

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Ohio)
Edison Company, The Cleveland Electric) Case No. 09-906-EL-SSO
Illuminating Company, and The Toledo)
Edison Company For Approval of a)
Market Rate Offer to Conduct A)
Competitive Bidding Process for Standard)
Service Offer Electric Generation Supply,)
Accounting Modifications Associated)
With Reconciliation Mechanism, and)
Tariffs for Generation Service.)

**DIRECT TESTIMONY
OF
JONATHAN WALLACH
Resource Insight, Inc.**

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

DECEMBER 7, 2009

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

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

4
5 **Q2: PLEASE SUMMARIZE YOUR PROFESSIONAL EDUCATION AND**
6 **EXPERIENCE.**

7 **A2:** I have worked as a consultant to the electric-power industry since 1981. From
8 1981 to 1986, I was a research associate at Energy Systems Research Group. In
9 1987 and 1988, I was an independent consultant. From 1989 to 1990, I was a
10 senior analyst at Komanoff Energy Associates. I have been in my current position
11 at Resource Insight since September of 1990.

12
13 Over the last twenty-eight years, I have advised clients and testified on a wide
14 range of economic, planning, and policy issues including: electric-utility
15 restructuring; wholesale-power market design and operations; transmission
16 pricing and policy; market valuation of generating assets and purchase contracts;
17 power-procurement strategies; integrated resource planning; cost allocation and
18 rate design; and energy-efficiency program design and planning.

19 My resume is attached as Exhibit JFWAL-1.

20
21 **Q3: PLEASE SUMMARIZE YOUR EXPERIENCE WITH REGARD TO THE**
22 **COMPETITIVE PROCUREMENT OF WHOLESALE SUPPLY FOR**
23 **STANDARD SERVICE RETAIL LOAD.**

1 **A3:** Over the past nine years, I have participated on behalf of the Maryland Office of
2 People's Counsel in the process of designing, implementing, and monitoring the
3 Standard Offer Service procurement mechanism for the four Maryland investor-
4 owned utilities. I participated in the negotiations that established Maryland's
5 procurement approach, and designed the mechanism for screening price offers
6 against a benchmark market price. Since then, I have monitored every round of
7 bidding, and assisted the Office of People's Counsel in the annual stakeholder
8 process regarding modifications to the procurement mechanism. Finally, I have
9 testified on the People's Counsel's behalf in every investigation by the Maryland
10 Public Service Commission of alternative procurement approaches, and was lead
11 investigator for a major study of expected costs and risks associated with
12 alternative procurement approaches.

13
14 Similarly, in Connecticut, I have participated in the Standard Service procurement
15 process for the two investor-owned utilities. On behalf of the Connecticut Office
16 of Consumer Counsel, I have participated in the development of requests for
17 proposals, independently evaluated price offers on bid day, participated in the
18 selection of winning bids, and appeared at hearings by the Connecticut
19 Department of Public Utility Control regarding the selection of winning bids. In
20 addition, I am currently involved in a collaborative effort to procure medium- and
21 long-term contracts for Standard Service supply.

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

4
5 **Q4: ON WHOSE BEHALF ARE YOU TESTIFYING?**

6 **A4:** I am testifying on behalf of the Office of the Ohio Consumers' Counsel ("OCC").

7
8 **Q5: WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 **A5:** On October 20, 2009, Ohio Edison Company, The Cleveland Electric Illuminating
10 Company, and The Toledo Edison Company ("FirstEnergy Ohio" or "the
11 Companies") filed for approval of a proposed auction process ("competitive bid
12 process" or "CBP") for procuring wholesale supply for Standard Service Offer
13 ("SSO") retail generation service starting on June 1, 2011. Previously, on August
14 17, 2009, FirstEnergy Ohio, along with its transmission affiliate American
15 Transmission Systems, Inc. ("ATSI"), had filed at the Federal Energy Regulatory
16 Commission ("FERC") a proposed implementation plan for withdrawing from the
17 Midwest Independent Transmission System Operator ("MISO") and migrating to
18 PJM Interconnection, LLC ("PJM"). This implementation plan calls for
19 completing the integration with PJM by June 1, 2011.

20
21 My testimony addresses the implications of the transition to PJM for the proposed
22 auction process. Specifically, I discuss how the transition poses increased price
23 risk to potential bidders, and recommend temporary changes to the CBP to

1 accommodate such transitory risks. In addition, I address the Companies'
2 contingency planning for the CBP in the event that FERC does not approve the
3 proposed integration plan on the date requested by the Companies in their FERC
4 filing. Finally, I propose long-term modifications to the CBP auction design that
5 may improve price transparency and reduce prices to consumers.

6

7 ***Q6: PLEASE DESCRIBE FIRSTENERGY OHIO'S PROPOSAL FOR THE***
8 ***DESIGN OF THE COMPETITIVE BID PROCESS.***

9 ***A6:*** Starting in June of 2010, the Companies propose to conduct two descending-
10 price clock auctions per year (in June and October) to purchase wholesale supply
11 to serve SSO retail load. In the first two auctions, in June and October of 2010,
12 the Companies would solicit offers for 12-, 24-, and 36-month contracts for
13 delivery starting in June of 2011. In subsequent annual cycles, with auctions in
14 June and October of each year, the Companies would solicit solely 36-month
15 contracts with delivery starting in June of the following year.

16

17 In each auction, FirstEnergy Ohio's SSO load would be divided into "tranches"
18 representing 1% of total SSO load across service territories and all rate classes.
19 The first two auctions in 2010 would seek to procure supply offers to meet a total
20 of 34 tranches of SSO load with 12-month contracts, 34 tranches with 24-month
21 contracts, and 32 tranches with 36-month contracts. If all of these tranches are
22 successfully filled by the conclusion of the auction in October of 2010, then the
23 Companies would have acquired enough wholesale supply to serve 100% of SSO

1 load between June of 2011 and May of 2012, 66% of SSO load between June of
2 2012 and May of 2013, and 32% of SSO load between June of 2013 and May of
3 2014.

