BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Joint Motion to Modify the)	
June 18, 2008 Opinion and Order in)	Case No. 12-1842-GA-EXM
Case No. 07-1224-GA-EXM.)	

DIRECT TESTIMONY OF STACIA HARPER ON BEHALF OF OHIO PARTNERS FOR AFFORDABLE ENERGY

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October 4, 2012 Counsel for Ohio Partners for Affordable Energy

- 1 Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.
- 2 A. My name is Stacia Harper. My business address is 231 West Lima Street,
- Findlay, Ohio 45840. I am the Director of Regulatory Affairs and Energy Policy
- for Ohio Partners for Affordable Energy ("OPAE"), and I appear in this case as a
- 5 witness on its behalf.

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- Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS FOR
 YOUR TESTIMONY IN THIS PROCEEDING.
- 9 A. My career has covered a broad spectrum of activities in the energy industry 10 including policy analysis at both the federal and state levels; experience in 11 wholesale market activities; extensive involvement with regional transmission 12 systems; trading experience in PJM/ECAR; and the development of national energy modeling methods and systems. I have worked with alternative fuel 13 implementation and distributed generation and have extensive knowledge of 14 15 energy and environmental policy, including renewable energy development and 16 sustainability.

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I have a Bachelor of Arts degree with dual majors in Political Science and Economics from West Virginia University (1995) and Master of Science degree in Resource and Applied Economics (2000), with a specialization in Energy Economics from the University of Alaska Fairbanks. I have also completed all required coursework towards a Ph.D. in Environmental and Resource Economics at West Virginia University. I have been employed in the energy industry since

1998, first with the University of Alaska Fairbanks (Graduate Resource Assistant, 1998-2000), then Science Applications International Corporation ("SAIC") and the U.S. Department of Energy National Energy Technology Center ("DOE/NETL") as a Project Manager from 2001-2004. From 2004-2006, I was employed by American Electric Power ("AEP") as an Associate in Commercial Operations and joined Direct Energy as a Senior Analyst from 2006-2008. Before joining Ohio Partners for Affordable Energy ("OPAE") in October of 2010, I was employed by the Ohio Consumers Counsel as the Federal Policy Advisor (2008-2010). While at University of Alaska, I focused on alternative energy for distributed generation applications, my Master's thesis was polymer electrolytic membrane ("PEM") fuel cells for distributed generation in Alaskan villages. At SAIC, a subcontractor to the DOE/NETL, my areas of specialization included valuation of environmental benefits from new technology system implementation in coal plants, demand and supply estimation for both renewable and fossil fuel based energy, as well as price forecast for production and delivered product. Many of my responsibilities involved working directly with national energy models such as the National Energy Modeling System (NEMS) to assist in reviewing and recommended forecast methodology, baseline assumptions that were used in determining forecasted demand, supply, and energy prices associated with electric power generation (coal, natural gas, wind, solar, biomass). As Project Manager with the DOE/NETL I was in charge of alternative fuel implementation for vehicles in India, a joint U.S. Agency for International Development project. Through my experiences at AEP and Direct Energy I was directly involved with

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1 wholesale market operations gaining experience in the various PJM administered 2 wholesale markets, natural gas wholesale and retail markets, long-term contracts, and portfolio management. My role as the Federal Energy Policy 3 4 Advisor with the Office of the Ohio Consumers' Counsel required direct 5 involvement in the development and review of new and existing energy policy. 6 7 I attach my resume listing my testimony and publications as Exhibit SH-1. 8 9 HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE OHIO PUBLIC UTILITIES Q. 10 COMMISSION ("PUCO")? Yes. I filed testimony on January 10, 2011, on behalf of OPAE in Case No. 10-11 Α. 12 176-EL-ATA, Cleveland Electric Illuminating Company, Ohio Edison Company, and Toledo Edison Company. 13 14 15 Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY. 16 Α. The purpose of my testimony is to discuss competition in natural gas markets; 17 the impact of various types of competition on the price, terms, conditions, and quality options available to consumers; the various competitive supply options 18 19 available to customers today; and, how eliminating the standard choice offer 20 ("SCO") supply option will affect the price, terms, and conditions available to

general sales service customers that are members of OPAE.

