BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for 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	)	Case No. 09-906-EL-SSO

DIRECT TESTIMONY
of
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ON BEHALF OF
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL
10 West Broad St., Suite 1800
Columbus, OH 43215

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(Second revision)

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is William Steinhurst, and I am Senior Consultant with Synapse Energy Economics ("Synapse"). My business address is 45 State Street, #394, Montpelier, Vermont 05602.

Q. ON WHOSE BEHALF DID YOU PREPARE THIS PREFILED TESTIMONY?

A: I prepared this testimony on behalf of the Office of the Ohio Consumers' Counsel.

Q. PLEASE DESCRIBE SYNAPSE ENERGY ECONOMICS.

A. Synapse is a research and consulting firm specializing in energy and environmental issues, including electric generation, transmission and distribution system reliability, ratemaking and rate design, electric industry restructuring and market power, electricity market prices, stranded costs, efficiency, renewable energy, environmental quality, and nuclear power.

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS?

A: I have over twenty-five years of experience in utility regulation and energy policy, including work on renewable portfolio standards and portfolio management practices for default service providers and regulated utilities, green marketing, distributed resource issues, economic impact studies, and rate design.

Prior to joining Synapse, I served as Planning Econometrician and Director for Regulated Utility Planning at the Vermont Department of Public Service, the State's Public Advocate and energy policy agency. I have provided consulting services for various clients, including the Connecticut Office of Consumer Counsel, the Illinois Citizens Utility Board, the California Division of Ratepayer Advocates, the D.C. and Maryland Offices of the Public Advocate, the Delaware Public Utilities Commission, the Regulatory Assistance Project, the National Association of Regulatory Utility Commissioners ("NARUC"), the National Regulatory Research Institute ("NRRI"), American Association of Retired Persons ("AARP"), The Utility Reform Network ("TURN"), the Union of Concerned Scientists, the Northern Forest Council, the Nova Scotia Utility and Review Board, the U.S. EPA, the Conservation Law Foundation, the Sierra Club, the Southern Alliance for Clean Energy, the Southern Environmental Law Center ("SELC"), the Oklahoma Sustainability Network, the Natural Resource Defense Council ("NRDC"), Illinois Energy Office, the Massachusetts Executive Office of Energy Resources, the James River Corporation, and the Newfoundland Department of Natural Resources.

I have testified as an expert witness in approximately 30 cases on topics including utility rates and ratemaking policy, prudence reviews, integrated resource planning, demand side management policy and program design, utility financings, regulatory enforcement, green marketing, power purchases, statistical analysis, and decision analysis. I have been a frequent witness in legislative hearings and

represented the State of Vermont, the Delaware Public Utilities Commission Staff, and several other groups in numerous collaborative settlement processes addressing energy efficiency, resource planning and distributed resources.

I was the lead author or co-author of Vermont's long-term energy plans for 1983, 1988, and 1991, as well as the 1998 report *Fueling Vermont's Future: Comprehensive Energy Plan and Greenhouse Gas Action Plan*, and also Synapse's study *Portfolio Management: How to Procure Electricity Resources to Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail Customers*. I was recently commissioned by the National Regulatory Research Institute to write *Electricity at a Glance*, a primer on the industry for new public utility commissioners, which included coverage of energy efficiency programs.

I hold a B.A. in Physics from Wesleyan University, and an M.S. in Statistics and Ph.D. in Mechanical Engineering from the University of Vermont.

More detail about my experience is contained in my resume attached as Exhibit OCC-WS-1.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE OHIO PUBLIC SERVICE COMMISSION?

A. No, although I was a presenter at an Ohio Commission Restructuring Roundtable on System Benefit Charges prior to restructuring in Ohio.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. My testimony will address the proposal by the Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company ("FirstEnergy" or "the Companies") to use a clearing price auction for procurement of wholesale power to serve Standard Service Offer ("SSO") load in their service territories. That proposal is described in more detail in the testimony of OCC witnesses Wilson and Wallach. I will begin by considering the heart of the Companies' request, namely that the Public Utilities Commission of Ohio ("Commission" or "PUCO") consider only one narrowly tailored procedure for this and future procurements of power for SSO customers. The Companies' proposed competitive bidding process ("CBP") for one, two and three year full-requirements power supply—transitioning to a three year, laddered procurement schedule—does not deliver what consumers need in the best way or at the lowest, most stable cost. Instead, a better approach would involve moving gradually and over time towards a more flexible procurement process resulting in a more robust portfolio of products.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.

A. In order to provide ratepayers with the benefits of a properly diversified resource portfolio, I recommend that the Commission:

1. Require that the Companies to move gradually and over time towards a more diversified procurement process for a more diversified portfolio of products.
2. Include in that portfolio a highly diversified mix of long-term or life-of-unit renewable generation (not merely pay for a given quantity of RECs), energy efficiency resources, and other products, including necessary amounts of short- and medium-term contracts in appropriate ladders. [1]
3. Refuse to give permanent approval to the product mix proposed by the Companies.

