving electric and gas companies, examined competitive issues relating to utility rates, provided market power studies for applications for market-rate authority, and studied market power issues in state restructuring proceedings. I have published articles on competition and energy matters, and I have spoken on numerous occasions

concerning competition in natural gas, electric power, and other industries. I have previously been accepted as an expert witness on energy matters before the Federal Energy Regulatory Commission (“FERC”), the New York Public Service Commission (“Commission”), other state commissions, and in federal court. A complete listing of my experience, publications, and testimony is contained in my resume, presented in Attachment JRM-1.

2. Counsel for NRG Energy, Inc. (“NRG”) asked that I prepare an affidavit to assess the competitiveness of Energy Service Companies (“ESCOs”) selling electric energy to mass market customers.

3. To provide this assessment, I have relied upon my 30 years of experience examining competition in energy markets, prior Commission decisions on marketing to retail customers in New York, postings on the internet by the Commission and ESCOs related to mass market retail energy offers in New York, data from the U.S. Energy Information Administration (“EIA”) on retail sales in New York, and data on ownership and affiliations of ESCOs in New York.

4. I have found that mass market retail sales of electric energy in New York are highly competitive. Over 40 independent entities sell electric energy at retail, suggesting robust competition among sellers. Moreover, market shares of sellers can change significantly over time. This indicates that mass market retail customers routinely switch suppliers according to their interests. Moreover, the market exhibits no barriers to entry, and entrants collectively account for a competitively significant share in each year.

5. I have reviewed the allegations against ESCOs. A workably competitive market does not mean that every supplier satisfies the needs of its customers 100 percent of the time. It does mean, however, that buyers are able to switch to alternative suppliers when buyers decide that a supplier’s offering is inadequate—whatever the reason. The turnover of customers in

retail energy markets that I have observed indicates that buyers can and do seek better supply options. Generic rules that limit the ability of ethical companies to market energy to retail customers simply cannot make those customers better off in the long-run. Indeed, the essence of market power is the ability to restrict buyers from taking service from other competitors. Actions by the Commission that limit options for buyers restrict competition and do not promote competition.

### **An Objective Measure of Competitiveness**

6. Although no single metric captures all facets of competition, market concentration, as measured by the Herfindahl-Hirschman Index, has been used by antitrust practitioners and regulators in energy industries for many years as a gauge of the likely competitiveness of a market. The Herfindahl-Hirschman Index, also called the HHI, equals the sum of the squared market shares. For example, a market with four firms with market shares of 40, 30, 20, and 10 percent would have an HHI of 3,000, which equals the sum of 1,600, 900, 400, 100—the squares of the market shares. As another example, a market with 10 firms with market shares of 10 percent each would have an HHI of 1,000. In other words, the more market participants exist and the more comparable their market shares, the lower the HHI will be.

7. Under U.S. Department of Justice and Federal Trade Commission *Horizontal Merger Guidelines*, markets with an HHI less than 1,500 are considered unconcentrated. These markets are considered so inherently competitive that mergers “in unconcentrated markets are unlikely to have adverse competitive effects and ordinarily require no further analysis.” This can be found in Section 5.3 of the 2010 version of the *Horizontal Merger Guidelines*.

8. When examining whether oil pipelines should be deregulated in 1982, the U.S. Department of Justice concluded that markets with an HHI below 2,500 were sufficiently competitive that they could be deregulated with little likelihood of prices being set at supra-

competitive levels. This can be found in U.S. Department of Justice, *Oil Pipeline Deregulation* (May 1986).

9. Therefore, to determine whether energy retailing to mass market customers in New York is workably competitive, one can examine sales data to determine whether market concentration, as measured by the HHI, is sufficiently low to conclude that the market is workably competitive.

10. To calculate the HHI for electric energy retailers to mass market customers in New York, I utilize data for sales to residential customers in New York. EIA posts results from Form EIA-861, which lists sales by retail provider by state. The most recent data available are for the calendar year 2014. From these data, I calculated the HHI based on sales revenues of all the ESCOs in New York selling electric energy to residential customers. From the raw data provided by EIA, I aggregated the sales for those companies known to be part of a larger corporate family. For example, I aggregated the sales data from Green Mountain Power and Energy Plus Holdings because both of these companies are affiliates of NRG.

11. The results of the HHI calculation are provided in Attachment JRM-2. As shown in the attachment, 19 ESCOs sold electric energy at retail in 2014 and had a share of ESCO sales of 1 percent or greater. The largest seller in 2014, Ambit Energy Holdings, had a share of 20 percent. The next largest seller, Direct Energy, had a share of only 14 percent. All other ESCOs have shares of 10 percent or less. ESCOs with shares of less than 1 percent collectively accounted for 7.5 percent of ESCO sales. The HHI is only 916, well within traditional screening thresholds for determining a competitive market.

12. It is not possible to do a similar HHI calculation for only small commercial customers because the EIA sales data do not separate out sales to small commercial customers from sales to large commercial customer.