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Q. PLEASE DEFINE COMPETITION.

Competition is an economic concept. When one speaks of competition, it is referring to the concept of "perfect competition". There are five criteria that must be met for perfect competition to exist: 1) homogenous product -- all firms sell an identical product; 2) all firms are price takers; 3) perfect information -- buyers know the nature of the product being sold and the prices charged by each firm; 4) freedom of entry and exit; and, 5) all firms are profit maximizers where the price is set at marginal cost and marginal cost is equal to marginal revenue. In actuality there are very few markets where perfect competition exists, as there often exist product differentiation, barriers to entry, imperfect information, and in some cases there is evidence of market power where a firm is able to charge a price that is greater than its marginal cost. In the case of the commodity, natural gas, there is a very competitive market where wholesale prices are established in an open marketplace. Prices are a function of demand and supply, where high demand and limited supply lead to higher prices, and in periods, such as today, moderate demand and ample supply are indicative of lower prices.

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Q. PLEASE DEFINE WILLING BUYER AND WILLING SELLER.

Willing buyers and sellers are any parties that are willing and able to engage in a transaction for goods or services, where neither party is being forced to take an action. Both parties are considered rational participants, where a buyer is seeking the lowest price or certain terms or certain conditions for ownership of a good or service being offered. The seller is seeking to sell its product or service

at the highest price. Buyers and sellers are able to negotiate what they are able to accept in exchange for their good or service; in the case of natural gas this exchange can be facilitated by the New York Mercantile Exchange ("NYMEX").

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- Q. IS THE NEW YORK MERCANTILE EXCHANGE, ALSO KNOWN AS THE NYMEX, A COMPETITIVE MARKET?
- 7 Α. No. The NYMEX in and of itself is not a competitive market; it is an exchange 8 that operates various competitive commodity markets, such as heating oil, 9 natural gas, electricity, etc. The NYMEX is a physical commodities futures 10 exchange; it is a marketplace where buyers and sellers come together to buy and sell their commodities in a transparent market place with clearly defined rules 11 12 and oversight by the Commodities Futures Trading Commission ("CFTC"). The NYMEX provides both options and futures trading opportunities for various 13 14 energy commodities, including natural gas. The competitiveness of the market is 15 in fact dependent on the market itself, and the NYMEX natural gas market is considered competitive. There is equal opportunity for participation as each 16 17 market is standardized in terms of the product being represented, conditions for 18 entry, rules for purchasing and selling, and terms and conditions.