II. REASONS FOR CONCERN WITH THE COMPANIES' REQUEST

Q. PLEASE GENERALLY DISCUSS THE COMPANIES' REQUEST TO THE COMMISSION.

A. The Companies' testimony and exhibits are narrowly focused on the issues of why an auction is better than other types of procurement and of *how* the auction should be carried out and fails to make a convincing case for the Commission to

[1] In this context, I mean diversified as to resource technology, type of fuel or renewable resource, vendor and ownership arrangements, term length and expiration date, as well as terms and conditions such as indexing or contingencies that affect cost or availability.

grant permanent approval of the proposed procurement choices for the immediate and for future procurements.[2]

Q. PLEASE ILLUSTRATE HOW THE COMPANIES' FILING AND REQUEST ARE NARROWLY FRAMED.

A. The Companies witnesses consider procurement and competitive issues primarily within the limited, specific context of an auction for full requirement supply and, then, only for a limited set of periods converging on a single three-year product. Little or no room is allowed in the Companies' picture of this proceeding for consideration of any other portfolio or products. Only one witness—Mr. Warvell—discusses alternative procurement strategies that were considered, and the discussion is very cursory.[3]

Q. WHAT DO YOU RECOMMEND THE COMMISSION DO CONCERNING THE COMPANIES' PROPOSAL?

A. I recommend that the Commission require the Companies' put in place processes (to be approved by the Commission) to procure a more diverse and broad based portfolio of resources. The Commission could require this in the current proceeding. Alternatively, it could open a Commission Ordered Investigation

[2] Only one of the Companies' witnesses, Mr. Warvell, discusses alternatives to the proposed product and clearing price auction. See Company Exhibit 1, p. 7 line 15 to p. 10 line 13. That discussion is conclusory and overlooks or dismisses viable alternatives, such as simply procuring *some* of the resources via the methods recommended in my testimony and *the rest* via the Companies' proposed products and processes. Neither in Mr. Warvell's testimony nor anywhere else in the application is there analysis that would justify the selection of the proposed procurement choices over any of the other possibilities, as required by O.A.C. 4901:1-35-03(B)(2)(m). For these reasons, I respectfully disagree with the PUCO Staff's conclusion on this requirement.

[3] Loc. cit.

("COI") to consider, generically, how to obtain needed products for all companies. The COI results could then be considered in future proceedings. I also note that the Companies seek approval for a perpetual CBP process. I urge the Commission not to approve the "perpetual" portion of the proposal, but to require the Companies to return before it so that stakeholder concerns (including those of the PUCO Staff) may be addressed.

III. REASONS FOR CONCERN WITH THE COMPANIES' PROPOSED PROCUREMENT

Q. WHAT PARTICULAR TYPE OF PROCUREMENT HAVE THE COMPANIES RECOMMENDED FOR POWER TO SERVE SSO CUSTOMERS?

A. The Companies propose to conduct a descending clock auction for procurement of slice-of-system, fixed-price full requirements power supply (excluding non-market based services) for the Companies' retail customers who are not shopping with an alternative supplier. The auctions would be held twice per year. The initial 2010 auctions include the procurement of one, two and three year products. Starting in 2011, each semiannual auction would procure three-year, fixed price contracts for approximately 17% of the power requirements for the Companies' SSO load. Winning bidders would receive the clearing price for the auction.

Q. ARE THE PROPOSED PROCUREMENT AND THE POWER SUPPLY PORTFOLIO THAT WOULD RESULT WELL DESIGNED?

A. Not entirely. While the Companies' proposal is based on a model that has worked reasonably well, the proposed selection of products and in the portfolio that would result can be improved to the benefit of consumers. The proposed products and portfolio impose unnecessary economic risks on SSO customers, and do not take all supply and demand-side resources into account. Those flaws threaten the interests of SSO consumers, especially small commercial and residential consumers.

Q. PLEASE SUMMARIZE HOW THE COMPANIES' PROCUREMENT, AS PROPOSED, IMPOSES UNNECESSARY ECONOMIC RISKS ON SSO CUSTOMERS.

A. The proposed auction imposes unnecessary economic risks on SSO customers because it does not include long-term, fixed price renewables or energy efficiency among the resources used.[4] For example, the Companies' proposal to limit the product selection to laddered three-year contracts is, in some ways, a failed compromise between short-term and long-term alternatives. Procuring all SSO power in 36-month products, even laddered and with auctions held on two

[4] I understand that a separate energy efficiency proceeding for the Companies is underway and may conclude prior to the proposed auctions, that the Companies are attending to their *existing* DSM obligations outside of the MRO (except for the interruptible power RFP they are proposing to be recovered under Rider PDR), and that there is (or will be) a collaborative process to develop a portfolio of DSM programs to complement the Companies' existing residential programs that the Company may file later this year (2009). Paganie prefiled testimony, Vol. 2 at 96 ff. My point here is that the proposed auction does not allow for demand-side resources to compete with the proposed products. It may be that there is room for *both* energy efficiency beyond that which passes cost-benefit and budgeting screening in that other proceeding, especially very long-lived efficiency measures like building shell improvements, *and* renewable generation beyond that required by any renewable portfolio standard, to enhance the SSO portfolio cost structure and price stability compared to the proposed portfolio of a single-product ladder that imposes considerable and expensive risk on the potential bidders. I would note that this resource option could raise questions about the by-passability or non-by-passability of energy efficiency costs, depending on the setting in which they were acquired.

different dates each year, could be the worst choice available. Shorter-term products, such as one-year contracts or even some small reliance on spot purchases may add price volatility, but on average could be less expensive. Longer-term products, such as life-of-unit contracts with a diverse group of newly constructed renewable generators, would reduce the owners' costs, for example, because having a credit-worthy purchaser involved in a project prior to construction reduces business risk and lower financing expense. Three-year terms suit power marketers and other potential bidders who include a significant premium in their bids for "hedging" or "risk management services." If such premia were only a few percent of the bid, applied to all the power needed for SSO service that is a large expense.

The Commission should require that any competitive SSO procurement include such additional long-term renewable energy and energy efficiency resources as are needed to provide the level of economic risk mitigation that is warranted for SSO customers. The proposed procurement also neglects other potential products or procurement methods that could deliver lower costs, and the Commission should require consideration of a broader range of products.