13. I nevertheless conclude that sales to small commercial customers in New York are also workably competitive. This conclusion is based upon the publicly available data showing many suppliers to commercial customers, the low concentration of ESCOs supplying residential customers, and my experience examining competition in retail energy markets.

14. Accordingly, I conclude that sales to mass market energy customers in New York are workably competitive.

#### **Additional Indications of Robust Competition**

15. I have also examined whether these shares are stable or unstable. Unstable market shares indicate that buyers often switch among competitors. Consumer switching provides evidence that buyers seek out deals that they believe are best for their particular situation and preferences. In other words, unstable market shares provides another indicator that the market is workably competitive. Based upon my experience in examining retail energy competition in other states, substantial switching among suppliers is common in competitive markets.

16. Attachment JRM-3 is a chart showing changes in market shares from 2010 through 2014. The chart in Attachment JRM-3 shows that shares can change substantially. For example, Direct Energy (including the companies it has acquired) had a share over 25 percent in 2010, and fell to 14 percent by 2014. Hudson Energy services and IDT Energy shares have also fallen over the period. In contrast, Ambit Energy's share has increased from under 10 percent to 20 percent over the period. Therefore, in just four years the landscape of the ESCO market has substantially changed, which is a good sign of healthy competition.

17. In my experience, ease of entry is a major driver of competitive markets. Here, small scale entry is both feasible and common. For example, Kiwi Energy's share increased

from 0 percent in 2012 to over 4 percent in 2014. Such growth by a small firm over a short period is indicative of easy entry. Markets with easy entry are inherently competitive.

### **Commission Concerns**

18. I understand that the Commission has expressed concerns that mass market ESCOs “offer little more than higher prices.”

19. Based on my understanding of the data relied upon by the Commission staff, the conclusion that was reached by Commission staff is in my opinion an oversimplification because it fails to account for certain important information about ESCO services and products. The averages cited by Commission staff do not account for the inducement and services offered by ESCOs. In my review of offerings by ESCOs, I see at least four incentives for customers.

20. First, one service offered by ESCOs is fixed-priced contracts. Distribution utilities offer only a variable price product. Although such products have the potential for low prices in the long-run, they also have the potential for substantial price volatility. The events of the polar vortex in the winter of 2014 provide a recent reminder of the risks of relying on month-to-month prices instead of locking-in prices over a longer period. ESCOs offer fixed-priced contracts ranging from 3 months to 3 years that eliminate the price volatility during the duration of the contract. Of course, locking-in a fixed price results in a cost to the buyer because it shifts price risk from the buyer to the seller. In essence, the buyer purchases energy and price insurance. At times, the bundled product has higher prices than the variable priced product, but the higher prices provide a worthwhile benefit to the buyer.

21. Second, ESCOs offer various products that provide different types and variable amounts of renewable energy. Studies have shown that some consumers are willing to pay more, some substantially more, for energy from renewable sources. ESCOs offer such products, which, of course, command a higher price because renewable energy typically costs more than

other types of energy. Once again, buyers rationally may, and do, pay higher prices in exchange for a product that they value more.

22. Third, ESCOs offer inducements similar to inducements offered in other industries. For example, Ambit Energy offers travel discounts as part of its service offerings. These inducements are no different from airlines or credit card companies offering frequent flyer miles to attract customers. Such inducements are non-priced terms of agreements, and the associated benefits of them would need to be accounted for in assessing the total net cost to buyers.

23. Non-price inducements are ubiquitous in competitive industries. For example, both airlines and credit card companies may offer frequent flyer miles along with their offerings. Credit card companies often offer interest-free loans for short-term periods for balance transfers from other credit cards. Automobile companies may offer low-rate financing as opposed to a price discount. Candy bar makers increase the size of their candy bars rather than keeping size the same and lowering prices. McDonald's places toys in their Happy Meals. Mortgage companies offer "no closing cost" financing in exchange for higher interest rates on the mortgage. Travel web sites offer "packages" that provide air-fare, car rental, and hotel accommodations for a bundled price.

24. In all these cases the consumer faces a choice of a "bundle" of the product and inducement in comparison to other offerings by the same or competing sellers. Every day Americans evaluate such options and make purchase choices that they believe are in their own interest.

25. Given the widespread use of non-price inducements for sales, it is not surprising that some competitive ESCOs also make such options available to consumers. Indeed, it would be abnormal not to have any ESCOs make such offers. Such non-price, non-energy related

inducements are an indication of robust competition. In other words, without competition there would be no such offers. Indeed, the lack of such competition is one reason why the old, monopolistic, regulated utilities rarely offered non-energy related inducements for service.

26. Fourth, some ESCOs appear to offer loss-leader pricing. These ESCOs offer variable contract prices substantially below the variable prices offered by the distribution utility. Of course, in a competitive market such prices cannot last for long. Therefore, these ESCOs would be expected to at some later time to charge prices above the prevailing price of the distribution utility. But in doing comparisons of pricing, one would need to account for the low introductory price and not just the higher, later prices. Undoubtedly some enterprising buyers observe these initial offers, switch often to take advantage of lower initial prices, and achieve overall savings. Such initial price discounts are also common in other markets. For example, storage services may offer storage space at \$1 for the initial month in exchange for a more standard price for some minimum period.

