

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of The Dayton Power and Light Company for Approval of its Market Rate Offer.)	Case No. 12-426-EL-SSO
In the Matter of the Application of The Dayton Power and Light Company for Approval of Revised Tariffs.)	Case No. 12-427-EL-ATA
In the Matter of the Application of The Dayton Power and Light Company for Approval of Certain Accounting Authority.)	Case No. 12-428-EL-AAM
In the Matter of the Application of The Dayton Power and Light Company for Waiver of Certain Commission Rules.)	Case No. 12-429-EL-WVR
In the Matter of the Application of The Dayton Power and Light Company to Establish Tariff Riders.)	Case No. 12-672-EL-RDR

**DIRECT TESTIMONY
OF
JAMES F. WILSON**

On Behalf of
The Office of the Ohio Consumers' Counsel
10 West Broad Street, Suite 1800
Columbus, Ohio 43215-3485
(614) 466-8574

March 5, 2013

1 **I. INTRODUCTION AND SUMMARY**

2

3 ***Q1. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.***

4 ***A1.*** My name is James F. Wilson. I am an economist and principal of Wilson Energy
5 Economics. My business address is 4800 Hampden Lane Suite 200, Bethesda,
6 MD 20814.

7

8 ***Q2. PLEASE DESCRIBE YOUR EXPERIENCE AND QUALIFICATIONS.***

9 ***A2.*** I have over twenty-five years of consulting experience to the electric power and
10 natural gas industries. Many of my past assignments have focused on the
11 economic and policy issues arising from the introduction of competition into these
12 industries, including restructuring policies, market design, and market power.
13 Other engagements have included contract litigation and damages; pipeline rate
14 cases; forecasting and market assessment; evaluating allegations of market
15 manipulation; probabilistic modeling of utility planning problems; and a wide
16 range of other issues arising in these industries. I also spent five years in Russia
17 in the early 1990s advising on the reform, restructuring, and development of the
18 Russian electricity and natural gas industries for the World Bank and other
19 clients. I have submitted affidavits and presented testimony in proceedings of the
20 Federal Energy Regulatory Commission, state regulatory agencies, and a U.S.
21 district court.

1 I have been involved in electricity restructuring and wholesale market design for
2 over twenty years in PJM, New England, Ontario, California, Russia, and other
3 regions. With regard to the PJM system, I have been involved in a broad range of
4 market design, planning and capacity market issues over the past several years. I
5 hold a B.A. in Mathematics from Oberlin College and an M.S. in Engineering-
6 Economic Systems from Stanford University. My curriculum vitae, summarizing
7 my experience and listing past testimony, is Attachment JFW-1 attached hereto.

8

9 ***Q3. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC UTILITIES***
10 ***COMMISSION OF OHIO?***

11 ***A3.*** Yes. I testified in Case No. 12-1230-EL-SSO regarding the application of The
12 Ohio Edison Company, The Cleveland Electric Illuminating Company, and The
13 Toledo Edison Company (collectively, “FirstEnergy”) for an Electric Security
14 Plan (“ESP”) in June 2012. I also testified in Case No. 09-906-EL-SSO,
15 involving FirstEnergy’s 2009 application for approval of a Market Rate Offer
16 (“MRO”).

17

18 ***Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS***
19 ***PROCEEDING?***

20 ***A4.*** I was retained by the Office of the Ohio Consumers’ Counsel (“OCC”) to review
21 and comment on the rate blending plan contained within The Dayton Power and
22 Light Company (“DP&L” or “Utility”) Second Revised Application
23 (“Application”) for an ESP filed December 12, 2012 in this proceeding.

**Q5. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING DP&L'S
PROPOSED RATE BLENDING PLAN.**

A5. DP&L's proposed rate blending plan takes too long to transition to full competition. A more rapid transition would enhance market efficiency, consistent with the State's policy that includes ensuring the diversity of electricity supplies and suppliers by giving consumers choices over who will supply their electricity.¹ A more rapid transition is also more consistent with a view of the Public Utilities Commission of Ohio ("PUCO" or "Commission") that customers should be able to benefit from market-based prices while they are low.² Setting DP&L's Standard Service Offer ("SSO") rates through a competitive auction would, judging from current and forecasted market prices, give customers a significant benefit relative to the current base generation rates. Finally, a more rapid transition to market will enhance the competitive marketplace, providing opportunities for competitors to fulfill the electricity needs of their customers, a policy of the state under R.C. 4928.02. Therefore, OCC's proposal, under which DP&L would acquire 100% of the power necessary to serve DP&L's SSO load through a competitive bidding process ("CBP") beginning with the effective date for rates under the ESP, is preferable to DP&L's proposal for rate blending over multiple years.

¹ See R.C. 4928.02(C).

² See *In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to 4928.143 Ohio Rev. Code in the Form of an Electric Security Plan*, Case No. 11-346-EL-SSO, Entry on Rehearing at ¶37 (January 30, 2013).

II. EVALUATION OF DP&L'S PROPOSED RATE BLENDING PLAN

Q6. PLEASE SUMMARIZE DP&L'S PROPOSED RATE BLENDING PLAN.

A6. DP&L's proposed rate blending plan is summarized in the Application at p. 7.

According to the proposal, only 10% of the applicable load would be met through a competitive bidding process ("CBP"), and priced at a resulting Competitive Bid ("CB") rate, through May of 2014. This fraction would rise to 40% for June 2014 through May 2015, to 70% for June 2015 through May 2016, and to 100%, representing full competition, only in June 2016.

Q7. WHAT IS THE STATUS OF THE OTHER OHIO UTILITIES' TRANSITIONS TO COMPETITION?

A7. Some other Ohio utilities are moving rapidly to full competition. Duke Energy Ohio held an auction on December 14, 2011 to satisfy 100% of its SSO load beginning January 1, 2012.³ FirstEnergy held auctions on October 20, 2010 and January 25, 2011, to satisfy 100% of SSO load beginning June 1, 2011.⁴

Q8. WHAT IS THE STATUS OF DP&L'S TRANSITION TO COMPETITION?