IV. RECOMMENDED PORTFOLIO MANAGEMENT APPROACH

Q. GIVEN THESE CONCERNS WHAT DO YOU RECOMMEND THE COMMISSION DO?

A. Given the various economic risks that the Companies' proposal would impose on SSO customers, especially those customers who are the smallest and least able to access competitive alternatives, I recommend that the Commission require a different approach—drawing on a more diverse portfolio of power supply products using varied procurement processes—if not for the procurement which is the subject of the present proceeding, then for future ones. As I stated above, that recommendation includes a Commission requirement that the Companies' put in place processes (to be approved by the Commission) to procure a more diverse and broad based portfolio of resources and that the Commission not approve the "perpetual" portion of the proposal.

Q. WHAT ALTERNATIVES DOES THE COMMISSION HAVE TO THE COMPANIES' PROPOSED SSO PROCUREMENT?

A. While there are many possibilities, I recommend that the PUCO require the Companies to conduct portfolio management and/or long-term power contracting. A portfolio management approach would allow for alternative contracting options to complement the existing CBP procurement auction mechanism if those options were found to be economically attractive for customers. Under the Companies' proposal, no such option for consideration of alternative contracts for SSO power supply, such as longer-term contracts, even exists, even though some resources may be more competitively priced if secured over time frames greater than three years.

Recently, certain restructured states have been moving away from the use of a uniform clearing price auction mechanism as the sole source of power to meet "standard offer" requirements. Some states that contract out their supply obligation do so with other structures, usually using requests for proposals ("RFPs"). Other restructured states that have some form of "all requirements" procurement are considering or have made changes to their procurement mechanisms, either through greater utility participation in procurement, use or consideration of long-term contracts as part of the portfolio of resources, or by delegating procurement to a government agency (as was done recently in Illinois).

The potential price stability and price benefit associated with more flexible procurement approaches are too great to ignore.

Q. IS PORTFOLIO MANAGEMENT OR LONG-TERM CONTRACTING BEING USED FOR THE PROCUREMENT OF STANDARD OFFER POWER SUPPLY IN STATES WITH DEREGULATED RETAIL ELECTRIC MARKETS?

A. Yes. Other states have recently implemented regulations and/or laws requiring alternative arrangements for SSO-like service that include portfolio management constructs and/or the use of long-term contracting.[5] Delaware, Connecticut, and Rhode Island are examples. Other states, including Illinois, Maryland,

[5] The following examples are based on research by Synapse for the New Jersey Department of the Public Advocate, Division of Rate Counsel.

Pennsylvania, Maine, and Massachusetts are considering or have taken action on changes to their SSO-like procurement mechanisms.

Q. DO YOU HAVE ANY GENERAL OBSERVATIONS ABOUT HOW PORTFOLIO MANAGEMENT IS IMPLEMENTED IN THESE STATES?

A. In most of these states, some form of professional advice has been employed or is being considered by state commission staff or other state agencies to assist in the evaluation of procurement practices or market opportunities. Professional consultants can be used to both undertake an evaluation of market conditions and recommend alternatives or complements to existing procurement strategies, and/or to actually serve as a portfolio manager and "broker" contracts.

I offer the following general observations on how portfolio management typically works in these states:

- In restructured states, utilities remain the entity responsible for provision of default service or SSO-like service for those customers not choosing third-party suppliers. They usually procure this from regional wholesale markets. Consultants used by commissions or commission staff are usually chosen through an RFP process, and funded through the utility.
- Such consultants are selected by commissions or state agencies, though the utilities may be involved in the process of developing an RFP to obtain the services.

- Consultants provide reports on market opportunities, or comment on "procurement plans" or similar documents.
- Contracts for power resulting from the application of portfolio recommendations may be "brokered" (formally or informally) by the consultants but the counterparties to those contracts are usually the utilities (and the suppliers);
- Commissions must approve all contracting arrangements for any standard offer power, be it long-term or shorter-term.

Q. CAN YOU DESCRIBE THE STANDARD OFFER PROCUREMENT DEVELOPMENTS IN SPECIFIC STATES?

A. Yes. I can provide greater detail regarding developments in Delaware, Connecticut, Rhode Island, Maryland and Illinois.

Q. WHAT ARE THE STANDARD OFFER PROCUREMENT DEVELOPMENTS IN DELAWARE?

A. In 2006, the state of Delaware passed legislation that directed the Public Service Commission, and other State Agencies, to consider the purchase of power under a long-term contracting structure from in-state generation resources, to serve standard offer load and other load in the state.[6] The combined Agencies retained an independent consultant group with expertise in the area of energy procurement to oversee both the development of the Request for Proposals ("RFP") and to

[6] Electric Utility Retail Customer Supply Act of 2006, 26 Del C. S. 1007(d).

assist the State Agencies in evaluating the bids submitted. The consulting group services were paid for by Delmarva Power and the costs are recovered in Delmarva's rates. [7]

The consulting firms used were New Energy Opportunities, Inc., La Capra Associates, Inc., Merrimack Energy Group, Inc., McCauley Lyman LLC, and Edward L. Selgrade, Esq. The group produced an initial report in 2006 on the responses to an RFP for long-term power. [8] Subsequent reports were produced by the same firms as the DE PSC, Delmarva Power and stakeholders considered the options presented by the responses to the first RFP. Subsequent negotiation between Delmarva and the responding parties, and decisions by the DE PSC, led to a final round of negotiation and agreement between Delmarva and Bluewater Wind for provision of standard offer energy from an offshore wind farm planned for operation by 2014. In July of 2008 the consulting group produced a report on the short-term and long-term impacts of the agreement on the costs for standard offer service for Delaware ratepayers. [9] The consulting services provided included wide-ranging analysis of the rate effects of the proposed bilateral contracts and comparisons of the considered contracts with benchmark wholesale prices in the Delmarva region of PJM.