4
5 In subsequent annual cycles, FirstEnergy Ohio would solicit offers to meet either
6 32 or 34 tranches of SSO load with 36-month contracts. As a result, at the
7 conclusion of each annual cycle, the Companies would have acquired enough
8 supply to serve 100% of SSO load for the upcoming delivery year, and about two-
9 thirds and one-third of SSO load for the following two delivery years,
10 respectively.

11

12 ***Q7: WHAT TYPE OF SUPPLY PRODUCT WOULD BE SOLICITED IN THE CBP***
13 ***AUCTIONS?***

14 ***A7:*** The CBP auctions would solicit offers for full-requirements wholesale supply.
15 Under the Companies' proposal, full-requirements wholesale supply is defined to
16 include the supply of energy, capacity, ancillary services, losses, and any other
17 electrical services other than tariffed transmission and distribution services
18 necessary to serve customers' load at all times. Full-requirements supply is a
19 "load-following" service, in the sense that a full-requirements supplier is
20 obligated during the term of its supply contract to supply a fixed percentage of
21 SSO load, regardless of how that load fluctuates from hour to hour or otherwise
22 varies over the term of the supply contract.

1 **Q8: HOW WOULD CLEARING PRICES BE DETERMINED UNDER**
2 **FIRSTENERGY OHIO'S PROPOSED AUCTION DESIGN?**

3 **A8:** FirstEnergy Ohio proposes to procure SSO supply through a multiple-round,
4 descending-price clock auction. Under the declining-clock format proposed by the
5 Companies, a clock price would be announced at the start of each round of
6 bidding.¹ In response, bidders would offer the number of load tranches they are
7 willing to serve at that price. In general, if the total number of tranches offered by
8 all bidders exceeds the target amount for that auction, then the price clock would
9 tick down and another bidding round would be conducted. If the total number of
10 tranches offered in a bidding round is less than or equal to the target, then the
11 auction would conclude and the clearing price would be set at the clock price for
12 the last or, in some cases, second-to-last, round.²

13
14 **Q9: WOULD THE CLEARING PRICE VARY OVER THE TERM OF THE**
15 **SUPPLY PRODUCT?**

16 **A9:** No. The proposed CBP auction is designed to acquire full-requirements supply at
17 a price that is fixed over the term of the contract executed with a winning bidder.

¹ For the first two auctions in June and October of 2010, there would be separate clock prices for the 12-, 24-, and 36-month supply products.

² For the first two auctions in June and October of 2010, the auctions will not end until offers for each of the three supply products fall below the respective tranche targets for the three products. For example, if at the end of a bidding round the 12- and 24-month products are under-subscribed and the 36-month product is over-subscribed, the price clock for the 36-month product will tick down (but not for the 12- or 24-month products), and another round of bidding will be conducted. Within certain limits, bidders in this new round will be free to increase the number of tranches offered for the 12- or 24-month products or to decrease the number of tranches offered for the 36-month product.

1 Thus, the price announced in each bidding round for each supply product, as well
2 as the clearing price at the completion of the auction, would be a single price that
3 applies over the entire product term.³

4
5 ***Q10: WOULD THE COMPANIES NECESSARILY PURCHASE THE TRANCHES***
6 ***THAT CLEAR IN AN AUCTION?***

7 ***A10:*** No. Prior to the start of an auction, the auction manager would determine, but not
8 announce, a “reservation price” for each supply product, representing the
9 maximum price that the Companies would pay for each product in that auction. If
10 the clearing price at the end of the auction for a product exceeds that product’s
11 reservation price, the Companies would not purchase the tranches that clear in the
12 auction for that product.

13
14 ***Q11: WHAT IS THE PURPOSE OF THE RESERVATION PRICE?***

15 ***A11:*** The Companies do not discuss the role of the reservation price in the proposed
16 auction process.⁴ However, the primary purpose of the reservation price should be
17 to ensure that auction-clearing prices reasonably reflect competitive market
18 conditions and that the Companies are purchasing, on customers behalf, full-
19 requirements products at the lowest feasible cost.

³ On the other hand, the price paid by ratepayers for SSO supply will vary by year due to the laddered procurement of full-requirements contracts over time. The retail price for SSO supply in any year will reflect a blending of fixed prices from a mix of overlapping contracts purchased at different times at different prices. That blend will change each year as contracts expire and are replaced with new contracts at different prices.

⁴ Nor do the Companies indicate whether there will be separate reservation prices specific to each of the solicited full-requirements products.

1 In order to fulfill this role, the reservation price should reflect bidders'
2 expectations regarding the cost to acquire the wholesale products that comprise
3 full-requirements supply. In particular, the reservation price should be specific to
4 the product being solicited and should reflect current market expectations
5 regarding:

- 6 • Uncongested forward energy cost;
- 7 • Congestion cost (net of financial congestion hedge);
- 8 • Congestion hedge cost;
- 9 • Zonal capacity cost (net of capacity transfer rights);
- 10 • Ancillary-service costs;
- 11 • Losses;
- 12 • Transaction costs (e.g., cost of credit); and
- 13 • Risk.

14

15 ***Q12: WHAT TYPES OF RISK ARE BIDDERS LIKELY TO REFLECT IN THEIR***
16 ***COST ESTIMATES FOR FULL-REQUIREMENTS SUPPLY?***

17 ***A12:*** As discussed more fully by OCC witness James Wilson, such cost estimates
18 would likely reflect general cost risk associated with uncertainty in forecasts of
19 price and load (and the correlation between price and load volatility.)

20

21 As I discuss below, bidders in the CBP auctions would also face unique, yet
22 transient, cost risks due to the migration of FirstEnergy Ohio from MISO to PJM.