A8. The transition to competition began with the passage of Senate Bill 3 in 1999.⁵ More recently, DP&L was provided additional time to make the transition to

³ *In the Matter of the Procurement of Standard Service Offer Generation for Customers of Duke Energy Ohio, Inc.*, Case No. 11-6000-EL-UNC, Evaluation and Recommendation (Jan. 20, 2012).

⁴ *In the Matter of the Procurement of Standard Service Offer Generation for Customers of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company*, Case No. 10-1284-EL-UNC, Finding and Order (Jan. 27, 2011).

⁵ SB 3 of 1999 (Effective October 5, 1999), Ohio Revised Code §4928.01 et seq. (subsequently amended).

1 market under the approved stipulation in its last Electric Security Plan (Case No.
2 08-1094-EL-SSO). However, under the current ESP Application, the first auction
3 for 100% of SSO load would not start providing SSO customers with fully
4 market-based rates for generation until June 1, 2016.

5
6 ***Q9. PLEASE SUMMARIZE THE RESULTS OF THE OTHER OHIO***
7 ***UTILITIES' RECENT COMPETITIVE BID PROCESSES.***

8 ***A9.*** Duke Energy Ohio has now completed three of the scheduled five auctions
9 designed to provide market based generation rates to customers continuing to
10 purchase electricity from the SSO.⁶ The first auction, held on December 14,
11 2011, resulted in auction prices of \$49.72, \$51.10, and \$57.08 per MWh for
12 supply from January 2012 through May of 2013, 2014, and 2015 respectively.⁷
13 Duke's first auction produced a 17.5% rate reduction off the total bill for 2012
14 from December 2011 rates for residential customers consuming 1,000 kWh per
15 month.⁸ The subsequent two auctions held in 2012 resulted in auction prices of
16 \$52.14 and \$50.56 per MWh for the period June 2013 through May 2015.⁹
17 FirstEnergy's auction held on May 13, 2009 for the term June 1, 2009 through
18 May 31, 2011, produced a clearing price of \$61.50 per MWh for each of the three
19 operating companies. The Commission found that, at that auction price, Ohio

⁶ *In the Matter of the Procurement of Standard Service Offer Generation for Customers of Duke Energy Ohio, Inc.*, Case No. 11-6000-EL-UNC, Evaluation and Recommendation (Jan. 20, 2012).

⁷ Id. Updated Auction Manager Report, (Jan. 5, 2012).

⁸ Ohio Public Utilities Commission – News Release (Dec. 15, 2011).

⁹ *In the Matter of the Procurement of Standard Service Offer Generation for Customers of Duke Energy Ohio, Inc.* Case No. 11-6000-EL-UNC, Updated Auction Manager Report, (Jun. 13, 2012 and Dec. 6, 2012).

Edison's customers would experience a 16% decrease, Toledo Edison's customers a 12.6% decrease, and Cleveland Electric Illuminating's customers a 7.4% decrease.¹⁰ FirstEnergy has completed several additional auctions to supply SSO load, of which most cleared in the \$52 to \$58 per MWH range, and a recent auction for supply through May of 2016 cleared at \$60.89 per MWH.¹¹

***Q10. WHAT AUCTION PRICES HAS DP&L FORECASTED FOR THE
ELECTRIC SECURITY PLAN PERIOD?***

A10. DP&L witness Teresa F. Marrinan developed "proxy market-based auction prices" for the CBPs, used in the Application for projecting financial and rate impacts. The projected auction prices, which were developed based on forward prices, are shown in Exhibit TFM-2. I reviewed Ms. Marrinan's methodology and concluded that her results fall within a reasonable range. DP&L witness Emily Rabb adjusted these projected auction results for losses and a revenue conversion factor to determine CB rates. This calculation is shown in Ms. Rabb's Exhibit 5B. The resulting CB rates are \$44.86 per MWh for the period January 2013 – May 2014, \$58.01 per MWh for June 2014 – May 2015, \$61.70 per MWh for June 2015 – May 2016, \$64.07 per MWh for June 2016 – May 2017, and \$65.75 per MWh for June 2017 – May 2018.

¹⁰ Ohio Public Utilities Commission – News Release (May 14, 2009).

¹¹ *In the Matter of the Procurement of Standard Service Offer Generation for Customers of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company*, Case No. 10-1284-EL-UNC. Auction Manager Reports (Nov. 15, 2010, Feb. 17, 2011, Nov. 16, 2011, Feb. 16, 2012, Nov. 14, 2012, Feb. 13, 2013).

1 **Q11. HOW DO THESE FORECASTED COMPETITIVE BID PRICES COMPARE**
2 **TO DP&L'S BASE GENERATION CHARGES THAT, UNDER THE**
3 **APPLICATION, WOULD APPLY TO THE SAME TIME PERIODS?**

4 **A11.** These forecasted CBP auction rates, and the corresponding DP&L Base
5 Generation Rates with which DP&L proposes to blend them, are shown in Exhibit
6 RJM-1 to the testimony of DP&L witness R. Jeffrey Malinak. On this Exhibit the
7 Utility identifies its Base Generation Rate as \$76.62 per MWH for 2013 through
8 May of 2018.

9 If rates are based 100% on auction results, then DP&L's auction forecast suggests
10 that customers will see substantial savings. The forecasted CBP auction rate is
11 39% below the proposed Blended SSO Rate for 2013 through May 2014, 16%
12 lower for June 2014 through May 2015, and 7% lower for June 2015 through May
13 2016.

14

15 **Q12. HAVE YOU IDENTIFIED ANY REASON WHY DP&L'S COMPETITIVE**
16 **BID PROCESSES MIGHT HAVE SUBSTANTIALLY DIFFERENT**
17 **RESULTS FROM OTHER OHIO UTILITIES' RECENT COMPETITIVE**
18 **BID AUCTIONS OR FROM DP&L'S AUCTION PRICE FORECAST?**

19 **A12.** No. DP&L's service territory is part of the large and generally unconstrained
20 western region of PJM. While there have been recent concerns about possible
21 transmission constraints into FirstEnergy's service territories resulting from
22 retirements announced in 2012, which may have had some impact on
23 FirstEnergy's latest CBP results, I am not aware of such concerns about the

1 DP&L region. I am not aware of any reason why DP&L's CBPs would have
2 results substantially different from those of the other Ohio utilities or substantially
3 different from DP&L's projections.