[7] Personal communication with Janis Dillard, on staff at the Delaware Public Service Commission.
[8] "Initial Report Regarding Delmarva Power & Light Company's Proposed RFP". Prepared for the Delaware Public Service Commission Staff, Delaware Office of Management and Budget, Delaware Energy Office, Delaware Controller General. Prepared by New Energy Opportunities Inc., Merrimack Energy Group, Inc., La Capra Associates, Inc. and Edward L. Selgrade, Esq., September 18, 2006.
[9] The reports and related materials are available on the Delaware Commission's website at http://depsc.delaware.gov/irp.shtml.

Delmarva Power currently has long-term contracts in place for both offshore and onshore wind generation. These contracts complement auction procurements of short-term power supply.

Q. WHAT ARE THE STANDARD OFFER PROCUREMENT DEVELOPMENTS IN CONNECTICUT?

A. Connecticut law requires electric utilities to submit plans to the Department of Public Utility Control ("DPUC") for the procurement of standard offer service power supply in a portfolio of contracts with overlapping, fixed terms.[10]

In keeping with DPUC decisions issued in 2008 allowing long-term contracts for SOS and RECs, in May of 2009 the United Illuminating Company ("UI") issued a RFP for long-term energy supply contracts (from three to 20 years) for UI's Standard Service customers, as well as for four to ten year contracts for Renewable Energy Certificates ("RECs"). The RFP explicitly sought electricity prices that are not linked to future spot prices for natural gas, oil or energy, and set forth the goal of providing risk mitigation and long-run cost reduction benefits to its ratepayers.[11] As an open invitation to negotiate, the RFP did not set formal

[10] NJ Division of Rate Counsel, "Comments of the Department of the Public Advocate, Division of Rate Counsel," August 28, 2009, I/M/O the Provision of Basic Generation Service for the Period Beginning June 1, 2010 (BPU Docket EO09050351). http://www.state.nj.us/publicadvocate/utility/docs/ER09050351_BGS_June_2010_Rate%20Counsel%20_Cvr_Ltr_and%20Comments_8-28-09.pdf

[11] The United Illuminating Company, Request for Proposals and Invitation to Negotiate, Phase I, May 18, 2009, available at http://www.uinet.com/uinet/connect/UINet/Power+Procurement/RFP+for+Long+Term+Contracts/.

deadlines. UI expected to complete the RFP process by the end of summer 2009. [12]

In 2007 the DPUC issued a decision that the state's need for 500 MW of peaking generation would be supplied under long-term, cost of service regulation. Three winning projects, including a peaking power plant proposed by a joint venture of UI and a merchant generator, were selected in 2008. Grants were also approved for distributed generation projects in 2009.[13] Still underway, the 2010 resource planning process has yet to establish whether additional resources will be needed.

Q. HOW HAS LONG-TERM CONTRACTING AND PORTFOLIO MANAGEMENT ADVANCED IN RHODE ISLAND?

A. Legislation signed into law in June 2009 required National Grid to enter into long-term contracts with an offshore wind project. The legislation also requires that the electric distribution company ("EDC") design and issue solicitations for long-term contracts (10 years or longer) for capacity, energy, and attributes from newly developed renewable energy projects. Both the procurement process and the contracts are subject to Commission approval. The legislation sets long-term

[12] NJ Division of Rate Counsel, "Comments of the Department of the Public Advocate, Division of Rate Counsel," August 28, 2009, I/M/O the Provision of Basic Generation Service for the Period Beginning June 1, 2010 (BPU Docket EO09050351).
http://www.state.nj.us/publicadvocate/utility/docs/ER09050351_BGS_June_2010_Rate%20Counsel%20_Cvr_Ltr_and%20Comments_8-28-09.pdf.

[13] NJ Division of Rate Counsel, "Comments of the Department of the Public Advocate, Division of Rate Counsel," August 28, 2009, I/M/O the Provision of Basic Generation Service for the Period Beginning June 1, 2010 (BPU Docket EO09050351).
http://www.state.nj.us/publicadvocate/utility/docs/ER09050351_BGS_June_2010_Rate%20Counsel%20_Cvr_Ltr_and%20Comments_8-28-09.pdf

contract capacity requirements for the EDC for each year between 2010 and 2013. In 2013 the minimum long-term contract capacity is 90 MW, of which three MW must be for in-state solar resources.[14]

The legislation also requires the EDC to solicit proposals for one newly developed renewable energy resource project of 10 MW or less by August 15, 2009, and to file a contract proposal with the PUC by October 15, 2009. A PUC ruling on the contract proposal is due by December 31, 2009. Proposals must include provisions for a transmission cable between the town of New Shoreham, RI and the mainland of the state. The EDC may chose to own, operate, otherwise participate or abstain from participating in the transmission cable project.[15]

In September of 2008 Deepwater Wind was certified as the state's offshore wind project developer. Certification allows the developer of a utility scale offshore wind project to file an application for approval with the PUC. Upon approval of the application, the EDC will be required to enter into a contract of at least 10 years with the wind developer. This contract will not count toward the 90 MW minimum renewable contract capacity requirement. Currently Deepwater Wind is conducting comprehensive environmental studies for the proposed wind farm.

Q. PLEASE DESCRIBE PORTFOLIO MANAGEMENT DEVELOPMENTS IN MARYLAND.

[14] Ibid.
[15] Ibid.

A. Maryland features a more diverse portfolio of various lengths compared to the ladder of all three-year contracts proposed by the Companies (aside from an initial transition period). Maryland has also shown a lively interest in further diversification.