27. In short, the fact that some, or even a majority, of customers pay higher-priced energy from ESCOs than from distribution utilities at any point in time is not evidence of a market failure or lack of competition in mass market energy products. The structural facts of ESCOs selling in New York indicate robust competition for selling to mass market retail customers.

**Conclusion**

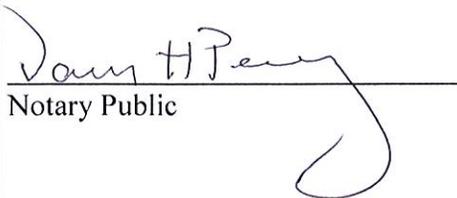
28. Many ESCOs sell to mass market retail customers in New York. Market concentration for these sellers is low, and market shares are not stable. These facts indicate that there is robust ESCO competition in New York.



John R. Morris, Ph.D.  
Principal  
Economists Incorporated



Subscribed and sworn before me  
on this 9th day of May 2016.

  
Notary Public

**DAWN HIGGINS PERRY**  
Notary Public, District of Columbia  
My Commission Expires June 30, 2019

## EXPERIENCE AND QUALIFICATIONS OF

### Dr. John R. Morris

#### OVERVIEW

Dr. Morris, a recognized expert in studying competition in energy industries, currently is a Principal at Economists Incorporated. He began his research of competition in energy industries in 1985 while working for the Federal Trade Commission. Since joining Economists Incorporated in 1992, he has consulted on many mergers and acquisitions involving energy companies, examined competitive issues relating to rates, and studied issues in state restructuring proceedings. He has published articles on competition and energy matters, and he has spoken on numerous occasions concerning competition in natural gas, electric power and other industries. He has been accepted as an expert witness on energy matters before the Federal Energy Regulatory Commission, state regulatory commissions, and in federal court.

#### EDUCATION

Ph.D., University of Washington, August 1985 Dissertation: *Intellectual Property: Creating, Pricing, Copying* • M.A., University of Washington, December 1983 • A.B., Georgetown University, May 1981

#### PRESENT POSITION

Dr. Morris is a *Principal* at Economists Incorporated, an economic consulting firm located at 2121 K Street, NW, Suite 1100, Washington, DC 20037. (202-223-4700) Economists Incorporated studies competition and regulation in many industries in the United States and in other countries. It is a leading firm in studying the competitive effects of mergers and acquisitions.

#### PREVIOUS EXPERIENCE

*Senior Vice President*, Economists Incorporated, December 2001 – December 2002 • *Vice President*, Economists Incorporated, December 1995 – December 2001 • *Senior Economist*, Economists Incorporated, June 1992 – December 1995 • *Economic Tutorial Leader*, Stanford University (Stanford in Washington), April 1993 – June 1995 • *Visiting Assistant Professor*, Department of Business Economics and Public Policy, School of Business, Indiana University, September 1991 – May 1992 • *Assistant to the Director for Antitrust*, Bureau of Economics, Federal Trade Commission, November 1989 – August 1991 • *Economic Advisor*, Office of Commissioner Machol, Federal Trade Commission, December 1988 – October 1989 • *Economist*, Division of Antitrust, Bureau of Economics, Federal Trade Commission, October 1985 – December 1988

#### MEMBERSHIPS

Member, International Association of Energy Economics • Associate, Energy Bar Association • Member, American Economic Association • Member, Western Economic Association International • Associate, American Bar Association

## AWARDS &amp; HONORS

*Award for Excellence in Law Enforcement*, Federal Trade Commission, 1988 • Graduate School Scholarship, University of Washington, 1984 • Graduated Cum Laude Georgetown University, 1981 • Senior Comprehensive Passed with Distinction, Georgetown University, 1981