4
5 ***Q13. WHAT DOES THIS INFORMATION SHOW ABOUT A COMPETITIVE BID***
6 ***PROCESS FOR DP&L'S STANDARD SERVICE OFFER?***

7 ***A13.*** The results of the recent CBP processes indicate that DP&L's SSO load could be
8 satisfied at substantial savings for standard offer customers through a CBP
9 process. Both Duke and FirstEnergy have already moved to a CBP process for
10 100% of their SSO load. In both cases, residential customers experienced a
11 decrease from their then-existing SSO rates. In contrast, DP&L is proposing a
12 three-year blending process where 100% CBP rates will not be achieved for
13 customers until June 1, 2016. Under DP&L's proposal, rates for some residential
14 customers would actually increase 2.61% in the first year of the ESP.¹² The
15 proposed delay in moving to a 100% auction price for all of DP&L's SSO
16 customers will result in substantial lost savings to customers.

17
18 ***Q14. ARE THERE OTHER POTENTIAL BENEFITS TO A MORE RAPID***
19 ***TRANSITION TO COMPETITION BY DP&L?***

20 ***A14.*** Yes.

¹² *In the Matter of the Application of The Dayton Power and Light Company for Approval of Its Electric Security Plan*, Case No. 12-426-EL-SSO, Second Revised Application (Rate Blending Plan at 1) (December 12, 2012).

1 ***Q15. WHAT ARE THE OTHER POTENTIAL BENEFITS TO A MORE RAPID***
2 ***TRANSITION TO COMPETITION BY DP&L?***

3 ***A15.*** A more rapid transition to competition by DP&L would result in more Ohio
4 generation competing in retail markets to serve loads not only in DP&L's service
5 territory, but also in the service territories of the other Ohio utilities. This
6 additional competition could contribute some additional downward pressure on
7 prices in the other utilities' CBPs, enhancing competitiveness and market
8 efficiency and benefiting consumers.

9
10 ***Q16. PLEASE SUMMARIZE YOUR CONCLUSION REGARDING DP&L'S***
11 ***PROPOSED TRANSITION TO COMPETITION, AS REFLECTED IN ITS***
12 ***PROPOSED RATE BLENDING PLAN.***

13 ***A16.*** DP&L's proposed rate blending plan takes too long to provide customers the
14 benefits of full competition. A more rapid transition to market, as proposed by
15 OCC, would enhance market efficiency and lower the price of DP&L's electric
16 service for Ohio consumers.

17
18 ***Q17. DOES THIS COMPLETE YOUR TESTIMONY?***

19 ***A17.*** Yes it does. However, I understand that I may be asked to supplement my
20 testimony in the event that DP&L, the PUCO Staff or any Signatory Party submits
21 additional testimony, or additional relevant information otherwise becomes
22 available.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Direct Testimony of James F. Wilson* was served via electronic transmission to the persons listed below on this 5th day of March, 2013.

/s/ Melissa R. Yost

Melissa R. Yost
Deputy Consumers' Counsel

SERVICE LIST

Thomas.mcnamee@puc.state.oh.us	cfaruki@ficlaw.com
Devin.parram@puc.state.oh.us	jsharkey@ficlaw.com
Judi.sobecki@dplinc.com	mwarnock@bricker.com
sam@mwncmh.com	tsiwo@bricker.com
fdarr@mwncmh.com	tony_long@ham.honda.com
mpritchard@mwncmh.com	asim_haque@ham.honda.com
joliker@mwncmh.com	haydenm@firstenergycorp.com
Amy.spiller@duke-energy.com	jlang@calfee.com
Jeanne.kingery@duke-energy.com	lmcbride@calfee.com
BMcMahon@emh-law.com	tallexander@calfee.com
Elizabeth.watts@duke-energy.com	jejadwin@aep.com
Rocco.DAscenzo@duke-energy.com	gpoulos@enernoc.com
dboehm@BKLawfirm.com	ricks@ohanet.org
mkurtz@BKLawfirm.com	cmooney2@columbus.rr.com
jkyler@BKLawfirm.com	tobrien@bricker.com
myurick@taftlaw.com	vparisi@igsenergy.com
zkraivitz@taftlaw.com	mswhite@igsenergy.com
whitt@whitt-sturtevant.com	Christopher.miller@icemiller.com
campbell@whitt-sturtevant.com	Gregory.dunn@icemiller.com
mhpetricoff@vorys.com	Chris.michael@icemiller.com
smhoward@vorys.com	trent@theoec.org
ssherman@kdlegal.com	cathy@theoec.org
jhague@kdlegal.com	joseph.clark@directenergy.com
Stephanie.Chmiel@ThompsonHine.com	dakutik@jonesday.com
Philip.Sineneng@ThompsonHine.com	aehaedt@jonesday.com
Michael.Dillard@ThompsonHine.com	ejacobs@ablelaw.org
matt@matthewcoxlaw.com	mjsatterwhite@aep.com
Bojko@carpenterlipps.com	stnourse@aep.com
Sechler@carpenterlipps.com	ssolberg@eimerstahl.com
bill.wells@wpafb.af.mil	stephen.bennett@exeloncorp.com
chris.thompson.2@tyndall.af.mil	Cynthia.Brady@Constellation.com
gmeyer@consultbai.com	mchristensen@columbuslaw.org
Bryce.mckenney@puc.state.oh.us	gregory.price@puc.state.oh.us

James F. Wilson
Principal, Wilson Energy Economics

4800 Hampden Lane Suite 200
Bethesda, Maryland 20814 USA

Phone: (240) 482-3737
Cell: (301) 535-6571
Fax: (240) 482-3759
Email: jwilson@wilsonenec.com
www.wilsonenec.com

SUMMARY

James F. Wilson has over 25 years of consulting experience, primarily in the electric power and natural gas industries. Many of his assignments have pertained to the economic and policy issues arising from the interplay of competition and regulation in these industries, including restructuring policies, market design, market analysis and market power. Other recent engagements have involved resource adequacy and capacity markets, contract litigation and damages, forecasting and market evaluation, pipeline rate cases and evaluating allegations of market manipulation. Mr. Wilson has been involved in electricity restructuring and wholesale market design for over twenty years in California, PJM, New England, Ontario, Russia and other regions. He also spent five years in Russia advising on the reform, restructuring and development of the Russian electricity and natural gas industries.