In 2007, the Public Service Commission of Maryland hired Levitan and Associates, Kaye Scholer, LLP and Semcas Consulting Associates to evaluate the state of electric restructuring in Maryland and to assess options for "re-regulation", including review of long-term contracting, portfolio management and if investor-owed utilities should build their own generation. This was in response to a 2007 change of law in Maryland. The Commission itself issued a report to the legislature in December 2007 entitled "Part I: Options For Re-regulation And New Generation". The consultants issued two separate reports to the MD PSC in November 2007: one entitled "Analysis of Options for Maryland's Energy Future" and the other "State Analysis and Survey on Restructuring and Re-Regulation." These reports contained analytical information on the market opportunities available to service Maryland standard offer service load.

The Maryland Office of People's Counsel also retained consultants Resource Insight and Synapse Energy Economics to perform an analysis of costs and benefits associated with different supply options for electricity service in Maryland. They issued a report entitled "Risk Analysis of Procurement Strategies

for Residential Standard Offer Service" in March 2008.[16] This report contained recommendations on reducing risk for standard offer service by including longer-term contracting mechanisms in the portfolio of supply for customers.

In July of 2008, in response to a proceeding on standard offer service that considered these reports, the MD PSC ordered the investor-owned utilities in MD to file (by October) an analysis of a portfolio management approach. In this Order, the MD PSC required the utilities to provide the following form of analyses and results in their filings:

1. Evaluation of a variety of different resource mixes including new generation, upgrades to existing generation, demand-side management, and transmission system upgrades.
2. Inclusion of "some component of longer-term (more than five years), medium-term (one to five years) and shorter-term (one year or less, including spot market purchases, if applicable) procurements".
3. Effects of the resource mix on current objectives for Maryland's renewable portfolio standard, energy efficiency goals, RGGI commitments, and PJM reliability requirements.
4. Evaluation of utility-owned generation.
5. Determination of expected prices and volatility for different resource mixes.

[16] Available at http://www.synapse-energy.com/Downloads/SynapseReport.2008-03.MD-OPC.Procurement-Strategies-for-SOS.07-067.pdf

6. The effect of three different major transmission project proposals on the portfolio outcome.

7. Provision of a forecast of expected annual costs of each portfolio mix using Monte-Carlo simulation or similar techniques, and the distribution of cost outcomes around those expected costs. This provision should include detailed analysis and back-up data relating to utility evaluations and proposed resource mixes.

The most recent RFP procurement was for a mix of three, 12, and 24 month terms.

Q. WHAT ARE THE STANDARD OFFER PROCUREMENT DEVELOPMENTS IN ILLINOIS?

A. Illinois' transition period to market rates ended in January 2007. During 2006, Illinois held its first SSO-like auction for residential and small commercial customers. However, in 2007 the Illinois legislature changed the law, and by the end of the 2007 an Illinois Power Agency ("IPA") had been established to oversee RFP-based bilateral procurements, the auctions were abolished, and an interim utility-run procurement plan was put in place to secure power for 2008-2009 (power for January 1, 2007 through May 31, 2008 was secured through the 2006 auctions). The IPA, funded from general state funds for the first two years and thereafter from what are effectively "brokerage fees" for IPA-arranged transactions, was given the charge to commence procurement for power year

beginning June 2009. [17] Transactions arranged by the IPA require approval by the Illinois Commerce Commission, and the contracts that result will be signed by the utilities as load-serving agents.

The interim procurement, held in the spring of 2008, consisted of separate RFP - based procurements by Commonwealth Edison ("ComEd") and the Ameren Illinois utilities (composed of three Illinois utilities held by Ameren, Central Illinois Light Company, Illinois Public Service, and Illinois Power Company). As a result of that procurement, utilities entered into one-year contracts with a group of suppliers for power supply for the 2008-2009 period. Those contracts resulted in prices that were lower than the prices obtained for the same period through the auction, both in absolute terms and in relative terms given the wholesale market conditions in place at each of those procurements. According to the Attorney General of Illinois, the lower prices were the result of the new statutorily-mandated procurement process, which produced electricity prices much closer (than the 2006 auction prices) to contemporaneous prices in forward markets, and use of financial swaps guaranteeing consumers a fixed price for a portion of ComEd and Ameren's power supply obligations. [18]

On September 3, 2008, the Illinois Power Agency filed with the Illinois Commerce Commission ("ICC") its first procurement plan, relying on relatively

[17] Personal communication with Mark Pruitt, Director, Illinois Power Agency.
[18] "Comments and Recommendations by the People of the State of Illinois on the 2008 Electricity Procurement Process", Susan Hedman and Elias Mossos, Office of the Illinois Attorney General, May 15, 2008.

short-term contracting periods – up to 3 years. [19] The spring 2009 procurement resulted in prices for energy, capacity, and RECs that were substantially below 2008 prices, and in May 2009, the ICC approved the resulting contracts. Although all of these contracts were only two years in duration, contracts for as long as 40 years were permitted by law.[20]

Bill SB2150, approved by the Governor in August 2009, created a Renewable Energy Resources Fund to be administered by the IPA and used to procure renewable energy resources. [21] The legislation calls for procurement to take place at least once a year, and, whenever possible, to result in long-term contracts. [22] The bill also amends the Illinois procurement code process in a number of ways, including that all contracts must be awarded by competitive sealed bidding.