TESTIMONY BEFORE  
THE FEDERAL  
ENERGY  
REGULATORY  
COMMISSION

Affidavit, Combined Locks Energy Center, LLC, *et al.*, ER10-3042-004 (2015) • Affidavit, Alabama Power Company, *et al.*, EL15-39-000 (2015) • Affidavit, PJM Interconnection, L.L.C., ER15-623-000 (2015) • Affidavit, Southern Indiana Gas and Electric Co. d/b/a Vectren Energy Delivery of Indiana, Inc., ER10-1338-000 (2014) • Affidavit, Quantum Choctaw Power, LLC *et al.*, ER12-458-007 (2014) • Affidavit, NRG Power Marketing LLC, *et al.*, ER10-2265-004 *et al.* (2014) • Affidavit, TransCanada Entities, ER10-2870-004 *et al.* (2014) • Affidavit, Tampa Electric Company, ER10-1437-002 (2014) • Affidavit, Kendall Green Energy LLC, ER14-1363-003 (2014) • Affidavit, Quantum Lake Power, LP, ER13-1489-000 (2014) • Affidavit, NRG Power Marketing LLC, *et al.* ER10-2265-002 (2014) • Affidavit, NRG Yield, Inc., *et al.*, EC14-101-000 (2014) • Affidavit, Community Wind Farm 1 *et al.*, ER14-1668-000 (2014) • Seaway Crude Pipeline Company LLC, OR15-6-000 (2014) • Affidavit, Public Service Electric and Gas Company *et al.*, ER10-1789-003 (2013) • Affidavits, NRG Energy Holdings, Inc., Edison Mission Sub, Inc., *et al.*, EC14-14-00 (2013) • Affidavit, Silver Merger Sub, Inc., *et al.*, EC13-128-000 (2013) • Prepared Answering Testimony, Deposition, and Hearing, Puget Sound Energy, Inc., *et al.*, EL01-10-085 (2012) • Affidavit, Wisconsin Public Service Corporation, *et al.*, ER10-1894-004 (2012) • Affidavit, PSEG New Haven LLC, ER12-1250-000 (2012) • Affidavit, Enterprise Product Partners L.P. and Enbridge, Inc., OR12-4-000 (2012) • Affidavit, Southern Indiana Gas and Electric Co., ER10-1338-001 (2011) • Affidavit, TransCanada Power Marketing Ltd. *et al.*, ER10-2780-001 (2011) • Affidavit, Tampa Electric Company, ER10-1476-001 (2011) • Affidavit, Cedar Creek Wind Energy, LLC, ER11-2577-000 (2010) • Affidavit, Public Service Electric and Gas Company *et al.*, ER97-837-014 (2010) • Affidavit, Morris Energy Group, LLC v. PSEG Energy Resources & Trade LLC; PSEG Fossil LLC; and PSEG Power LLC, EL10-79-000 (2010) • Affidavit, UGI Storage Company and UGI Central Penn Gas, Inc., CP10-23-000 (2010) • Prepared Answering Testimony, People of the State of California, *ex rel*; Bill Lockyer, Attorney General of the State of California v. Powerex Corp., *et al.*, EL02-71-000 (2009) • Affidavit, Integrys Energy Services, Inc. v. New Brunswick Power Generation Corporation, EL09-32-002 (2009) • Affidavit, People of the State of California, *ex rel*; Edmund G. Brown Jr. Attorney General of the State of California v. Powerex Corp., *et al.*, EL09-56-000 (2009) • Affidavit, San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services, EL00-95-000 (2009) • Affidavit, Troy Energy, LLC, *et al.*, ER02-25-010 (2009) • Affidavit, Combined Locks Energy Center, LLC, *et al.*, ER01-2659-015 (2009) • Prepared Direct Testimony and Deposition, Energy Transfer Partners, *et al.*, IN06-3-003 (2009) •

Prepared Direct Testimony and Hearing, Mobil Pipe Line Company, OR07-21-000 (2009) • Idaho Power Company, ER06-787-002 (2009) • Affidavit, Southern Indiana Gas and Electric Co. d/b/a Vectren Energy Delivery of Indiana, Inc. ER96-2734-007 (2008) • Affidavit, Choctaw Gas Generation, LLC, *et al.* ER08-1332-002 • Affidavit, TransCanada Energy Sales Ltd., ER09-328-001 (2008) • Prepared Direct Testimony and Deposition, Oasis Pipeline L.P., *et al.*, IN06-3-004 (2008) • Affidavit, Tampa Electric Company, ER99-2342-012 (2008) • Affidavit, ANP Bellingham Energy Company, LLC, *et al.*, ER00-2117-005 (2008) • Affidavit, SUEZ Energy Marketing, NA, *et al.*, ER06-169-003 (2008) • Affidavit, TransCanada Energy Marketing ULC, *et al.*, ER07-1274-001 (2008) • Affidavit, Georgia-Pacific Brewton LLC, *et al.*, ER08-1126-000 (2008) • Affidavit, Montgomery L'Energia Power Partners LP, ER08-864-000 (2008) • Affidavit (with Joseph P. Kalt), Energy Transfer Partners, *et al.*, IN06-3-002 (2008) • Affidavit, Energy Transfer Partners, *et al.*, IN06-3-002 (2008) • Affidavit, TransCanada Maine Wind Development Inc., ER08-685-000 (2008) • Affidavit (with Joseph P. Kalt), Energy Transfer Partners, *et al.*, IN06-3-000 (2007) • Affidavit, Energy Transfer Partners, *et al.*, IN06-3-000 (2007) • Affidavit, The People of the State of Illinois, *ex rel.* Illinois Attorney General Lisa Madigan v. Exelon Generation Co., LLC, *et al.*, EL07-47-000 (2007) • Affidavit, Baltimore Gas and Electric Company, ER07-576-000 (2007) • Affidavit, Trans-Allegheny Interstate Line Company, ER07-562-000 (2007) • Affidavit, TransCanada Energy Marketing Ltd., *et al.*, ER07-331-000 (2006) • Affidavit, Tampa Electric Company, ER99-2342-000, ER07-173-000 (2006) • Affidavit, Koch Supply & Trading, LP, ER07-100-000 (2006) • WPS Resources Corporation and Peoples Energy Corporation, EC06-152-000 (2006) • Affidavit, Sabine Cogen, LP, ER06-744-000 (2006) • Affidavit, Air Liquide Large Industries U.S. LP, ER06-743-000 (2006) • Affidavit, ANP Bellingham Energy Company, LLC., *et al.*, ER00-2117-000 (2005) • Affidavit, Duke Energy Corporation and Cinergy Corp., EC05-103-000 (2005) • Affidavit, El Paso Marketing, L.P., *et al.*, ER95-428-000 (2005) • Affidavit, TransCanada Energy Ltd., *et al.*, ER95-692-000 (2005) • Affidavit, Granite Ridge Energy, LLC, ER00-1147-000, ER05-287-001 (2005) • Affidavit, TransCanada Power (Castleton) LLC, ER05-743-000 (2005) • Affidavit, Tampa Electric Company, *et al.*, ER99-2342-003 (2005) • Affidavit, Wisconsin Public Service Corporation, WPS Energy Services, Inc., and WPS Power Development, Inc., ER96-1088-035 and Wisconsin Public Service Corporation, ER95-1528-010 (2005) • Affidavit, Wisconsin River Power Company, ER05-453-000 (2005) • Affidavit, Upper Peninsula Power Company, ER05-89-001 (2005) • Affidavit, Southern Indiana Gas and Electric Company, ER96-2734-003 (2004) • Affidavit, Tampa Electric Company, *et al.*, ER99-2342-003 (2004) • Affidavits, TransCanada Hydro Northeast, Inc., *et al.*, EC05-12-000, ER05-111-000 (2004) • Affidavits, Dominion Energy New England, Inc., *et al.*, EC05-4-000, ER05-34-000 (2004) • Affidavit, Wisconsin Public Service Corporation, WPS Energy Services,