1	Q.	IS A WHOLESALE AUCTION, SUCH AS THE AUCTION UTILIZED TO
2		ESTABLISH A STANDARD SERVICE OFFER ("SSO"), AS THE TERM HAS
3		BEEN USED IN OHIO'S UTILITY REGULATORY FRAMEWORK, A FORM OF
4		COMPETITION?
5	A.	Yes. The auction process exhibits all the characteristics to facilitate a
6		competitive national gas market, just as the NYMEX provides.
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8	Q.	IS A RETAIL AUCTION, SUCH AS THE AUCTION DOMINION EAST OHIO
9		("Dominion") UTILIZES TO ESTABLISH THE STANDARD CHOICE OFFER
10		("SCO") A FORM OF COMPETITION?
11	A.	Yes. The auction process exhibits all the characteristics to facilitate a
12		competitive national gas market, just as the NYMEX provides.
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14	Q.	IS A DESCENDING CLOCK AUCTION AS CURRENTLY USED TO ESTABLISH
15		THE SCO CONSIDERED TO BE AN EFFECTIVE MECHANISM TO ENSURE
16		COMPETITION?
17	A.	Yes. It is generally accepted that a declining clock auction is an effective
18		mechanism to ensure competition.
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2		AND TRANSACTIONS BETWEEN WILLING BUYERS AND WILLING SELLERS
3		TO REDUCE OR ELIMINATE THE NEED FOR REGULATION IN PROVIDING
4		NATURAL GAS SERVICES TO CUSTOMERS?
5	A.	Based on consultation with counsel the answer is yes.
6		
7	Q	IS THE PRICE ESTABLISHED BY A SCO AUCTION REGULATED BY THE
8		PUBLIC UTILITIES COMMISSION?
9	A.	No. The Commission merely certifies that the auction has been conducted in a
10		fair manner Case No.07-1224-GA-EXM, Entry (July 23, 2008). At the close of
11		Dominion's 2011 SCO auction, PUCO Chairman Todd A. Snitchler stated, "The
12		auction process has again yielded positive results for Dominion East Ohio
13		customers [t]he market continues to provide a competitive commodity price for
14		natural gas." See: http://www.puco.ohio.gov/puco/index.cfm/media-room/media-natural
15		releases/puco-approves-results-of-dominion-natural-gas-supply-auctions/.
16		
17	Q.	PLEASE DESCRIBE THE PRICE, TERMS, CONDITIONS, AND QUALITY
18		OPTIONS CURRENTLY AVAILABLE TO GENERAL SALES SERVICE
19		CUSTOMERS IN OHIO'S COMPETITIVE NATURAL GAS MARKETS.
20	A.	A number of competitive approaches are utilized to establish prices paid by
21		Choice-eligible General Sales Service- Non-Residential, Large Volume
22		General Sales Service, Energy Choice Transportation Service- Non-

IS IT THE POLICY OF THE STATE OF OHIO TO SUBSTITUTE COMPETITION

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Q.

Residential and Large Volume Energy Choice Transportation Service

customers (collectively, "Commercial customers"). First, some price offers are established by Certified Competitive Retail Natural Gas Suppliers ("CRNGS"). These price offers, based on a review of the PUCO's 'Apples to Apples' chart are as follows: 1) variable rates, generally adjusted monthly, which are available on a month-by-month basis or over a term; 2) variable rates with a cap, which are also generally adjusted monthly and available on a month-by-month or over a fixed term; and, 3) fixed rate contracts available over a fixed term, generally one year though some are for shorter or longer terms. Prices offered by CRNGS are only available to CHOICE-eligible customers, customers that are current on their bills. All contracts have conditions; primarily different penalties that apply if a customer terminates a contract before the end of the term of the contract.

Not all products that CRNGS offer are posted on the PUCO's Apples to Apples chart. Additional pricing products, based on volumetric swing, conversions or triggers, and utilization of caps and collars are also available. These products are designed for the more sophisticated purchaser.

A second approach to establish rates, terms, and conditions is provided through a governmental aggregation. These aggregations can be opt-out or opt-in, though the former is the prevalent approach. Rates are established by either soliciting bids or through an auction. The rates can be variable or fixed, with governmental aggregations sometimes offering both options. Customers are

enrolled with the winning CRNGS for a fixed term, generally one or two years. In some cases, the fixed rates can change annually during the term of the contract to reflect price changes in the wholesale market. Again, these rates are only available to CHOICE-eligible customers.

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The third competitive option available to customers is the SCO. The price is established through an auction held by the natural gas utility where all winning bidders receive the same price. Under the SCO approach, commercial and residential customers that have chosen not to enter into a bilateral contract with a CRNGS and/or have chosen to opt-out of a governmental aggregation and have not entered into a bilateral contract with a CRNGS, receive the price established through the competitive auction. In addition, residential and commercial customers that come to the end of a CRNGS contract term and do not renew the contract or select a new supplier can contact Dominion and elect to receive service under the SCO at the price established by the auction. According to the pre-filed testimony of Dominion's witness Murphy, at Page 5, a significant number of commercial customers, roughly 20%, choose to be served through this SCO option. Details of customer eligibility for commodity service options are attached as Exhibit SH-2, which is a copy of Joint Exhibit 2 filed as a part of the Stipulation in Case No. 07-1224-GA-EXM.