Q. WHAT WOULD YOU RECOMMEND AS A PORTFOLIO MANAGEMENT APPROACH FOR OHIO UTIILTIES?

A. There is more than one way to implement a portfolio management approach. I offer the following suggestion for portfolio management "mechanics":

1. A professional advisor should be retained based on the issuance of a RFP for such services. A working group that includes representation from

[19] State of Illinois, Illinois Commerce Commission, Docket No. 08-0519, available at http://www.icc.illinois.gov/docket/casedetails.aspx?no=08-0519.
[20] The Illinois Public Utilities Act, §16-111.5, available at http://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=1277&ChapAct=220%26nbsp%3BILCS%26nbsp%3B5%2F&ChapterID=23&ChapterName=UTILITIES&ActName=Public+Utilities+Act.
[21] Illinois General Assembly, SB2150, available at http://www.ilga.gov/legislation/billstatus.asp?DocNum=2150&GAID=10&GA=96&DocTypeID=SB&LegID=45077&SessionID=76.
[22] Illinois General Assembly, SB2150, §1-56, Illinois Power Agency Renewable Energy Resources Fund.

stakeholders who are not market participants, specifically including OCC, should develop the scope of the RFP. The advisor could be an individual, or more likely, a firm with a deep working knowledge of wholesale energy markets in the Ohio, MISO and PJM regions and with no ties to existing SSO suppliers and independent of any financial interest in the outcome of electricity procurement.

2. The overall goal of the advisor should be to identify alternative procurement strategies to achieve greater stability of price and lower overall prices. The advisor's key function would be to first assess the wholesale marketplace for electricity, including analysis of the risk associated with different contracting options, and then to make recommendations to the Commission on possible purchase opportunities.

3. Since electricity market opportunities are closely tied to timing of transactions, the PUCO and the working group would need to also scope out the way in which the advisor's assessments and resulting recommendations might be acted on in a timely manner.

4. The PUCO and the working group would need to establish the mechanism for contracting with potential suppliers, if or when it has been determined that procurement of some form is in the interest of SSO load.

V. RECOMMENDATIONS FOR AUCTION ENHANCEMENTS IF AN AUCTION IS ORDERED

Q. DO YOU HAVE RECOMMENDATIONS FOR THE COMMISSION ON HOW THE COMPANIES' PROPOSED AUCTION SHOULD BE DESIGNED, IF THE COMMISSION DECIDES TO AUTHORIZE AN AUCTION OF THE TYPE PROPOSED BY THE COMPANIES?

A. Yes. I recommend that the PUCO require an allocation of power to long-term, fixed price renewable sources and energy efficiency to provide risk mitigation benefits to SSO customers.

Q. WHAT IS BEING DONE IN OHIO WITH REGARD TO RENEWABLE GENERATION AND ENERGY EFFICIENCY PLANNING?

A. Pursuant to Senate Bill 221 (SB 221) and the Commission Order implementing the legislation,[23] electric utilities are required to "ensure that, by the end of the year 2024 and each year thereafter, electricity from alternative energy resources equals at least twenty-five per cent of their retail electric sales in the state." Half of the required alternative energy resources must be renewable energy resources.[24] Half of the requirement may be generated from advanced energy resources.

[23] A summary of the Commission's rulings is provided in "Case No. 08-888-EL-ORD, Rules for Energy Efficiency, Alternative & Renewable Energy, Emission Controls and Amendments to Forecasting Chapters 4901:5-1, 4901:5-3, and 4901:5-5 of the Ohio Administrative Code." http://www.puco.ohio.gov/emplibrary/files/legal/rules/08-888/08-888_Rules.doc, revised 11/2/2009.

[24] 4928.01 of the Revised Code defines "Renewable energy resource" as including solar photovoltaic or solar thermal energy, wind energy, power produced by a hydroelectric facility, geothermal energy, fuel derived from solid wastes, biomass energy, biologically derived methane gas, and wood by-products. It also includes fuel cells, energy storage for renewable energy resources that primarily generate electricity off peak, or renewable distributed generation. Advanced energy resources include efficiency improvements at existing generating facilities, any distributed generation system, clean coal technologies, certain advanced nuclear energy technology, fuel cell energy, advanced solid waste or debris combustion, and energy efficiency and demand side management above what is required by other regulatory standards or programs. ("Case No. 08-888-EL-ORD, Rules for Energy Efficiency, Alternative & Renewable Energy,

Separate from the requirements for alternate energy resources, SB 221 requires electric distribution utilities to implement energy efficiency programs that achieve energy savings equivalent to at least 0.3% of its total, annual average, and normalized sales during the preceding three calendar years. The energy efficiency requirement increases such that utilities must achieve cumulative, annual energy savings greater than 22% by the end of 2025. Utilities are also required to implement peak demand reduction programs designed to achieve a one percent reduction in peak demand in 2009 and an additional 0.75% reduction each year through 2018. (Ohio Revised Code 4928.66(A)(1)(a))

Ohio Administrative Code 4901:1-35-03(B)(2)(e) requires electric utilities to describe plans for meeting targets pertaining to load reductions, energy efficiency, renewable energy, advanced energy, and advanced energy technologies as a part of the CBP plan. After the initial CBP plan, subsequent filings must include a discussion of how the plan advances state policy. Utilities are required to provide justification of its proposed CBP plan, considering alternative possible methods of procurement. O.A.C. 4901:1-35-03(B)(2).

Q. IF THE STATE ALREADY HAS ALTERNATIVE ENERGY PORTFOLIO STANDARDS, WHY DO YOU RECOMMEND PROCUREMENT OF

Emission Controls and Amendments to Forecasting Chapters 4901:5-1, 4901:5-3, and 4901:5-5 of the Ohio Administrative Code." http://www.puco.ohio.gov/emplibrary/files/legal/rules/08-888/08-888_Rules.doc, revised 11/2/2009).

LONG-TERM RENEWABLE CONTRACTS AND ENERGY EFFICIENCY FOR SSO LOAD?