23 These risks arise in part because there will be little or no data regarding the

1 impact of the migration on PJM system performance or market prices for some
2 time after the integration is completed. Bidders may also face risks to the extent
3 that there is uncertainty around the expected date for completing the integration.
4

5 ***Q13: PLEASE SUMMARIZE THE COMPANIES' IMPLEMENTATION PLAN***
6 ***FOR MIGRATING TO PJM.***

7 ***A13:*** The Companies propose to transfer all load, generation, and transmission in the
8 ATSI zone from MISO to PJM by June 1, 2011. Before then, the Companies
9 propose to participate in a series of auctions to acquire capacity for the purposes
10 of meeting their obligations under PJM's Reliability Pricing Model ("RPM")
11 market. For the planning years starting in June of 2011 and 2012, the Companies
12 would purchase capacity on behalf of all load in the ATSI zone (other than load
13 that opts to self-supply) through two annual "transition" auctions. Under the
14 proposed implementation plan, these transition auctions would be held in March
15 of 2010. For the planning year starting in June of 2013, the Companies would
16 participate in PJM's Base Residual Auction ("BRA") in May of 2010.⁵
17

18 In addition, in the Spring of 2011, FirstEnergy Ohio (along with other load-
19 serving entities in the ATSI zone) would be eligible to participate in PJM's annual
20 process for allocating and auctioning congestion hedges for the planning year
21 starting in June of 2011. Specifically, the Companies would be eligible to

⁵ All other load-serving entities in the ATSI zone would also be eligible to participate in the Base Residual Auction.

1 participate in the process for nominating and allocating Auction Revenue Rights
2 ("ARR") in March of 2011, and the annual auction for Financial Transmission
3 Rights ("FTR") in the following month.⁶

4
5 ***Q14: IS FIRSTENERGY OHIO SEEKING FERC APPROVAL OF ITS***
6 ***INTEGRATION PLAN BY A DATE CERTAIN?***

7 ***A14:*** Yes. The Companies have requested that FERC rule on its proposal by December
8 17, 2009:

9 Once the generation and load in the ATSI footprint participate in the
10 May 2010 RPM auction, it would be very difficult to unwind the
11 results. FirstEnergy therefore requests final rulings on the key
12 elements of its proposal, as described below. This will provide
13 FirstEnergy's management and Board of Directors with time, prior to
14 the deadline to commit load into the May 2010 Base Residual
15 Auction for the 2013-14 Delivery Year, to evaluate the
16 Commission's order and determine whether to commit to enter
17 PJM.⁷

⁶ Pursuant to PJM procedures for new zones, load-serving entities in the ATSI zone would have the option of being directly allocated Financial Transmission Rights for two planning years starting in June of 2011.

⁷ FERC Docket No. ER09-1589-000, Application, August 17, 2009, p. 13.

1 ***Q15: HOW DOES FIRSTENERGY OHIO PLAN TO PROCEED WITH THE***
2 ***INTEGRATION IF FERC DOES NOT APPROVE ITS PROPOSAL BY***
3 ***DECEMBER 17, 2009?***

4 ***A15:*** The Companies have not indicated in their filings at FERC or in the instant
5 proceeding how they would proceed in the event that either FERC fails to rule by
6 the requested date; a final ruling is deferred by requests for rehearing; a final
7 ruling is subject to court appeal; or the integration proceeds on a timeline other
8 than that proposed in the Companies' implementation plan. In particular, the
9 Companies have not indicated whether they would participate in the BRA in May
10 of 2010, if their integration proposal were still subject to litigation at that time.⁸
11 Likewise, the Companies have not indicated whether they would proceed with
12 the transition capacity auctions on the same schedule if litigation is still ongoing.

13
14 ***Q16: WHAT IS THE COMPANIES' CONTINGENCY PLAN FOR THE CBP IN***
15 ***THE EVENT THAT FERC DOES NOT APPROVE THE INTEGRATION***
16 ***PLAN BY DECEMBER 17, 2009?***

17 ***A16:*** The Companies have not indicated in their filing in this proceeding whether and,
18 if so, how they would alter the proposed design or schedule for the competitive
19 bidding process in the event that approval of the integration plan is delayed
20 beyond the requested date. Nor is there any indication in their filing as to how the

⁸ Regardless of the Companies' decision in this regard, it is not clear that it would be feasible for PJM to include the ATSI zone in the May 2010 BRA in the absence of final resolution of integration litigation, since including the ATSI zone would affect BRA clearing prices paid (and the amount of capacity to be purchased) not just by FirstEnergy Ohio but all other market participants in the ATSI zone and throughout PJM.

1 CBP might be affected if the ATSI zone were not included in the May 2010 BRA,
2 if integration issues were still being disputed by the time the first CBP auction
3 was scheduled in June of 2010, or if, following the CBP auctions in June or
4 October of 2010, the scheduled integration completion date is delayed past June 1,
5 2011. Instead, the discussion in the Companies' filing in this regard is limited to
6 the following statement:

7 If the PJM transition is delayed or not approved, bidders will obtain
8 capacity necessary to meet MISO requirements in the same manner
9 as bidders did in the May 2009 Auction.⁹

10

11 ***Q17: WOULD BIDDERS IN THE JUNE 2010 CBP AUCTION FACE INCREASED***
12 ***RISK IF DISPUTES OVER THE INTEGRATION HAVE NOT BEEN***
13 ***RESOLVED BY THEN?***

14 ***A17:*** Yes. In this situation, there would be continuing uncertainty regarding whether
15 and when the integration would be consummated, and thus uncertainty as to
16 whether SSO load would be met using PJM or MISO wholesale products. Faced
17 with such uncertainty, a winning bidder in the June 2010 CBP auction might
18 either: (1) lock into PJM or MISO products in advance of final resolution of the
19 integration dispute and risk having to unwind such deals; or (2) delay purchasing
20 wholesale products until the dispute is resolved and bear the price risk in the

⁹ PUCO Case No. 09-906-EL-SSO, *Application*, October 20, 2009, ¶ 35.