Inc., and WPS Power Development, Inc., ER96-1088-033 and Wisconsin Public Service Corporation, ER95-1528-008 (2004) • Affidavit, NorthPoint Energy Solutions Inc. ER04-1244-000 (2004) • Affidavit, Union Power Partners, L.P., ER01-930-004 (2004) • Affidavit, Panda Gila River, L.P., ER01-931-004 (2004) • Affidavit, Dominion Energy Kewaunee, Inc., ER04-318-000 (2003) • Affidavit, TPS GP, Inc., TPG LP, Inc., Panda GS V, LLC & Panda GS VI, LLC, EC03-90-000 (2003) • Affidavit, Berkshire Power Company, L.L.C. *et al.*, ER99-3502-001 (2002) • Affidavit, El Paso Merchant Energy, L.P., ER95-428-024 (2002) • Affidavit, Tampa Electric Company, ER99-2342-001 (2002) • Affidavit, Hardee Power Partners Limited, ER99-2341-001 (2002) • Affidavit, TECO-PANDA Generating Company, L.P., ER02-1000-000 (2002) • Affidavit, Commonwealth Chesapeake Company, LLC, ER99-415-004 (2002) • Affidavit, Wisconsin Public Service Corporation, WPS Energy Services, Inc., and WPS Power Development, Inc., ER96-1088-031 and Wisconsin Public Service Corporation, ER95-1528-006 (2001) • Affidavit, TPS McAdams, LLC and TPS Dell, LLC, ER02-507-000 and ER02-510-000 (2001) • Affidavits, Prepared Direct Testimony, and Hearing, CPUC v. El Paso Natural Gas Company, et al., RP00-241-000 (2000-2001), Affidavit, El Paso Energy Corporation and The Coastal Corporation, EC00-73-000, (2000) • Affidavit, El Paso Energy Corporation and Sonat Inc., EC99-73-000 (1999) • Prepared Testimony, San Diego Gas & Electric Company and Enova Energy, Inc., EC97-12-000 (1997) • Prepared Testimony and Hearing, Wisconsin Electric Power Co., Northern States Power Co. (Minnesota), Northern States Power Co. (Wisconsin), and Cenerprise, Inc., EC95-16-000 (1996)

TESTIMONY BEFORE  
STATE REGULATORY  
COMMISSIONS

Prepared Direct Testimony, In re: Petition for Determination of Cost Effective Generation Alternative to Meet Need Prior to 2018, by Duke Energy Florida, Inc., FPSC Docket No. 140111-EI (2014) • Affidavit and Prepared Testimony, In The Matter of the Petition of Public Service Electric and Gas Company for Approval of an Increase in Electric and Gas Rates and for Changes in the Tariffs for Electric and Gas Service, B.P.U.N.J. No. 14 Electric and B.P.U.N.J. No. 14 Gas Pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1 and for Approval of a Gas Weather Normalization Clause; A Pension Expense Tracker; and for Other Appropriate Relief, BPU Docket No. GR09050422, New Jersey Board of Public Utilities (2010) • Prepared Direct Testimony, Application of Wisconsin Power and Light Company for Issuance of a Certificate of Public Convenience and Necessity for Construction and Placement in Operation of an Approximately 300 MW Coal-Fired Baseload Facility and an Application for Approval of Fixed Financial Parameters and Capital Cost Rate-Making Principles for the Baseload Facility, Docket No. 6680-CE-170, Public Service Commission of Wisconsin (2008) • Prepared Rebuttal Testimony and Hearing, In the Matter of the Joint Petition of Public Service Electric and Gas Company and Exelon Corporation for Approval of a Change in Control of Public Service Electric and Gas Company, and Related