A. Consumers value electric price stability. Adding energy efficiency resources and long-term contracts (life of unit or fixed terms of 10-years or more) with fixed and reliable pricing is a practical way to deliver that stability. Such products also reduce the overall proportion of supply procured from more volatile shorter-term clearing price markets. Long-term or life of unit renewable energy purchases enhance price stability, since their costs are not affected by fossil fuel price swings or temporary shortages of generation. Energy efficiency resources enhance price stability for the same reason and also because many of the most attractive sources of efficiency savings also reduce on-peak energy use and peak demand.

Long-term, fixed price contracts for traditional fossil fuel supply are difficult to procure at a reasonable price, because such resources are associated with high fuel price risk and environmental regulatory risk, such as the risk of future carbon dioxide emission regulation. Renewable resources, on the other hand, are free of such risks. Thus, only renewables can promise consumers reasonable, fixed generation prices for the long-term.

Energy efficiency resources make sense in constructing a default service procurement strategy, but for different, yet complementary, and compelling reasons. Not only does acquisition of efficiency savings reduce the cost of service and bills paid by SSO consumers, but it does so in a way that simultaneously

mitigates price volatility, reduces the potential for wholesale market power abuse, and improves service reliability.

In combination with wise procurement practices to mitigate market power, inclusion of long-term fixed price renewables and energy efficiency in the portfolio for SSO procurement reduces a number of financial risks that would otherwise be borne by SSO customers, and over time, can reduce cost as well.

Q. ARE THERE OTHER ADVANTAGES TO LONG-TERM RENEWABLE CONTRACTS?

A. Yes. Renewable developers can obtain better financing terms from the financial markets when a project has long-term supply contracts in place. In other words, long-term contracts are associated with lower capital costs for the construction of new plants. I view this as a win-win; long-term renewable contracts could pair lower capital costs with more stable and lower prices for SSO customers over the long-term.

Q. ARE THERE ANY LIMITS ON THE PERCENTAGE OF ALTERNATIVE ENERGY PROVIDED IN THE COMPANIES' STANDARD SERVICE OFFER OBLIGATIONS?

A. No. Senate Bill No. 221 established a requirement for electric distribution utilities to provide by 2025 and thereafter 25% of the electricity supply required for its SSO from alternative energy resources. To this end, the legislation established

annual benchmarks for alternative energy resources generated from renewable and solar energy resources. An electric utility is not required to comply with a renewable energy benchmark if its reasonably expected cost of compliance with the benchmark is greater than 3% above its reasonably expected cost of otherwise producing or acquiring the requisite electricity. (Ohio Revised Code 4928.64(C)(3)) However, the statute specifically states that "nothing in this section precludes a utility or company from providing a greater percentage." (Ohio Revised Code 4928.64(B))

Q. DO YOU HAVE A RECOMMENDATION FOR THE COMMISSION WITH REGARD TO THE INCORPORATION OF RENEWABLE GENERATION INTO SSO PROCUREMENT, SHOULD THE COMMISSION NEED TO ACT ON THIS MATTER?

A. Yes. A portion of the basic utility service system energy requirements, increasing each year, should be procured from renewable resources on a long-term basis.

Q. WOULD THIS APPROACH DELIVER GREATER FINANCIAL PROTECTION AND RATE STABILITY TO SSO CUSTOMERS THAN A RENEWABLE PORTFOLIO STANDARD ("RPS") OR SIMILAR TARGETS?

A. Yes. An RPS approach can be effective at getting renewable plants built, but consumers do not realize the full economic benefits of including renewables in the SSO portfolio unless they can also benefit from a long-term fixed price contract

for their use. The cost savings and price stability that SSO consumers would obtain from including long-term, fixed price contracts for renewable power would not available to SSO consumer from a system that relies only on compliance with a RPS with tradable credits alone; the RPS approach generally re-prices the cost of renewable certificates each year, leaving customers to pay high prices for certificates now with no assurance of avoiding fossil fuel risks later. Let me explain this further. With an RPS in place, but without specific long-term contracts for renewables in place, renewables end up being simply another generation option. And their price, like the price of any other generation option, is based on the cost of the unit on the margin because developers would have to sell their power into the market (though without the RECs). In such a market, then, all generation is generally priced by reference to fossil fuel generation via the market clearing prices. In this scenario, even though renewable energy has no fuel component, since the price for all generation is based on the marginal unit cost, customers pay for energy from renewables as if they were paying for energy that runs on fossil fuel. If some long-term contracting with renewable generation development for meeting RPS requirements is planned by the Companies, that would be helpful, but would not eliminate the benefit of doing more for SSO procurement.

Alternatively, were there specific long-term renewable contracts in place to service basic utility service customers, the renewable generation component could be priced at the true cost of operating the renewable resource, without regard to

fossil fuel prices. This cost should be significantly lower, over-time, than the cost of operating a fossil fuel resource. It would, therefore, make sense for the Commission to link any renewable policy directly to basic utility service policy by procuring a certain percentage of basic utility service supply through long-term renewable contracts.

Q. WHAT IS YOUR RECOMMENDED PROCESS FOR PROCURING LONG-TERM RENEWABLE CONTRACTS?

A. I believe it might be best to use an RFP process for the renewable supply contracts, while continuing to use an auction process for the remainder of the load. The reason for this is that the RFP process offers a bit more flexibility and may allow for longer terms. For example, if in any given year, bids for renewable generation seem unreasonable, offers could simply be rejected and another RFP would be issued the following year.

Q. SHOULD SUCH AN RFP PROCESS BE RUN SIMULTANEOUS TO THE AUCTION PROCESS?

A. No. I recommend running the RFP process for the renewables contracts prior to the auction date for the majority of load. This way, the result of the RFP process will be known to all suppliers prior to the auction and should not be a risk factor that negatively affects suppliers' bids.