1 interim.¹⁰ In either case, bidders in the June 2010 CBP auction would be faced
2 with cost risk due to uncertainty around the expected integration date and would
3 likely increase offer prices to hedge such risk.¹¹

4

5 ***Q18: HOW MIGHT THE COMPANIES MITIGATE THIS RISK?***

6 ***A18:*** One straightforward option would be to delay the schedule for the transition
7 capacity auctions and the first two CBP auctions until such disputes are resolved
8 and there is greater certainty regarding whether and when the integration will be
9 completed. Moreover, as discussed at greater length by OCC witness James
10 Wilson, the Companies and PJM could hold off on including the ATSI zone in the
11 BRA for the 2013 planning year and instead conduct a third transition auction for
12 that planning year at a later time.

13

14 ***Q19: DO BIDDERS FACE OTHER RISKS AS A RESULT OF THE COMPANIES'***
15 ***MIGRATION TO PJM?***

16 ***A19:*** Yes. At least in the first two CBP auctions in June and October of 2010,
17 bidders may also bear risks associated with uncertainties regarding the
18 impact of the migration on PJM system performance or market prices.

¹⁰ Bidders would not have the option to delay purchasing capacity, since capacity would already have effectively been purchased on their behalf by FirstEnergy Ohio in the transition auctions and by PJM in the Base Residual Auction.

¹¹ More precisely, in a declining-price clock auction, bidders would likely increase their estimates of the minimum clock price below which they would be unwilling to offer to supply an SSO load tranche.

1 By the time the first two CBP auctions are run, neither PJM nor FirstEnergy Ohio
2 will have any operational experience or market data for a PJM system that
3 includes the ATSI zone.¹² Until the PJM markets actually operate and clear with
4 the ATSI zone as part of the PJM control area, there will be little or no market
5 information regarding the impact of ATSI integration on a number of operating
6 and cost parameters, including:

- 7 • Day-ahead and real-time system locational marginal prices.
- 8 • Marginal losses.
- 9 • Zonal congestion costs.
- 10 • ARR allocations and zonal ARR revenues.
- 11 • FTR auction-clearing prices and paths.
- 12 • Regulation, synchronized-reserve, and operating-reserve prices.

13
14 In other words, bidders in the first two CBP auctions would lack essential data for
15 forecasting the costs of wholesale market products in a post-integration PJM.¹³
16 The lack of historical data will increase uncertainty around those forecasts,

¹² As part of the proposed integration plan, PJM will conduct market trials for both the day-ahead and real-time energy markets. These market trials may provide bidders with relevant market data. However, under the current implementation schedule for the integration plan, the trials will not be conducted until after the first two CBP auctions are completed. See FERC Docket No. ER09-1589-000, Application, Exhibit I, Schedule 3.2.5.

¹³ Bidders would likely rely on historical data to develop expected values and probability distributions for key inputs to their forecast models, as well as to benchmark the output results of their forecast modeling.

1 increase bidders' perception of cost risk in their pricing of SSO supply, and thus
2 likely increase risk premiums in offer prices.

3
4 ***Q20: WOULD YOU EXPECT THESE RISKS TO DIMINISH OVER TIME?***

5 ***A20:*** By definition, this "pre-integration risk" is a transitory phenomenon; it should
6 diminish as experience is gained with operating the integrated PJM market and as
7 the database of market data grows over time. As such, to the extent that this risk
8 affects auction prices, I would expect that this impact would be material only in
9 the first two CBP auctions.

10
11 ***Q21: DO YOU RECOMMEND MODIFYING THE COMPETITIVE BIDDING***
12 ***PROCESS FOR THE FIRST TWO AUCTIONS IN 2010 IN LIGHT OF YOUR***
13 ***FINDINGS ON PRE-INTEGRATION RISK?***

14 ***A21:*** Yes. For the first two CBP auctions conducted prior to the integration of
15 FirstEnergy Ohio with PJM, I recommend that the Companies solicit only 12-
16 month full-requirements contracts, rather than a mix of 12-, 24-, and 36-month
17 contracts.

18
19 While it may be appropriate to buy three years forward in subsequent auction
20 cycles, this is probably not the case for the first two auctions prior to integration
21 with PJM. If offer prices in the first two auctions reflect premiums for pre-
22 integration risk, then, under the Companies proposal, these premiums would be
23 locked in for up to three years. Instead, the Companies could simply procure 12-

1 month supply to serve SSO load in the 2011 planning year in these first two
2 auctions, and then solicit longer-term contracts to serve load starting in the 2012
3 planning year in subsequent auctions. Under this alternative approach, ratepayers
4 might still be exposed to a pre-integration risk premium for one year, since the 12-
5 month contracts for the 2011 planning year would have been acquired prior to
6 integration.¹⁴ However, unlike under the Company's approach, supply for
7 subsequent planning years would be acquired after integration, at which point pre-
8 integration risk and thus risk premiums would likely have diminished.

9

10 ***Q22: DO YOU SUPPORT THE COMPANY'S PROPOSAL TO SOLICIT 36-***
11 ***MONTH CONTRACTS IN SUBSEQUENT AUCTION CYCLES?***

12 ***A22:*** As I note above, it may be appropriate to buy full-requirements supply three years
13 forward in auction cycles other than the cycle preceding the merger of ATSI with
14 PJM. However, for these post-integration auction cycles, it may be preferable to
15 buy three years forward using sequential 12-month contracts, rather than a single
16 36-month contract.

17

18 Under this alternative approach to buying three years forward, the Companies
19 would solicit three types of 12-month contracts with terms that span the next three
20 planning years. For example, in the CBP auction for SSO supply starting in June
21 of 2012, the Companies would solicit three 12-month products for delivery in

¹⁴ There is no avoiding this exposure. Since the current SSO supply contracts expire in May of 2011, the Companies must purchase SSO supply for delivery starting in June of 2011 prior to the integration date.