Authorizations, BPU Docket No. EM05020106, OAL Docket No. PUC-01874-05, New Jersey Board of Public Utilities (2005, 2006) • Affidavit, Application of Duke Energy Corporation for Authorization to Enter Into a Business Combination Transaction with Cinergy Corp., Docket No. 2005-210-E, Public Service Commission Of South Carolina (2005) • Prepared Rebuttal Testimony and Hearing, Joint Application of PECO Energy Company and Public Service Electric and Gas Company for Approval of the Merger of Public Service Enterprise Group Incorporated with and into Exelon Corporation, Docket No. A-110550F0160, Pennsylvania Public Utility Commission (2005) • Prepared Direct Testimony and Hearing, Application of Washington Gas Light Company for amendments to Rate Schedule No. 9, Firm Delivery Gas Supplier Agreement of its Gas Tariff, Docket No. PUE-2004-00085 (2005) • Prepared Direct Testimony, Application of Wisconsin Public Service Corporation for a Certificate of Public Convenience and Necessity for Construction of A Large Electric Generating Plant with Associated Facilities, known as Weston 4, at Its Existing Weston Generating Station Located in Marathon County, Docket No. 6690-CE-187, Public Service Commission of Wisconsin (2004) • Prepared Direct Testimony, Metromedia Energy, Inc. - Regarding Washington Gas Light Company's Plan to Return Customers to Sales Service Effective December 1, 2003, Docket No. PUE-2003-00536 (2004) • Report (with Mark Frankena) and Testimony, Analysis of Competitive Implications: An investigations into whether electric industry restructuring and competition in the provision of retail electric service is in the public interest, Louisiana Public Service Commission Docket No. U-21453, U-20925 (SC), U-22092 (SC) (Subdocket A) (2000) • Report and Hearing, Atlantic City Electric Company: Audit of Restructuring, New Jersey Board of Public Utilities, Docket No. EA97060395 (1998) • Prepared Testimony and Hearing, Proceeding on Motion of the Commission to Redesign Niagara Mohawk Power Corporation's Current SC-7 Service Classification and Implement a New SC-7-A Service Classification, Case 94-E-0172, New York Public Service Commission (1995)

TESTIMONY BEFORE  
FEDERAL COURTS

Report, Deposition, and Bench Trial, FTC v. Arch Coal, Inc., et al., Civil Action 04-0534 (JDB), U.S. Dist. Court, Dist. of Columbia (2004) • Report, Deposition and Jury Trial, Trigen v. OG&E, CIV-96-1595L, U.S. Dist. Court, Western Dist. of Oklahoma (1998)

TESTIMONY BEFORE  
STATE COURTS

Affidavit, City Public Service Board of San Antonio vs. Public Utility Commission of Texas, et al., No. 97-02917, District Court of Travis County, Texas, 200<sup>th</sup> Judicial District (1997)

## OTHER TESTIMONY

Report, Metromedia Energy, Inc. v. Mirant Americas Energy Marketing, RE: 18 198 Y 18484 03 (2005) • Report and Deposition, King Provision Corporation v. Burger King Corporation and Grand Metropolitan PLC, 90-05718-CA, 4th Cir., Duval Co., Florida (1992) • Deposition, West Texas Transmission L.P. v. Enron Corp. et al., SA 88 CA 0638, W.D. Texas, San Antonio Division (1988)

## PUBLICATIONS

“Geographic Market Delineation in LMP Electric Power Markets,” *Electricity Journal* 23(3) (April 2010): 49-60 • “The Likely Effect of the Proposed Exelon-PSEG Merger on Wholesale Electricity Prices,” *Electricity Journal* 21(1) (Jan./Feb. 2008): 45-54 • “FERC MBR Screens: The Good, the Bad, and the Ugly,” *Public Utilities Fortnightly* 143(7) (July 2005): 37-42 • “Finding Market Power in Power Markets,” *International Journal of the Economics of Business*, 7(2) (July 2000): 167-178 • “Why Applicants Should Use Computer Simulation Models to Comply with the FERC’s New Merger Policy,” with Mark Frankena, *Public Utilities Fortnightly*, 135(3) (February 1, 1997): 22-26 • *Electric Utility Mergers*, with Mark Frankena and Bruce Owen, Chapters 1, 4, & 5, 1994 • “International Trade and Antitrust: Comments,” *University of Cincinnati Law Review*, 61(3) (1993): 945-953 • “Upstream Vertical Integration with Automatic Price Adjustments,” *Journal of Regulatory Economics* 4 (1992): 279-287 • “Should the U.S. Department of Justice deviate from the 5% price test for market definition on a case-by-case basis?” with Gale Mosteller, *International Merger Law*, April 1992 • “Defining Markets for Merger Analysis,” with Gale Mosteller, *Antitrust Bulletin* 36 (Fall 1991): 599-640 • “Analyzing Agreements Among Competitors: What Does the Future Hold?” with Jim Langenfeld, *Antitrust Bulletin* 36 (Fall 1991): 651-679 • “In Defense of Antitrust,” with Jim Langenfeld, *Regulation* 14(2) (Spring 1991): (Letters) 2-4 • “Enforcement of Property Rights and the Provision of Public Good Attributes,” *Information Economics and Policy* 3 (1988): 91-108