Mr. Wilson has submitted affidavits and testified in Federal Energy Regulatory Commission and state regulatory proceedings. His papers have appeared in the *Energy Journal*, *Electricity Journal*, *Public Utilities Fortnightly* and other publications, and he often presents at industry conferences.

Prior to founding Wilson Energy Economics, Mr. Wilson was a Principal at LECG, LLC. He has also worked for ICF Resources, Decision Focus Inc., and as an independent consultant.

EDUCATION

MS, Engineering-Economic Systems, Stanford University, 1982
BA, Mathematics, Oberlin College, 1977

RECENT ENGAGEMENTS

- Executive briefing on wind integration and linkages to short-term and longer-term resource adequacy approaches.
- Affidavit on the impact of a centralized capacity market on the potential benefits of participation in a Regional Transmission Organization (RTO).
- Participated in a panel teleseminar on resource adequacy policy and modeling.
- Affidavit on opt-out rules for centralized capacity markets.
- Affidavits on minimum offer price rules for RTO centralized capacity markets.
- Evaluated electric utility avoided cost in a tax dispute.
- Advised on pricing approaches for RTO backstop short-term capacity procurement.
- Affidavit evaluating the potential impact on reliability of demand response products limited in the number or duration of calls.
- Evaluated changing patterns of natural gas production and pipeline flows, developed approaches for pipeline tolls and cost recovery.

- Evaluated an electricity peak load forecasting methodology and forecast; evaluated regional transmission needs for resource adequacy.
- Participated on a panel teleseminar on natural gas price forecasting.
- Affidavit evaluating a shortage pricing mechanism and recommending changes.
- Testimony in support of proposed changes to a forward capacity market mechanism.
- Reviewed and critiqued an analysis of the economic impacts of restrictions on oil and gas development.
- Advised on the development of metrics for evaluating the performance of Regional Transmission Organizations and their markets.
- Prepared affidavit on the efficiency benefits of excess capacity sales in readjustment auctions for installed capacity.
- Prepared affidavit on the potential impacts of long lead time and multiple uncertainties on clearing prices in an auction for standard offer electric generation service.

EARLIER PROFESSIONAL EXPERIENCE

LECG, LCC, Washington, DC 1998–2009.

Principal

- Reviewed and commented on an analysis of the target installed capacity reserve margin for the Mid Atlantic region; recommended improvements to the analysis and assumptions.
- Evaluated an electric generating capacity mechanism and the price levels to support adequate capacity; recommended changes to improve efficiency.
- Analyzed and critiqued the methodology and assumptions used in preparation of a long run electricity peak load forecast.
- Evaluated results of an electric generating capacity incentive mechanism and critiqued the mechanism's design; prepared a detailed report. Evaluated the impacts of the mechanism's flaws on prices and costs and prepared testimony in support of a formal complaint.
- Analyzed impacts and potential damages of natural gas migration from a storage field.
- Evaluated allegations of manipulation of natural gas prices and assessed the potential impacts of natural gas trading strategies.
- Prepared affidavit evaluating a pipeline's application for market-based rates for interruptible transportation and the potential for market power.
- Prepared testimony on natural gas industry contracting practices and damages in a contract dispute.
- Prepared affidavits on design issues for an electric generating capacity mechanism for an eastern US regional transmission organization; participated in extensive settlement discussions.
- Prepared testimony on the appropriateness of zonal rates for a natural gas pipeline.
- Evaluated market power issues raised by a possible gas-electric merger.
- Prepared testimony on whether rates for a pipeline extension should be rolled-in or incremental under FERC policy.
- Prepared an expert report on damages in a natural gas contract dispute.
- Prepared testimony regarding the incentive impacts of a ratemaking method for natural gas pipelines.
- Prepared testimony evaluating natural gas procurement incentive mechanisms.
- Analyzed the need for and value of additional natural gas storage in the southwestern US.
- Evaluated market issues in the restructured Russian electric power market, including the need to introduce financial transmission rights, and policies for evaluating mergers.
- Affidavit on market conditions in western US natural gas markets and the potential for a new merchant gas storage facility to exercise market power.
- Testimony on the advantages of a system of firm, tradable natural gas transmission and storage rights, and the performance of a market structure based on such policies.

- Testimony on the potential benefits of new independent natural gas storage and policies for providing transmission access to storage users.
- Testimony on the causes of California natural gas price increases during 2000-2001 and the possible exercise of market power to raise natural gas prices at the California border.
- Advised a major US utility with regard to the Federal Energy Regulatory Commission (FERC) proposed Standard Market Design and its potential impacts on the company.
- Reviewed and critiqued draft legislation and detailed market rules for reforming the Russian electricity industry, for a major investor in the sector.
- Analyzed the causes of high prices in California wholesale electric markets during 2000 and developed recommendations, including alternatives for price mitigation. Testimony on price mitigation measures.
- Summarized and critiqued wholesale and retail restructuring and competition policies for electric power and natural gas in select US states, for a Pacific Rim government contemplating energy reforms.
- Presented testimony regarding divestiture of hydroelectric generation assets, potential market power issues, and mitigation approaches to the California Public Utilities Commission.
- Reviewed the reasonableness of an electric utility's wholesale power purchases and sales in a restructured power market during a period of high prices.
- Presented an expert report on failure to perform and liquidated damages in a natural gas contract dispute.
- Presented a workshop on Market Monitoring to a group of electric utilities in the process of forming an RTO.
- Authored a report on the screening approaches used by market monitors for assessing exercise of market power, material impacts of conduct, and workable competition.
- Developed recommendations for mitigating locational market power, as part of a package of congestion management reforms.
- Provided analysis in support of a transmission owner involved in a contract dispute with generators providing services related to local grid reliability.
- Authored a report on the role of regional transmission organizations in market monitoring.
- Prepared market power analyses in support of electric generators' applications to FERC for market-based rates for energy and ancillary services.
- Analyzed western electricity markets and the potential market power of a large producer under various asset acquisition or divestiture strategies.
- Testified before a state commission regarding the potential benefits of retail electric competition and issues that must be addressed to implement it.
- Advised a Canadian electric utility on restructuring issues, including: market design and trading arrangements; contractual approaches to mitigating market power; measures for ensuring adequate generating capacity.
- Prepared a market power analysis in support of an acquisition of generating capacity in the New England market.
- Advised a California utility regarding reform strategies for the California natural gas industry, addressing a broad range of market power issues and policy options for providing system balancing services.