1 June of 2012, 2013, and 2014, respectively. The CBP auction would then be
2 conducted in the same fashion as proposed by the Company, except in this case
3 bidders would be offering planning-year 2012, 2013, or 2014 contracts, rather a
4 single 36-month contract that spans the same three-year time period. As with the
5 multi-product solicitations proposed by the Company for the first two CBP
6 auctions, under this alternative approach, bidders in each round would be able to
7 adjust their offers for each product, and switch among products, in response to the
8 different clock prices for the three 12-month products.

9
10 ***Q23: WHAT ARE SOME OF THE ADVANTAGES OF THIS ALTERNATIVE***
11 ***APPROACH TO BUYING THREE YEARS FORWARD?***

12 ***A23:*** This approach offers bidders the flexibility to bid for individual planning years, or
13 any combination of individual planning years, at prices specific to each planning
14 year. Allowing bidders to respond to individual prices promotes price
15 transparency, in the sense that it reveals bidders' expectations regarding market
16 prices and costs to serve SSO load in each year. In contrast, bidding on 36-month
17 contracts would reveal bidders' average expectations for all three planning years.

18
19 In addition, soliciting sequential 12-month contracts rather than 36-month
20 contracts may promote more robust participation and reduce costs to serve SSO
21 load over the three planning years. Under the Companies' proposed approach,
22 only those bidders willing to supply SSO load for all three planning years would
23 participate in the auction. In this case, the auction clearing price would reflect the

1 supply cost for those bidders that can most efficiently serve SSO load for all three
2 planning years. Under the alternative approach, the pool of potential bidders
3 would expand to include bidders who are capable of serving load in one or two
4 planning years, and who might be able to serve load in those particular years at a
5 lower cost than the bidders in the narrower pool of bidders willing to serve load in
6 all three years.¹⁵

7
8 Finally, this alternative approach would provide the Commission greater
9 flexibility in its final selection of winning offers. For example, if auction-clearing
10 prices for the second and third planning years appear to be above market or
11 otherwise unfavorable, the Commission would have the option under this
12 alternative approach to approve just those 12-month contracts required to meet
13 SSO load requirements for the upcoming planning year. Under the Companies'
14 approach, however, Commission rejection of 36-month contracts would leave the
15 Companies short of their SSO load requirement for the next planning year,
16 potentially forcing the Companies into the volatile PJM or MISO spot markets to
17 fill the gap.

18
19 ***Q24: PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.***

¹⁵ This has been the experience with the procurement process in Connecticut, which allows bidders to offer prices for individual years and for combinations of individual years. In these procurements, the lowest-cost individual-year offers have often been less expensive than the lowest-cost combination offers for those same years.

1 **A24:** The proposed integration of FirstEnergy Ohio with PJM poses increased price risk
2 for bidders in the two CBP auctions conducted prior to integration. These risks
3 arise in part because there will be little or no data regarding the impact of the
4 migration on PJM system performance or market prices for some time after the
5 integration is completed. Bidders may also face risks to the extent that there is
6 uncertainty around the expected date for completing the integration.

7
8 In order to address the risk associated with the lack of market information, I
9 recommend that the Companies solicit only 12-month full-requirements contracts
10 in the first two CBP auctions, rather than a mix of 12-, 24-, and 36-month
11 contracts. By doing so, the Companies would be able to avoid locking in for more
12 than a year any price premiums associated with pre-integration risk. For
13 subsequent auction cycles, I recommend that the Companies solicit sequential 12-
14 month contracts, rather than single multi-year contracts, in order to improve price
15 transparency and reduce costs to consumers.

16
17 One option for addressing the risk associated with uncertainty around the
18 expected integration date would be to delay the schedule for the transition
19 capacity auctions and the first two CBP auctions to a point in time closer to the
20 expected integration date. This delay would allow time for any ongoing litigation
21 or disputes over the integration process to be resolved, and would therefore
22 provide greater certainty to bidders in the first two CBP auctions as to whether
23 and when the integration would be completed.

*Direct Testimony of Jonathan F. Wallach
On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No 09-906-EL-SSO*

- 1 **Q25: DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**
- 2 **A25:** Yes.

CERTIFICATE OF SERVICE

It is hereby certified that a true copy of the foregoing the *Direct Testimony of Jonathan F. Wallach on Behalf of the Office of the Ohio Consumers' Counsel* has been served electronically this 7th day of December, 2009.



Jeffrey L. Small
Assistant Consumers' Counsel

SERVICE LIST

James W. Burk
Arthur E. Korkosz
Mark A. Hayden
Ebony L. Miller
FirstEnergy Corp.
16 South Main Street
Akron, OH 44308

Robert J. Triozzi
Director of Law
Steven L. Beeler
City of Cleveland
Cleveland City Hall
601 Lakeside Ave., Room 106
Cleveland, OH 44114-1077

Glenn S. Krassen
Bricker & Eckler LLP
1375 E. Ninth St.
Suite 1500
Cleveland, OH 44114

Attorney for NOPEC and Ohio Schools
Council

Thomas McNamee
Assistant Attorney General
Public Utilities Commission of Ohio
180 E. Broad St., 6th Floor
Columbus, OH 43215

David C. Rinebolt
Colleen L. Mooney
Ohio Partners for Affordable Energy
231 W. Lima St.
P.O. 1793
Findlay, OH 45839-1793

Michael K. Lavanga
Garrett A. Stone
Brickfield, Burchette, Ritts & Stone, PC
1025 Thomas Jefferson St., NW
8th Floor, West Tower
Washington, DC 20007

Attorneys for Nucor Steel Marion, Inc.