## WORKING PAPERS

“Advertising Restrictions as Rent Increasing Costs,” FTC Bureau of Economics Working Paper No. 196, May 1992 • “Rent Increasing Costs: The Antitrust Implications from a Paradox in Value Theory,” FTC Bureau of Economics Working Paper No. 182, November 1990 • “The Relationship Between Industrial Sales Prices and Concentration of Natural Gas Pipelines,” FTC Bureau of Economics Working Paper No. 168, November 1988 • “Deregulation by Vertical Integration?” FTC Bureau of Economics Working Paper No. 166, November 1988

PRESENTATIONS &  
PROFESSIONAL  
ACTIVITIES

Report, PJM Interconnection, L.L.C., Docket No. ER15-623-000, Federal Energy Regulatory Commission, January 20, 2015 • Comments, Notice of Inquiry: Analysis of Horizontal Market Power under the Federal Power Act, Docket No. RM11-14-000, Federal Energy Regulatory Commission, May 23, 2011 • Comments, Position Limits for Derivatives, RIN 3038-AD15 and 3038-AD16, Commodity Futures Trading Commission, March

28, 2011 • Comments, Guidance on Simultaneous Transmission Import Limit Studies, AD10-2-000, Federal Energy Regulatory Commission, February 12, 2010 • “Geographic Market Delineation in LMP Electric Power Markets,” presentation before representatives of the Federal Energy Regulatory Commission, U.S. Department of Justice, and U.S. Federal Trade Commission, January 27, 2010 • Comments, Notices of Intent to determine that 15 natural gas financial basis contracts traded on the Intercontinental Exchange, Inc. are Significant Price Discovery Contracts, Commodity Futures Trading Commission, October 26, 2009 • “Efficacy of Vertical Integration in Energy Industries with Applications to Proposed Standards of Conduct for Transmission Providers,” submitted to FERC by Santee Cooper in Docket No. RM07-1-000 (2007) • Chair, Antitrust Committee, Energy Bar Association, 2004–2005 • “Competition in the Natural Gas Industry: An Antitrust Perspective, presentation to staff of the Federal Energy Regulatory Commission,” March 28, 2005 • Vice Chair, Antitrust Committee, Energy Bar Association, 2003–2004 • “Weston 4 Effect on Wholesale Competition in WUMS,” submitted to the Public Service Commission of Wisconsin by Wisconsin Public Service Corporation in Docket No. 6690-CE-187, September 26, 2003 • “Computer Models In The Electric Power Industry,” presented to staff of the Federal Trade Commission, Washington, DC, June 11, 2002 • “TECO EnergySource Market Share Analysis,” submitted to FERC by TECO EnergySource, Inc. in Docket No. ER96-1563-017, September 10, 2001 • “Finding Market Power in Power Markets,” presented to staff of the Federal Trade Commission, Washington, DC, June 20, 2001 • “A Study of Marketing Affiliate and Other Affiliate Holdings of Firm Capacity on Interstate Natural Gas Pipelines and the Effects on Natural Gas Markets,” April 30, 2001, submitted to FERC by the Interstate Natural Gas Association of America in Docket No. PL00-1-003 • “Why We Should Use Computer Models to Unveil Market Power,” presented at the Sixth DOE–NARUC National Electricity Forum, Brown Convention Center, Houston, TX, September 16, 1998 • Comments, *Agency Information Collection and Dissemination Activities: Comment Request*, U.S. Department of Energy, Energy Information Administration, August 28, 1998 • Comments, *Revised filing Requirements Under Part 33 of the Commission’s Regulations*, Federal Energy Regulatory Commission Docket No. RM98-4-000, August 21, 1998 • “Use of Computer Simulation Models to Unveil Market Power,” presented to staff of the Federal Trade Commission, Federal Energy Regulatory Commission and U.S. Department of Justice, Federal Trade Commission, Washington, DC, April 10, 1998 • “Use of Computer Simulation Models to Unveil Market Power: The Primergy Case,” presented to the Bureau of Economics, Federal Trade Commission, Washington, DC, December 8, 1997 • “Use of Computer Simulation Models to Unveil Market Power,” presented at the 29th Annual Conference of the Institute of Public Utilities, Williamsburg, Virginia, December 3, 1997 • “Mergers and Market Power,” presented at the National Association of State