ICF RESOURCES, INC., Fairfax, VA, 1997–1998.

Project Manager

- Reviewed, critiqued and submitted testimony on a New Jersey electric utility's restructuring proposal, as part of a management audit for the state regulatory commission.
- Assisted a group of US utilities in developing a proposal to form a regional Independent System Operator (ISO).

- Researched and reported on the emergence of Independent System Operators and their role in reliability, for the Department of Energy.
- Provided analytical support to the Secretary of Energy's Task Force on Electric System Reliability on various topics, including ISOs. Wrote white papers on the potential role of markets in ensuring reliability and on liability issues.
- Recommended near-term strategies for addressing the potential stranded costs of non-utility generator contracts for an eastern utility; analyzed and evaluated the potential benefits of various contract modifications, including buyout and buydown options; designed a reverse auction approach to stimulating competition in the renegotiation process.
- Designed an auction process for divestiture of a Northeastern electric utility's generation assets and entitlements (power purchase agreements).
- Participated in several projects involving analysis of regional power markets and valuation of existing or proposed generation assets.

IRIS MARKET ENVIRONMENT PROJECT, 1994–1996.

Project Director, Moscow, Russia

Established and led a policy analysis group advising the Russian Federal Energy Commission and Ministry of Economy on economic policies for the electric power, natural gas, oil pipeline, telecommunications, and rail transport industries (*the Program on Natural Monopolies*, a project of the IRIS Center of the University of Maryland Department of Economics, funded by USAID). Major activities and projects included:

- Advised on industry reforms and the establishment of federal regulatory institutions.
- Advised the Russian Federal Energy Commission on electricity restructuring, development of a competitive wholesale market for electric power, tariff improvements, and other issues of electric power and natural gas industry reform.
- Developed policy conditions for the IMF's \$10 billion Extended Funding Facility.
- Performed industry diagnostic analyses with detailed policy recommendations for electric power (1994), natural gas, rail transport and telecommunications (1995), oil transport (1996).

Independent Consultant stationed in Moscow, Russia, 1991–1996

Projects for the WORLD BANK, 1992-1996:

- Bank Strategy for the Russian Electricity Sector. Developed a policy paper outlining current industry problems and necessary policies, and recommending World Bank strategy.
- Russian Electric Power Industry Restructuring. Participated in work to develop recommendations to the Russian Government on electric power industry restructuring.
- Russian Electric Power Sector Update. Led project to review developments in sector restructuring, regulation, demand, supply, tariffs, and investment.
- Russian Coal Industry Restructuring. Analyzed Russian and export coal markets and developed forecasts of future demand for Russian coal.
- World Bank/IEA Electricity Options Study for the G-7. Analyzed mid- and long-term electric power demand and efficiency prospects and developed forecasts.
- Russian Energy Pricing and Taxation. Developed recommendations for liberalizing energy markets, eliminating subsidies and restructuring tariffs for all energy resources.

Other consulting assignments in Russia, 1991–1994:

- Project leader for start-up phase of the joint Russian-American Electric Power Alternatives Study on power sector development and investment; also participated in a project on electric power restructuring.
- Advised the US Agency For International Development on the establishment of energy industry technical assistance programs in Russia.

- Advised on projects pertaining to Russian energy policy and the transition to a market economy in the energy industries, for the Institute For Energy Research of the Russian Academy of Sciences.
- Presented seminars on the structure, economics, planning, and regulation of the energy and electric power industries in the US, for various Russian clients.

DECISION FOCUS INC., Mountain View, CA, 1983–1992

Senior Associate, 1985-1992.

- For the Electric Power Research Institute, led projects to develop decision-analytic methodologies and models for evaluating long term fuel and electric power contracting and procurement strategies. Applied the methodologies and models in numerous case studies, and presented several workshops and training sessions on the approaches.
- Analyzed long-term and short-term natural gas supply decisions for a large California gas distribution company following gas industry unbundling and restructuring.
- Analyzed long term coal and rail alternatives for a midwest electric utility, including alternative coal supply regions, suppliers and contract structures; spot/contract mix; rail arrangements; power purchases; conversion to gas.
- Led project to evaluate bulk power purchase alternatives and strategies for a New Jersey electric utility. Developed model for analyzing power purchases.
- Performed a financial and economic analysis of a proposed hydroelectric project.
- For a natural gas pipeline company serving the Northeastern US, forecasted long-term natural gas supply and transportation volumes. Developed a forecasting system for staff use.
- Analyzed potential benefits of diversification of gas suppliers for a mid-continent gas pipeline company.
- Led project to evaluate and make recommendations on uranium contracting strategies, including long-term contract purchases, spot purchases, and stockpiling actions, for an electric utility.
- Analyzed telecommunications services markets under deregulation, developed and implemented a pricing strategy model. Evaluated potential responses of residential and business customers to changes in the client's and competitors' telecommunications services and prices.
- Analyzed coal contract terms and supplier diversification strategies for an eastern electric utility.
- Analyzed long-term natural gas supply strategies and spot purchasing strategies for a California natural gas distribution company.
- Analyzed oil and natural gas contracting strategies for a California electric utility. Evaluated standby supply options for low-sulfur fuel oil.