Samuel C. Randazzo
Lisa G. McAlister
Joseph M. Clark
McNees Wallace & Nurick LLC
21 E. State St., 17th Fl
Columbus, OH 43215

David I. Fein
Vice President, Energy Policy – Midwest
Constellation Energy Group, Inc.
550 W. Washington, Blvd., Suite 300
Chicago, IL 60661

Attorneys for Industrial Energy Users-Ohio

M. Howard Petricoff
Stephen M. Howard
Vorys, Sater, Seymour and Pease LLP
52 E. Gay St.
P.O. Box 1008
Columbus, OH 43216-1008

Cynthia Fonner Brady
Senior Counsel
Constellation Energy Resources, LLC
550 W. Washington, Blvd., Suite 300
Chicago, IL 60661

Attorneys for Direct Energy Services, LLC

David F. Boehm
Michael L. Kurtz
Boehm, Kurtz & Lowry
36 E. Seventh St., Suite 1510
Cincinnati, OH 45202

Richard L. Sites
General Counsel & Senior Director of
Health Policy
Ohio Hospital Association
155 East Broad Street, 15th Floor
Columbus, OH 43215-3620

Attorneys for The Ohio Energy Group

Thomas J. O'Brien
Bricker & Eckler LLP
100 South Third Street
Columbus, OH 43215-4291

John W. Bentine
Mark S. Yurick
Matthew S. White
Chester, Willcox & Saxbe LLP
65 East State Street, Suite 1000
Columbus, OH 43215-4213

Attorney for Ohio Manufacturers' Assoc.
and Ohio Hospital Assoc.

Attorneys for The Kroger Co.

Douglas M. Mancino
McDermott Will & Emery LLP
2049 Century Park East, Suite 3800
Los Angeles, CA 90067-3218

Gregory K. Lawrence
McDermott Will & Emery LLP
28 State Street
Boston, MA 02109

Attorney for Morgan Stanley Capital Group
Inc.

Attorney for Morgan Stanley Capital Group
Inc.

Will Reisinger
Nolan Moser
Trent Dougherty
Ohio Environmental Council
1207 Grandview Ave., Ste. 201
Columbus, OH 43212-3449

Lance M. Keiffer
Assistant Prosecuting Attorney
Lucas County Courthouse
700 Adams Street, Suite 250
Toledo, OH 43604

Attorney for NOAC

Michael D. Dortch
Kravitz, Brown & Dortch, LLC
65 East State Street, Suite 200
Columbus, OH 43215

Attorney for Duke Energy Retail Sales,
LLC

Craig I. Smith
2824 Coventry Road
Cleveland, OH 44120

Attorney for Materials Science
Corporation.

C Todd Jones
Christopher L. Miller
Andre T. Porter
Gregory H. Dunn
Schottenstein Zox & Dunn Co., LPA
250 West Street
Columbus, OH 43215

Attorneys for AICUO

Todd M. Williams
P.O. Box 6885
Toledo, OH 43612

Attorney for Ohio Environmental Council

Amy B. Spiller
Duke Energy Business Services Inc.
221E. Fourth St.
25 AT II
Cincinnati, OH 45202

Matthew W. Warnock
Bricker & Eckler LLP
100 South Third Street
Columbus, OH 43215

Attorney for Ohio Schools Council

Morgan E. Parke
Michael R. Beiting
FirstEnergy Solutions Corp.
76 South Main Street
Akron, Ohio 44308

Dane Stinson, Esq.
Bailey Cavalieri LLC
10 West Broad Street, Suite 2100
Columbus, OH 43215

Attorney for Gexa Energy - Ohio, LLC

Theodore S. Robinson
Citizen Power
2121 Murray Avenue
Pittsburgh, PA 15217

burkj@firstenergycorp.com
korkosza@firstenergycorp.com
haydenm@firstenergycorp.com
elmiller@firstenergycorp.com
sam@mwncmh.com
lmcialister@mwncmh.com
jclark@mwncmh.com
david.fein@constellation.com
Cynthia.brady@constellation.com
dboehm@BKLawfirm.com
mkurtz@BKLawfirm.com
RTriozi@city.cleveland.oh.us
SBeeler@city.cleveland.oh.us
Cmooney2@columbus.rr.com
drinebolt@aol.com
Thomas.mcnamee@puc.state.oh.us
smhoward@vorys.com
mhpetricoff@vssp.com
mwarnock@bricker.com
wis29@yahoo.com
cmiller@szd.com
aporter@szd.com
gdunn@szd.com
robinson@citizenpower.com

ricks@ohanet.org
tobrien@bricker.com
gkrassen@bricker.com
mwarnock@bricker.com
mkl@bbrslaw.com
gas@bbrslaw.com
mhpetricoff@vssp.com
smhoward@vssp.com
jbentine@cwslaw.com
mwhite@cwslaw.com
myurick@cwslaw.com
dmancino@mwe.com
glawrence@mwe.com
lkeiffer@co.lucas.oh.us
nmoser@theOEC.org
will@theOEC.org
trent@theOEC.org
Williams.toddm@gmail.com
Amy.Spiller@duke-energy.com
mdortch@kravitzllc.com
mparke@firstenergycorp.com
beitingm@firstenergycorp.com
Dane.Stinson@BaileyCavalieri.com
Kim.Bojko@puc.state.oh.us
Gregory.Price@puc.state.oh.us

Qualifications of
JONATHAN F. WALLACH

Resource Insight, Inc.
5 Water Street
Arlington, Massachusetts 02476

SUMMARY OF PROFESSIONAL EXPERIENCE

- 1990–Present* **Vice President, Resource Insight, Inc.** Provides research, technical assistance, and expert testimony on electric- and gas-utility planning, economics, regulation, and restructuring. Designs and assesses resource-planning strategies for regulated and competitive markets, including estimation of market prices and utility-plant stranded investment; negotiates restructuring strategies and implementation plans; assists in procurement of retail power supply.
- 1989–90* **Senior Analyst, Komanoff Energy Associates.** Conducted comprehensive cost-benefit assessments of electric-utility power-supply and demand-side conservation resources, economic and financial analyses of independent power facilities, and analyses of utility-system excess capacity and reliability. Provided expert testimony on statistical analysis of U.S. nuclear plant operating costs and performance. Co-wrote *The Power Analyst*, software developed under contract to the New York Energy Research and Development Authority for screening the economic and financial performance of non-utility power projects.
- 1987–88* **Independent Consultant.** Provided consulting services for Komanoff Energy Associates (New York, New York), Schlissel Engineering Associates (Belmont, Massachusetts), and Energy Systems Research Group (Boston, Massachusetts).
- 1981–86* **Research Associate, Energy Systems Research Group.** Performed analyses of electric utility power supply planning scenarios. Involved in analysis and design of electric and water utility conservation programs. Developed statistical analysis of U.S. nuclear plant operating costs and performance.