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The fourth competitive option is assignment to the next available CRNGS on a rotating list maintained by Dominion pursuant to the CRNGS' then-applicable

monthly variable rate, referred to as the MVR, posted on the Apples to Apples chart. The MVR prices are unique to each CRNGS; the price the customer pays is dependent on the price being offered by the CRNGS to which the customer is assigned. This price is provided to CHOICE-eligible customers when their contract with a CRNGS expires, they do not sign a new contract, and they do not contact Dominion to receive the SCO. The price the customer pays is the variable rate offered by the CRNGS that is published on the 'Apples to Apples' list maintained by the PUCO. The MVR may or may not be the lowest variable rate offered by the CRNGS serving the customer through the MVR assignment process, but is the lowest published rate offered by each CRNGS. The rate is not inherently a rate determined by competition between CRNGS since the customer is assigned to the rate and does not shop; i.e. the customer has chosen not to shop and the MVR is the default service.

- Q. WHAT CHANGE IS BEING REQUESTED IN THE MOTION FILED BY DOMINION AND THE OHIO GAS MARKETERS GROUP ("OGMG")?
- Dominion and the OGMG seek to eliminate the SCO option, i.e., the third

 competitive option discussed above, for all commercial customers, meaning that

 pricing established through an auction would no longer be available to those

 customers. Choice-eligible commercial customers that have chosen not to enter

 into a bilateral contract with a CRNGS or to be served through a governmental

 aggregation would be subject only to the fourth competitive option discussed

 above, i.e., they would be assigned a CRNGS by Dominion through the MVR

process at a variable rate determined by the CRNGS participating in the MVR process. This change would result in roughly 20% of all commercial customers losing the third option to choose not to enter into a bilateral contract or participate in a governmental aggregation and instead pay a price established through the competitive SCO auction.

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- Q. WHAT ARE THE TYPICAL TERMS AND CONDITIONS THAT ARE AVAILABLE TO COMMERCIAL CUSTOMERS?
 - Α. Most terms and conditions relate to the length of the contract; the potential for changes in the price during the term of the contract; and, the fee charged for early termination of the contract. Contracts can be monthly or for a term, generally one year, though some are shorter and others are longer. Some contracts have provisions that allow the fixed rate to be changed at some point in the life of the contract. Finally, there is the level of the charge for early termination of the contract. Some contracts have no termination fee so customers can decide monthly whether or not to continue to receive service under the contract. At the other end of the continuum, the termination fee can be several hundred dollars. Because the terms of competitive contracts are not available to the general public or transparent in any way, I cannot determine the upper range of termination fees. In the Apples to Apples chart, termination fees range from \$0.0 to \$150.00. As noted above, commercial customers can also agree to contracts that establish prices based on volumetric swing, conversions or triggers, or utilize caps and collars.

2	Q.	OHIO GAS MARKETERS GROUP AND RETAIL ENERGY SUPPLY
3		ASSOCIATION WITNESS RINGENBACH INDICATES AT PAGES 5-6 OF HER
4		PRE-FILED TESTIMONY THAT THERE ARE BENEFITS TO CUSTOMERS
5		FROM COMPETITION. DO YOU AGREE THAT THE BENEFITS SHE
6		DESCRIBES ARE ADVANTAGEOUS TO CUSTOMERS?
7	A.	No. At this point, there are no contracts on the Apples to Apples chart that offer
8		any other terms, such as providing energy efficiency services. Time-of-use
9		prices are not used in natural gas because pricing of natural gas does not vary
10		hourly as wholesale electric rates do. In fact, time of day pricing for natural gas
11		is not appropriate because gas can be stored and there is no hourly natural gas
12		market. Smart meters are not relevant to natural gas contracts. Dominion has
13		implemented electronic meters but such meters utilize one-way communications
14		and are used only to remotely read the meter to establish monthly usage
15		amounts which determine the commodity portion of the bill paid by the consumer,
16		either directly to the CRNGS or to the natural gas utility when there is a purchase
17		of receivables agreement.