Utility Consumer Advocates Mid-Year Meeting, Charleston, South Carolina, June 9, 1997 • “Market Power Analysis: An Economic Perspective,” (with Mark Frankena), presented at the Strategic Research Institute Conference on The Legal Challenges of Restructuring, Arlington, Virginia, April 16, 1997 • “Mergers and Market Power,” presented at the Edison Electric Institute Workshop on FERC Merger Policy Guidelines, Arlington, Virginia, April 1, 1997 • “New Approaches to Controlling Distribution Company Market Power,” presented at the New York Energy Efficiency Council Conference on Innovative Solutions to a Changing Energy Market, New York Athletic Club, February 7, 1997 • Description of the Western Power Model, with Mark Frankena, Exhibit 8 to Prepared Testimony Before the Nevada Public Service Commission, January 31, 1997 • Reviewer, American Bar Association, Section of Antitrust Law, *Manual on the Economics of Antitrust Law, 14th Supplement*, 1995 • Referee, *Quarterly Journal of Business and Economics*, 1994—1995 • Reviewer, American Bar Association, Section of Antitrust Law, *Manual on the Economics of Antitrust Law, 10th Supplement*, 1993 • Expert Witness, Federal American Inn of Court, Washington, DC, Winter 1993 • “Advertising Restrictions as Rent Increasing Costs,” presented at a *Contemporary Policy Issues* Session of the Western Economics Association’s 67th Annual Conference, July 1992 • “Let’s Make Merger Policy Fully Consonant With Economic Theory,” presented at a *Contemporary Policy Issues* Session of the Western Economics Association’s 67th Annual Conference, July 1992 • “Advertising Restrictions as Rent Increasing Costs,” Seminar, Department of Business Economics, Indiana University, October 1991 • “International Trade and Antitrust: Comments,” presented at a *Contemporary Policy Issues* Session of the Western Economics Association’s 66th Annual Conference, July 1991 • Discussant, Western Economics Association’s 66th Annual Conference, July 1991 • Horizontal Restraints Cases at the Federal Trade Commission: From *American Medical Association* through the Present,” with Jim Langenfeld, presented at the 60th Annual Conference of the Southern Economics Association, November 1990 • “Defining Markets for Merger Analysis,” with Gale Mosteller, presented at a *Contemporary Policy Issues* Session of the Western Economics Association’s 65th Annual Conference, cosponsored by the *Antitrust Bulletin* and the Antitrust and Trade Regulation Section of the Federal Bar Association, July 1990 • “Analyzing Agreements Among Competitors: What Does the Future Hold?” with Jim Langenfeld, presented at a *Contemporary Policy Issues* Session of the Western Economics Association’s 65th Annual Conference, cosponsored by the *Antitrust Bulletin* and the Antitrust and Trade Regulation Section of the Federal Bar Association, July 1990 • “The Relationship Between Industrial Sales Prices and Concentration of Natural Gas Pipelines,” Seminar, Office of Economic Policy, Federal Energy Regulatory Commission, Summer 1989 • “The Relationship Between Industrial Sales Prices and Concentration of Natural Gas Pipelines,” Seminar, Economic Analysis Group, Antitrust

Division, U.S. Department of Justice, February 1989 •  
“Deregulation by Vertical Integration?” Seminar, Department of  
Business Economics, Indiana University, January 1989 •  
Discussant, Industrial Organization Society Session, Annual  
Meeting of the American Economics Association, December 1988  
• “Concentration and Price in the Natural Gas Industry,” Seminar,  
Federal Trade Commission, July 1988 • “Relevant Measures of  
Concentration for Antitrust Policy,” presented at an Industrial  
Organization Society Session of the 57th Annual Conference of  
the Southern Economics Association, November 1987

**ESCO Retail Electricity Sales in New York  
(2014)**

<b>Holding Company</b>	<b>Sales (\$k)</b>	<b>Share (%)</b>
Ambit Energy Holdings, LLC	218,583	20.6
Direct Energy	149,115	14.0
Hudson Energy Services	106,305	10.0
IDT Energy, Inc.	82,926	7.8
NRG	64,649	6.1
Kiwi Energy NY LLC	43,320	4.1
Viridian Energy NY LLC	37,954	3.6
MVC Capital	35,606	3.3
Agway Energy Services, LLC	34,638	3.3
Major Energy Electric Services	33,179	3.1
North American Power and Gas, LLC	28,704	2.7
Family Energy, Inc. New York	24,083	2.3
XOOM Energy New York, LLC	23,982	2.3
MPower Energy LLC	23,747	2.2
Consolidated Edison Co-NY Inc	23,537	2.2
Exelon	16,142	1.5
Accent Energy Holdings, LLC	13,853	1.3
Alpha Gas and Electric, LLC	13,220	1.2
Columbia Utilities Electricity	10,150	1.0
Other	79,618	7.5
<b>Total</b>	<b>1,063,309</b>	
<b>HHI</b>		<b>916</b>

Source: EIA Form 861

### Shares of ESCO Retail Residential Sales in New York