EDUCATION

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

PUBLICATIONS

- “The Future of Utility Resource Planning: Delivering Energy Efficiency through Distributed Utilities” (with Paul Chernick), *International Association for Energy Economics Seventeenth Annual North American Conference* (460–469). Cleveland, Ohio: USAEE. 1996.
- “The Price is Right: Restructuring Gain from Market Valuation of Utility Generating Assets” (with Paul Chernick), *International Association for Energy Economics Seventeenth Annual North American Conference* (345–352). Cleveland, Ohio: USAEE. 1996.

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

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

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

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

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

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

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

REPORTS

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

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

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

“First Year of SOS Procurement.” 2004. Prepared for the Maryland Office of People’s Counsel.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PRESENTATIONS

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

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

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

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

EXPERT TESTIMONY

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

- 1994 **NY PSC** on behalf of the Pace Energy Project, Natural Resources Defense Council, and Citizen's Advisory Panel. Case No. 93-E-1123. Joint testimony with John Plunkett critiques proposed modifications to Long Island Lighting Company's DSM programs from the perspective of least-cost-planning principles.
- 1994 **Vt. PSB** on behalf of the Vermont Department of Public Service. Docket No. 5270-CV-1 and 5270-CV-3. Testimony and rebuttal testimony discusses rate and bill effects from DSM spending and sponsors load shapes for measure- and program-screening analyses.
- 1996 **New Orleans City Council** on behalf of the Alliance for Affordable Energy. Docket Nos. UD-92-2A, UD-92-2B, and UD-95-1. Rates, charges, and integrated resource planning for Louisiana Power & Lights and New Orleans Public Service, Inc.
- 1996 **New Orleans City Council** Docket Nos. UD-92-2A, UD-92-2B, and UD-95-1. Rates, charges, and integrated resource planning for Louisiana Power & Lights and New Orleans Public Service, Inc.; Alliance for Affordable Energy. April, 1996.
- Prudence of utilities' IRP decisions; costs of utilities' failure to follow City Council directives; possible cost disallowances and penalties; survey of penalties for similar failures in other jurisdictions.
- 1998 **Massachusetts Department of Telecommunications and Energy** Docket No. 97-111, Commonwealth Energy proposed restructuring; Cape Cod Light Compact. Joint testimony with Paul Chernick, January, 1998.
- Critique of proposed restructuring plan filed to satisfy requirements of the electric-utility restructuring act of 1997. Failure of the plan to foster competition and promote the public interest.
- Massachusetts Department of Telecommunications and Energy** Docket No. 97-120, Western Massachusetts Electric Company proposed restructuring; Massachusetts Attorney General. Joint testimony with Paul Chernick, October, 1998. Joint surrebuttal with Paul Chernick, January, 1999.
- Market value of the three Millstone nuclear units under varying assumptions of plant performance and market prices. Independent forecast of wholesale market prices. Value of Pilgrim and TMI-1 asset sales.
- 1999 **Maryland PSC** Case No. 8795, Delmarva Power & Light comprehensive restructuring agreement, Maryland Office of People's Counsel. July 1999.
- Support of proposed comprehensive restructuring settlement agreement

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

Support of proposed comprehensive restructuring settlement agreement

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

Support of proposed comprehensive restructuring settlement agreement

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

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

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

Evaluation of innovative rate proposal by PJM transmission owners.

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

Reasonableness of proposed fees for electricity-supplier services.

Maryland PSC Case No. 8890, Merger of Potomac Electric Power Company and Delmarva Power and Light Company, Maryland Office of People's Counsel. September 2001; surrebuttal, October 2001. In support of settlement: Supplemental, December 2001; rejoinder, January 2002.

Costs and benefits to ratepayers. Assessment of public interest.

Maryland PSC Case No. 8796, Potomac Electric Power Company stranded costs and rates, Maryland Office of People's Counsel. December 2001; surrebuttal, February 2002.

Allocation of benefits from sale of generation assets and power-purchase contracts.

2002 **Maryland PSC** Case No. 8908, Maryland electric utilities' standard offer and supply procurement, Maryland Office of People's Counsel. Direct, November 2002; Rebuttal December 2002.

Benefits of proposed settlement to ratepayers. Standard-offer service. Procurement of supply.