1	Q.	IS THERE ANY VARIATION IN THE QUALITY OF NATURAL GAS PROVIDED
2		THROUGH NATURAL GAS CONTRACTS?
3	A.	No. Natural gas utilities require that the natural gas that flows through their
4		systems meet certain standards. There can be no difference in the quality of gas
5		flowed through the system.
6		
7	Q.	WILL ELIMINATION OF THE SCO OPTION AFFECT THE PRICE PAID BY
8		COMMERCIAL CUSTOMERS?
9	A.	Yes. Generally, the roughly 20% of commercial customers on the SCO will see
10		price increases as a result of being forced into service by a CRNGS through the
11		MVR process.
12		
13		While there is occasionally an MVR price that is at or below the SCO price, the
14		vast majority of prices posted on Apples to Apples are higher, often much higher,
15		than the SCO price. The analysis is included in my testimony as Exhibit SH-3.
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17		In addition, the fixed prices posted on Apples to Apples are also higher than the
18		SCO when compared over a twelve-month period to a 12 month average of the
19		SCO price. My analysis is included in this testimony as Exhibit SH-4.
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21		The SCO auction price effectively acts as a price floor, the minimum price at
22		which providers are willing to supply service. There is little incentive for CRNGS
23		providers to provide a price much lower than this, as CRNGS are profit

1 maximizers. Without this transparent "effective" price-floor established 2 competitively, there is a reduction in the efficiency of the competitive market. 3 4 In addition, the SCO eliminates customer acquisition costs, a significant barrier to 5 entry for new CRNGS into the competitive natural gas market. 6 7 Q. CAN YOU SUM UP THE REASONS WHY SCO PRICES ARE LOWER THAN 8 CRNGS'S DIRECT OFFERS? 9 Yes. First, the lower price is the result of the auction process. In a descending 10 clock auction, as used by Dominion and other Ohio natural gas utilities, the default load is divided into equally sized groups referred to as tranches. CRNGS 11 12 that are participating in the auction agree to serve customers at the monthly NYMEX closing price plus a retail price adjustment that is determined through the 13 auction. The price is ultimately set at the level where the number of bids match 14 15 the number of tranches. All winning bidders are paid the same amount for providing SCO service. 16 In addition, the SCO eliminates the CRNGS's customer acquisition costs, a 17 significant barrier to entry into the competitive natural gas market of new 18 19 CRNGS.

Q. IS THE SCO AUCTION PROCESS COMPETITIVE?

A. Yes. This auction approach is competitive. Roughly as many suppliers participate in the auction as post offers on the Apple to Apple chart. In the Dominion auctions, the retail price adjustment has declined with each auction.

The current retail price adjustment is \$.60/Mcf.

One of the policy goals of the State of Ohio is to facilitate the state's competitiveness in the global economy. Certainly, purchasing natural gas at the lowest possible price enhances the competitiveness of Dominion's commercial customers, thereby enhancing the competitiveness of Ohio's businesses.

The CRNGS contracts that are offered on the Apples to Apples chart are generally higher priced than the SCO price for the reasons stated above. First, the auction approach drives down prices because the competitive auction forces the CRNGS to bid at the lowest price at which they are willing and able to provide service. Second, there is no acquisition cost to CRNGS for customers served through the SCO process, so there is no need to build these costs into the bids. Customer acquisition is one of the most significant costs CRNGS incur. The same is basically true for governmental aggregations; while CRNGS bidding on these aggregations do incur some costs, such as mailing opt-out postcards, the CRNGS acquires customers through aggregation without incurring significant customer acquisition costs.