TESTIMONY AND AFFIDAVITS

PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. ER13-535 (Minimum Offer Price Rule), Affidavit in Support of the Protest and Comments of the Joint Consumer Advocates, December 28, 2012.

In the Matter of the Application of Ohio Edison Company, et al for Authority to Provide for a Standard Service Offer in the Form of an Electric Security Plan, Public Utilities Commission of Ohio Case No. 12-1230-EL-SSO: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel, May 21, 2012; deposition, May 30, 2012; testimony at hearings, June 5, 2012.

PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. ER12-513, Affidavit in Support of Protest of the Joint Consumer Advocates and Demand Response Supporters (changes to RPM), December 22, 2011.

People of the State of Illinois *ex rel.* Leon A. Greenblatt, III v Commonwealth Edison Company, Circuit Court of Cook County, Illinois, deposition, September 22, 2011; interrogatory, February 22, 2011.

In the Matter of the Application of Union Electric Company for Authority to Continue the Transfer of Functional Control of Its Transmission System to the Midwest Independent Transmission System

Operator, Inc., Missouri PSC Case No. EO-2011-0128, Testimony in hearings, February 9, 2012; Rebuttal Testimony and Response to Commission Questions On Behalf Of The Missouri Joint Municipal Electric Utility Commission, September 14, 2011.

PJM Interconnection, L.L.C., and PJM Power Providers Group v. PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket Nos. ER11-2875 and EL11-20 (Minimum Offer Price Rule), Affidavit in Support of Protest of New Jersey Division of Rate Counsel, March 4, 2011, and Affidavit in Support of Request for Rehearing and for Expedited Consideration of New Jersey Division of Rate Counsel, May 12, 2011.

PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. ER11-2288 (Demand response "saturation" issue), Affidavit in Support of Protest and Comments of the Joint Consumer Advocates, December 23, 2010.

North American Electric Reliability Corporation, Federal Energy Regulatory Commission Docket No. RM10-10, Comments on Proposed Reliability Standard BAL-502-RFC-02: Planning Resource Adequacy Analysis, Assessment and Documentation, December 23, 2010.

In the Matter of the Reliability Pricing Model and the 2013/2014 Delivery Year Base Residual Auction Results, Maryland Public Service Commission Administrative Docket PC22, Comments and Responses to Questions On Behalf of Southern Maryland Electric Cooperative, October 15, 2010.

PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. ER09-1063-004 (PJM compliance filing on pricing during operating reserve shortages): Affidavit In Support of Comments and Protest of the Pennsylvania Public Utility Commission, July 30, 2010.

ISO New England, Inc. and New England Power Pool, Federal Energy Regulatory Commission Docket No. ER10-787-000 on Forward Capacity Market Revisions: Direct Testimony On Behalf Of The Connecticut Department of Public Utility Control, March 30, 2010; Direct Testimony in Support of First Brief of the Joint Filing Supporters, July 1, 2010; Supplemental Testimony in Support of Second Brief of the Joint Filing Supporters, September 1, 2010.

PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. ER09-412-006: Affidavit In Support of Protest of Indicated Consumer Interests, January 19, 2010.

In the Matter of the Application of Ohio Edison Company, et al For Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Public Utilities Commission of Ohio Case No. 09-906-EL-SSO: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel, December 7, 2009; deposition, December 10, 2009, testimony at hearings, December 22, 2009.

Application of PATH Allegheny Virginia Transmission Corporation for Certificates of Public Convenience and Necessity to Construct Facilities: 765 kV Transmission Line through Loudon, Frederick and Clarke Counties, Virginia State Corporation Commission Case No. PUE-2009-00043: Direct Testimony on Behalf of Commission Staff, December 8, 2009.

PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. ER09-412-000: Affidavit On Proposed Changes to the Reliability Pricing Model On Behalf Of RPM Load Group, January 9, 2009; Reply Affidavit, January 26, 2009.

PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. ER09-412-000: Affidavit In Support of the Protest Regarding Load Forecast To Be Used in May 2009 RPM Auction, January 9, 2009.

Maryland Public Service Commission et al v. PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. EL08-67-000: Affidavit in Support Complaint of the RPM Buyers, May 30, 2008; Supplemental Affidavit, July 28, 2008.

PJM Interconnection, L.L.C., Federal Energy Regulatory Commission Docket No. ER08-516-000: Affidavit On PJM's Proposed Change To RPM Parameters On Behalf Of RPM Buyers, March 6, 2008.

PJM Interconnection, L.L.C., Reliability Pricing Model Compliance Filing, Federal Energy Regulatory Commission Docket Nos. ER05-1410 and EL05-148: Affidavit Addressing RPM Compliance Filing Issues on Behalf of the Public Power Association of New Jersey, October 15, 2007.

TXU Energy Retail Company LP v. Leprino Foods Company, Inc., US District Court for the Northern District of California, Case No. C01-20289: Testimony at trial, November 15-29, 2006; Deposition, April 7, 2006; Expert Report on Behalf of Leprino Foods Company, March 10, 2006.

Gas Transmission Northwest Corporation, Federal Energy Regulation Commission Docket No. RP06-407: Reply Affidavit, October 26, 2006; Affidavit on Behalf of the Canadian Association of Petroleum Producers, October 18, 2006.

PJM Interconnection, L.L.C., Reliability Pricing Model, Federal Energy Regulatory Commission Docket Nos. ER05-1410 and EL05-148: Supplemental Affidavit on Technical Conference Issues, June 22, 2006; Supplemental Affidavit Addressing Paper Hearing Topics, June 2, 2006; Affidavit on Behalf of the Public Power Association of New Jersey, October 19, 2005.

Maritimes & Northeast Pipeline, L.L.C., Federal Energy Regulatory Commission Docket No. RP04-360-000: Prepared Cross Answering Testimony, March 11, 2005; Prepared Direct and Answering Testimony on Behalf of Firm Shipper Group, February 11, 2005.