- 2003 **Maryland PSC** Case No. 8980, adequacy of capacity in restructured electricity markets; Maryland Office of People's Counsel. Direct, December 2003; Reply December 2003.
- Purpose of capacity-adequacy requirements. PJM capacity rules and practices. Implications of various restructuring proposals for system reliability.
- 2004 **Maryland PSC** Case No. 8995, Potomac Electric Power Company recovery of generation-related uncollectibles; Maryland Office of People's Counsel. Direct, March 2004; Supplemental March 2004, Surrebuttal April 2004.
- Calculation and allocation of costs. Effect on administrative charge pursuant to settlement.
- Maryland PSC** Case No. 8994, Delmarva Power & Light recovery of generation-related uncollectibles; Maryland Office of People's Counsel. Direct, March 2004; Supplemental April 2004.
- Calculation and allocation of costs. Effect on administrative charge pursuant to settlement.
- Maryland PSC** Case No. 8985, Southern Maryland Electric Coop standard-offer service; Maryland Office of People's Counsel. Direct, July 2004.
- Reasonableness and risks of resource-procurement plan.
- 2005 **FERC** Docket No. ER05-428-000, revisions to ICAP demand curves; City of New York. Statement, March 2005.
- Net-revenue offset to cost of new capacity. Winter-summer adjustment factor. Market power and in-City ICAP price trends.
- FERC** Docket No. PL05-7-000, capacity markets in PJM; Maryland Office of People's Counsel. Statement, June 2005.
- Inefficiencies and risks associated with use of administratively determined demand curve. Incompatibility of four-year procurement plan with Maryland standard-offer service.
- FERC** Dockets Nos. ER05-1410-000 & EL05-148-000, proposed market-clearing mechanism for capacity markets in PJM; Coalition of Consumers for Reliability, Affidavit October 2005, Supplemental Affidavit October 2006.
- Inefficiencies and risks associated with use of administratively determined demand curve. Effect of proposed reliability-pricing model on capacity costs.
- 2006 **Maryland PSC** Case No. 9052, Baltimore Gas & Electric rates and market-transition plan; Maryland Office of People's Counsel, February 2006.
- Transition to market-based residential rates. Price volatility, bill complexity, and cost-deferral mechanisms.

Maryland PSC Case No. 9056, default service for commercial and industrial customers; Maryland Office of People's Counsel, April 2006.

Assessment of proposals to modify default service for commercial and industrial customers.

Maryland PSC Case No. 9054, merger of Constellation Energy Group and FPL Group; Maryland Office of People's Counsel, June 2006.

Assessment of effects and risks of proposed merger on ratepayers.

Illinois Commerce Commission Docket No. 06-0411, Commonwealth Edison Company residential rate plan; Citizens Utility Board, Cook County State's Attorney's Office, and City of Chicago, Direct July 2006, Reply August 2006.

Transition to market-based rates. Securitization of power costs. Rate of return on deferred assets.

Maryland PSC Case No. 9064, default service for residential and small commercial customers ; Maryland Office of People's Counsel, Rebuttal Testimony, September 2006.

Procurement of standard-offer power. Structure and format of bidding. Risk and cost recovery.

FERC Dockets Nos. ER05-1410-000 & EL05-148-000, proposed market-clearing mechanism for capacity markets in PJM; Maryland Office of the People's Counsel, Supplemental Affidavit October 2006.

Distorting effects of proposed reliability-pricing model on clearing prices. Economically efficient alternative treatment.

Maryland PSC Case No. 9063, optimal structure of electric industry; Maryland Office of People's Counsel, Direct Testimony, October 2006; Rebuttal November 2006; surrebuttal November 2006.

Procurement of standard-offer power. Risk and gas-price volatility, and their effect on prices and market performance. Alternative procurement strategies.

Maryland PSC Case No. 9073, stranded costs from electric-industry restructuring; Maryland Office of People's Counsel, Direct Testimony, December 2006.

Review of estimates of stranded costs for Baltimore Gas & Electric.

2007 **Maryland PSC** Case No. 9091, rate-stabilization and market-transition plan for the Potomac Edison Company; Maryland Office of People's Counsel, Direct Testimony, March 2007.

Rate-stabilization plan.

Maryland PSC Case No. 9092, rates and rate mechanisms for the Potomac Electric Power Company; Maryland Office of People's Counsel, Direct Testimony, March 2007.

Cost allocation and rate design. Revenue decoupling mechanism.

Maryland PSC Case No. 9093, rates and rate mechanisms for Delmarva Power & Light; Maryland Office of People's Counsel, Direct Testimony, March 2007.

Cost allocation and rate design. Revenue decoupling mechanism.

Maryland PSC Case No. 9099, rate-stabilization plan for Baltimore Gas & Electric; Maryland Office of People's Counsel, Direct, March 2007; Surrebuttal April 2007.

Review of standard-offer-service-procurement plan. Rate stabilization plan.

Connecticut DPUC Docket No. 07-04-24, review of capacity contracts under Energy Independence Act; Connecticut Office of Consumer Counsel, Joint Direct Testimony June 2007.

Assessment of proposed capacity contracts.

Maryland PSC Case No. 9117, residential and small-commercial standard-offer service; Maryland Office of People's Counsel. Direct and Reply, September 2007; Supplemental Reply, November 2007; Additional Reply, December 2007; presentation, December 2008.

Benefits of long-term planning and procurement. Proposed aggregation of customers.

Maryland PSC Case No. 9117, Phase II, residential and small-commercial standard-offer service; Maryland Office of People's Counsel. Direct, October 2007.

Energy efficiency as part of standard-offer-service planning and procurement. Procurement of generation or long-term contracts to meet reliability needs.

2008 **Connecticut DPUC 08-01-01**, peaking generation projects; Connecticut Office of Consumer Counsel. Direct (with Paul Chernick), April 2008.

Assessment of proposed peaking projects. Valuation of peaking capacity. Modeling of energy margin, forward reserves, other project benefits.

Ontario EB-2007-0707, Ontario Power Authority integrated system plan; Green Energy Coalition, Penimba Institute, and Ontario Sustainable Energy Association. Evidence (with Paul Chernick and Richard Mazzini), August 2008.

Critique of integrated system plan. Resource cost and characteristics; finance cost. Development of least-cost green-energy portfolio.

2009 **Maryland PSC** Case No. 9192, Delmarva Power & Lights rates; Maryland Office of People's Counsel. Direct, August 2009; Rebuttal, Surrebuttal, September 2009.

Cost allocation and rate design.

Wisconsin PSB Docket No. 6630-CE-302, Glacier Hills Wind Park certificate, Citizens Utility Board of Wisconsin. Direct and Surrebuttal, October 2009.

Reasonableness of proposed wind facility.