Q. ARE THERE ADDITIONAL BENEFITS ASSOCIATED WITH INCLUDING ENERGY EFFICIENCY IN PORTFOLIO MANAGEMENT?

A. Energy efficiency as a resource in a utility portfolio provides at least the following benefits:

- Reduces the risks associated with fossil fuels and their inherently unstable price and supply characteristics and avoids the costs of unanticipated increases in future fuel prices;
- Avoids the hard to predict costs of complying with potential future environmental regulations, such as CO2 regulation;
- Improves the overall reliability of the electricity system by lowering peak demand and providing more time and flexibility to respond to changing market conditions, while moderating the "boom-and-bust" effect of competitive market forces on generation supply;
- Defers expensive transmission and distribution upgrades and mitigating expensive transmission congestion problems; and
- Promotes local economic development and job creation.

Q. HOW CAN ENERGY EFFICIENCY BE INCORPORATED INTO THE PROCUREMENT OF GENERATION SERVICE FOR SSO CUSTOMERS?

A. I believe there are two ways to approach this task. One would be to allow providers of demand-side resources to bid into the auction just as do supply-side options. The other would be to set aside a portion of the SSO load and then to

procure this portion separately through energy efficiency programs carried out by the utility or an independent third party.[25] Either would be compatible with competitive procurement of the remaining residual load from an auction or alternative method or delivery by the utility.

Q. HOW WOULD THE PROCUREMENT OF ENERGY EFFICIENCY RESOURCES "FIT INTO" THE COMPANIES' PROPOSED COMPETITIVE PROCUREMENT PROCESS?

A. The short answer is that the Companies would not and do not need to directly enter that process. Rather, the most convenient way to procure energy efficiency resources would likely be to procure them separately from the SSO power procurement. The SSO power procurement "product" is already defined in terms of each winning bidder committing to supply a certain set percentage of the SSO customer load as it happens to occur. To the extent that efficiency resources are procured outside of that process, the SSO supply bidders will simply see a reduced load. Of course, they should be provided with a clear picture of the funding and procurement goals for efficiency resources so that they will be able to estimate the load they are likely to need to serve.

VI. ADDITIONAL COMMENTS ON AUCTION DESIGN

[25] To the extent that the Companies may be contemplating such a set aside, that could be helpful, but the scope and value of such a set aside to enhancing the SSO portfolio deserves separate attention.

Q. DO YOU HAVE CONCERNS ABOUT THE FIXED-PRICE 3-YEAR CONTRACT LADDERING SCHEME THAT THE COMPANIES HAVE PROPOSED FOR SMALL RESIDENTIAL CUSTOMERS?

A. Yes. As discussed above, I recommend including both diversified long-term contracts, especially for renewable generation, and energy efficiency in the portfolio at this time. OCC witnesses Wilson and Wallach discuss recommendations for the short-term portion of the portfolio.

Q. HOW OFTEN SHOULD THE AUCTION PRODUCTS BE REVISITED?

A. Over time, as market conditions and financial hedging instruments mature and change, it would make sense to incorporate entirely new products into the auction mix and an informal workshop would not necessarily result in such a significant issue being addressed fully. I, therefore, recommend that the PUCO order a formal review of the product mix every three years. In no event, should the Commission give permanent approval to a given product mix as has been proposed by the Companies in this proceeding. I say this having in mind that the PUCO and utility should make such changes that are in the public interest with care and deliberation, and with participation by intervenors, so as not to disrupt, unduly, wholesale markets or auction participants' perceptions. But I see no need to arbitrarily rule out changes, should markets or other circumstances require them in the public interest. This review requirement should be explicitly stated by the PUCO to formalize a process.

Q: PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

A: The Companies proposal for the CBP gives serious consideration to only one narrowly tailored procedure for this and future procurements of power for SSO customers. The Companies' proposed competitive bidding process ("CBP") for one, two and three year full-requirements power supply—transitioning to a three year, laddered procurement schedule—does not deliver what consumers need in the best way or at the lowest, most stable cost. Instead, I strongly recommend as a better approach that the Commission

a. Reject the Companies' filing, and

b. Require the prompt filing of a new application conforming to the recommendations made in my prefiled testimony and that of OCC witnesses Wilson and Wallach.

The purpose of that new application should be to move thoughtfully but expeditiously towards a more flexible procurement process resulting in a more robust portfolio of products. Doing so would be completely compatible with both wholesale and retail competition, but would provide those customers who do not or cannot shop with service at a level of cost and risk that is optimized for their needs, not those of the Companies and marketers.

OCC witnesses Wilson and Wallach recommend changes to the products and procedures for the proposed declining clock auction. In addition to those changes, I recommend that that the Commission:

1. Require that the Companies to move gradually and over time towards a more diversified procurement process for a more diversified

portfolio of products and put in place processes (to be approved by the Commission) to do so, including an allocation of power to long-term, fixed price renewable sources and energy efficiency. The Commission could require this in the current proceeding. Alternatively, it could open a "Commission Ordered Investigation" to consider, generically, how to obtain needed products for all companies, the results of which could be considered in future proceedings.

2. Include in that portfolio a highly diversified mix of long-term or life-of-unit renewable generation, energy efficiency resources, and other products, including necessary amounts of short- and medium-term contracts in appropriate ladders. [26] Earlier in this prefiled testimony, I described an illustrative procedure by which such a portfolio could be designed.

3. Refuse to give permanent approval to the product mix proposed by the Companies.

Q. DOES THAT CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes, at this time.

[26] In this context, I mean diversified as to resource technology, type of fuel or renewable resource, vendor and ownership arrangements, term length and expiration date, as well as terms and conditions such as indexing or contingencies that affect cost or availability.