Dynegy Marketing and Trade v. Multiut Corporation, US District Court of the Northern District of Illinois, Case. No. 02 C 7446: Deposition, September 1, 2005; Expert Report in response to Defendant's counterclaims, March 21, 2005; Expert Report on damages, October 15, 2004.

Application of Pacific Gas and Electric Company, California Public Utilities Commission proceeding A.04-03-021: Prepared Testimony, Policy for Throughput-Based Backbone Rates, on behalf of Pacific Gas and Electric Company, May 21, 2004.

Gas Market Activities, California Public Utilities Commission Order Instituting Investigation I.02-11-040: Testimony at hearings, July, 2004; Prepared Testimony, Comparison of Incentives Under Gas Procurement Incentive Mechanisms, on behalf of Pacific Gas and Electric Company, December 10, 2003.

Application of Red Lake Gas Storage, L.P., Federal Energy Regulatory Commission Docket No. CP02-420, Affidavit in support of application for market-based rates for a proposed merchant gas storage facility, March 3, 2003.

Application of Pacific Gas and Electric Company, California Public Utilities Commission proceeding A.01-10-011: Testimony at hearings, April 1-2, 2003; Rebuttal Testimony, March 24, 2003; Prepared Testimony, Performance of the Gas Accord Market Structure, on behalf of Pacific Gas and Electric Company, January 13, 2003.

Application of Wild Goose Storage, Inc., California Public Utilities Commission proceeding A.01-06-029: Testimony at hearings, November, 2001; Prepared testimony regarding policies for backbone expansion and tolls, and potential ratepayer benefits of new storage, on behalf of Pacific Gas and Electric Company, October 24, 2001.

Public Utilities Commission of the State of California v. El Paso Natural Gas Co., Federal Energy Regulatory Commission Docket No. RP00-241: Testimony at hearings, May-June, 2001; Prepared Testimony on behalf of Pacific Gas and Electric Company, May 8, 2001.

Application of Pacific Gas and Electric Company, California Public Utilities Commission proceeding A.99-09-053: Prepared testimony regarding market power consequences of divestiture of hydroelectric assets, December 5, 2000.

San Diego Gas & Electric Company, *et al*, Federal Energy Regulatory Commission Docket No. EL00-95: Prepared testimony regarding proposed price mitigation measures on behalf of Pacific Gas and Electric Company, November 22, 2000.

Application of Harbor Cogeneration Company, Federal Energy Regulatory Commission Docket No. ER99-1248: Affidavit in support of application for market-based rates for energy, capacity and ancillary services, December 1998.

Application of and Complaint of Residential Electric, Incorporated vs. Public Service Company of New Mexico, New Mexico Public Utility Commission Case Nos. 2867 and 2868: Testimony at hearings, November, 1998; Direct Testimony on behalf of Public Service Company of New Mexico on retail access issues, November, 1998.

Management audit of Public Service Electric and Gas' restructuring proposal for the New Jersey Board of Public Utilities: Prepared testimony on reliability and basic generation service, March 1998.

PUBLISHED ARTICLES

Forward Capacity Market CONEfusion, Electricity Journal Vol. 23 Issue 9, November 2010.

Reconsidering Resource Adequacy (Part 2): Capacity Planning for the Smart Grid, Public Utilities Fortnightly, May 2010.

Reconsidering Resource Adequacy (Part 1): Has the One-Day-in-Ten-Years Criterion Outlived Its Usefulness? Public Utilities Fortnightly, April 2010.

A Hard Look at Incentive Mechanisms for Natural Gas Procurement, with K. Costello, National Regulatory Research Institute Report No. 06-15, November 2006.

Natural Gas Procurement: A Hard Look at Incentive Mechanisms, with K. Costello, Public Utilities Fortnightly, February 2006, p. 42.

After the Gas Bubble: An Economic Evaluation of the Recent National Petroleum Council Study, with K. Costello and H. Huntington, Energy Journal Vol. 26 No. 2 (2005).

High Natural Gas Prices in California 2000-2001: Causes and Lessons, Journal of Industry, Competition and Trade, vol. 2:1/2, November 2002.

Restructuring the Electric Power Industry: Past Problems, Future Directions, Natural Resources and Environment, ABA Section of Environment, Energy and Resources, Volume 16 No. 4, Spring, 2002.

Scarcity, Market Power, Price Spikes, and Price Caps, Electricity Journal, November, 2000.

The New York ISO's Market Power Screens, Thresholds, and Mitigation: Why It Is Not A Model For Other Market Monitors, Electricity Journal, August/September 2000.

ISOs: A Grid-by-Grid Comparison, Public Utilities Fortnightly, January 1, 1998.

Economic Policy in the Natural Monopoly Industries in Russia: History and Prospects (with V. Capelik), Voprosi Ekonomiki, November 1995.

Meeting Russia's Electric Power Needs: Uncertainty, Risk and Economic Reform, Financial and Business News, April 1993.

Russian Energy Policy through the Eyes of an American Economist, Energeticheskoye Stroitelstvo, December 1992, p 2.

Fuel Contracting Under Uncertainty, with R. B. Fancher and H. A. Mueller, IEEE Transactions on Power Systems, February, 1986, p. 26-33.

OTHER ARTICLES, REPORTS AND PRESENTATIONS

Panel Discussion – Alternative Models and Best Practices in Other Regions, Long-Term Resource Adequacy Summit, California Public Utilities Commission and California ISO, San Francisco, California, February 26, 2012.

Fundamental Capacity Market Design Choices: How Far Forward? How Locational? EUCI Capacity Markets Conference, October 3, 2012.

One Day in Ten Years? Economics of Resource Adequacy, Mid-America Regulatory Conference Annual Meeting, June 12, 2012.

Reliability and Economics: Separate Realities? Harvard Electricity Policy Group Sixty-Fifth Plenary Session, December 1, 2011.

National Regulatory Research Institute Teleseminar: The Economics of Resource Adequacy Planning: Should Reserve Margins Be About More Than Keeping the Lights On?, panelist, September 15, 2011.

Improving RTO-Operated Wholesale Electricity Markets: Recommendations for Market Reforms, American Public Power Association Symposium, panelist, January 13, 2011.

Shortage Pricing Issues, panelist, Organization of PJM States, Inc. Sixth Annual Meeting, October 8, 2010.

National Regulatory Research Institute Teleseminar: Forecasting Natural Gas Prices, panelist, July 28, 2010.

Comments on the NARUC-Initiated Report: Analysis of the Social, Economic and Environmental Effects of Maintaining Oil and Gas Exploration Moratoria On and Beneath Federal Lands (February 15, 2010) submitted to NARUC on June 22, 2010.

Forward Capacity Market CONEfusion, Advanced Workshop in Regulation and Competition, 29th Annual Eastern Conference of the Center for Research in Regulated Industries, Rutgers University, May 21, 2010.

One Day in Ten Years? Resource Adequacy for the Smart Grid, revised draft November 2009.

Approaches to Local Resource Adequacy, presented at Electric Utility Consultants' Smart Capacity Markets Conference, November 9, 2009.

One Day in Ten Years? Resource Adequacy for the Smarter Grid, Advanced Workshop in Regulation and Competition, 28th Annual Eastern Conference of the Center for Research in Regulated Industries, Rutgers University, May 15, 2009.

Resource Adequacy in Restructured Electricity Markets: Initial Results of PJM's Reliability Pricing Model (RPM), Advanced Workshop in Regulation and Competition, 27th Annual Eastern Conference of the Center for Research in Regulated Industries, Rutgers University, May 15, 2008.

Statement at Federal Energy Regulatory Commission technical conference, Capacity Markets in Regions with Organized Electric Markets, Docket No. AD08-4-000, May 7, 2008.

Raising the Stakes on Capacity Incentives: PJM's Reliability Pricing Model (RPM), presentation at the University of California Energy Institute's 13th Annual POWER Research Conference, Berkeley, California, March 21, 2008.

Raising the Stakes on Capacity Incentives: PJM's Reliability Pricing Model (RPM), report prepared for the American Public Power Association, March 14, 2008.

Comments on GTN's Request for Market-Based Rates for Interruptible Transportation, presentation at technical conference in Federal Energy Regulatory Commission Docket No. RP06-407, September 26-27, 2006 on behalf of Canadian Association of Petroleum Producers.

Comments on Policies to Encourage Natural Gas Infrastructure, and Supplemental Comments on Market-Based Rates Policy For New Natural Gas Storage, State of the Natural Gas Industry Conference, Federal Energy Regulatory Commission Docket No. AD05-14, October 12 and 26, 2005.

After the Gas Bubble: A Critique of the Modeling and Policy Evaluation Contained in the National Petroleum Council's 2003 Natural Gas Study, with K. Costello and H. Huntington, presented at the 24th Annual North American Conference of the USAEE/IAEE, July 2004.

Comments on the Pipeline Capacity Reserve Concept, State of the Natural Gas Industry Conference, Federal Energy Regulatory Commission Docket No. PL04-17, October 21, 2004.

Southwest Natural Gas Market and the Need for Storage, Federal Energy Regulatory Commission's Southwestern Gas Storage Technical Conference, docket AD03-11, August 2003.

Assessing Market Power in Power Markets: the "Pivotal Supplier" Approach and Variants, presented at Electric Utility Consultants' Ancillary Services Conference, November 1, 2001.

Scarcity and Price Mitigation in Western Power Markets, presented at Electric Utility Consultants' conference: What To Expect In Western Power Markets This Summer (conference chair), May 1-2, 2001.

Market Power: Definition, Detection, Mitigation, pre-conference workshop, with Scott Harvey, January 24, 2001.

Market Monitoring in the U.S.: Evolution and Current Issues, presented at the Association of Power Exchanges' APEx 2000 Conference, October 25, 2000.

Ancillary Services and Market Power, presented at the Electric Utility Consultants' Ancillary Services Conference (New Business Opportunities in Competitive Ancillary Services Markets), Sept. 14, 2000.

Market Monitoring Workshop, presented to RTO West Market Monitoring Work Group, June 2000.

Screens and Thresholds Used In Market Monitoring, presented at the Conference on RTOs and Market Monitoring, Edison Electric Institute and Energy Daily, May 19, 2000.

The Regional Transmission Organization's Role in Market Monitoring, report for the Edison Electric Institute attached to their comments on the FERC's NOPR on RTOs, August, 1999.

The Independent System Operator's Mission and Role in Reliability, presented at the Electric Utility Consultants' Conference on ISOs and Transmission Pricing, March 1998.

Independent System Operators and Their Role in Maintaining Reliability in a Restructured Electric Power Industry, ICF Resources for the U. S. Department of Energy, 1997.

Rail Transport in the Russian Federation, Diagnostic Analysis and Policy Recommendations, with V. Capelik and others, IRIS Market Environment Project, 1995.

Telecommunications in the Russian Federation: Diagnostic Analysis and Policy Recommendations, with E. Whitlock and V. Capelik, IRIS Market Environment Project, 1995.

Russian Natural Gas Industry: Diagnostic Analysis and Policy Recommendations, with I. Sorokin and V. Eskin, IRIS Market Environment Project, 1995.

Russian Electric Power Industry: Diagnostic Analysis and Policy Recommendations, with I. Sorokin, IRIS Market Environment Project, 1995.

PROFESSIONAL ASSOCIATIONS

United States Association for Energy Economics

Natural Gas Roundtable

Energy Bar Association

February 2013

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

3/5/2013 4:50:03 PM

in

Case No(s). 12-0426-EL-SSO, 12-0427-EL-ATA, 12-0428-EL-AAM, 12-0429-EL-WVR, 12-0672-EL-RDR

Summary: Testimony Direct Testimony of James F. Wilson on Behalf of the Office of the Ohio Consumers' Counsel electronically filed by Patti Mallarnee on behalf of Yost, Melissa Ms.