2	Q.	ARE CRNGS ABLE TO COMPETE WITH THE SCO WITH THEIR CONTRACT
3		OFFERS?
4	A.	Few compete with the SCO on price, but CRNGS are clearly able to compete
5		with the SCO by offering other terms and conditions as discussed previously.
6		CRNGS currently serve roughly 80% of Dominion's commercial customers either
7		through bilateral contracts with customers, governmental aggregations, or MVR
8		assignments, so competition to serve customers clearly exists. For instance,
9		many customers prefer fixed price contracts. Those are available through offers
10		other than the SCO. Long-term contracts are available through offers other than
11		the SCO. These other offers, in addition to the SCO, give customers the various
12		competitive options that are the goal of the State's policy.
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14	Q.	DOES OHIO LAW SPECIFY THAT THE END GOAL OF THE TRANSITION TO
15		COMPETITIVE MARKETS IS TO LIMIT COMPETITION TO DIRECT
16		CONTRACTS BETWEEN CRNGS AND CUSTOMERS?
17	A.	Based on consultations with counsel, the answer is no. Ohio law sanctions
18		governmental aggregations in which the price is set through a bidding process.
19		The SCO auction process is essentially analogous to governmental aggregations

for customers who are not part of aggregations. Ohio law, specifically R.C.

4929.02(A)(3), speaks to "promoting a diversity of natural gas supplies and

suppliers...." Both governmental aggregation and the SCO represent options that

are consistent with this policy because they provide customers with additional competitive options.

Based on the fact that roughly 20% of Dominion commercial customers have chosen the SCO service, this is clearly an option that is in demand. SCO service is essentially a month-to-month contract analogous to the MVR. It is set through a competitive process. It produces a lower price than the options espoused by the membership organizations of CRNGS participating in this case.

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Q. DOES THIS CONCLUDE YOUR TESTIMONY?

10 A. Yes.

Stacia J. Harper

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Summary of Qualifications:

Energy Economist and policy expert with specialized experience in the following fields:

Long-Term Planning	Wholesale Markets	Modelling
Integrated Resource Planning	Resource adequacy/RPM	Demand/Supply Forecasting
Non-Transmission Alternatives	RTO/Stakeholder Governance	Market Fundamentals (gas and
		power)
Portfolio Optimization	Demand Side Management	Cost Benefit Analysis
Transmission Expansion	Price Responsive Demand	Econometrics/Statistics
Alternative/Renewable Energy	Transmission Cost Allocation	Spatial Analysis/ArcView/GIS
Cap and Trade	Retail and LMP Pricing	Least Cost Optimization
SmartGrid/AMI	Auction Design	Analysis of State and Federal
Legislation		

Over 10 years of increasingly responsible experience in the energy profession applying a unique understanding of resource and energy economics, engineering, and public policy to design and implement long term sustainable energy policies. Expert knowledge in distributed generation, spatial analysis for long-term planning, demand response, PRD, SmartGrid, AMI, rate design. Active participant in state and national collaboratives and organizations. Experience at FERC, DOE, EIA, NERC, state Commissions, PIOs/NGOs, RTOs, deregulated and regulated utilities. Effective at facilitating and managing coalitions.

Professional Experience

Ohio Partners for Affordable Energy- Columbus, Ohio

2010 - Present

Director Regulatory Affairs and Energy Policy

- Develop, coordinate, and manage alternative energy projects for community energy development working with utilities, industrials, community action agencies, federal funding partners
- Represent low income consumers interests in all SmartGrid cases in Ohio, advocate at national level, member of Demand Response Coordinating Committee, SmartGrid Interoperability Committee.
- Develop, coordinate, and advocate regulatory strategy with local, state, and federal officials and Commission staff.

Office of the Ohio Consumers' Counsel – Columbus, Ohio

2008 - 2010

Senior Energy Policy Advisor

- Coordinate company participation in trade associations, develop strategic alliances and collaborative efforts at state and national levels (AEP, FE, DP&L- SmartGrid/AMI/PRD/DR)
- Manage participation in regulatory proceedings including outside counsel and consultants
- Subject matter expert on, electric power industry restructuring and competitive market design long-term planning, including but not limited to: demand response/PRD, Transmission/NTAs planning, SmartGrid/AMI, climate change, and alternative/renewable energy, auction design
- Active participant in committees, symposiums, panels, and task forces at NASUCA, MISO, PJM, OPSI, OMS, NARUC

Direct Energy - Dublin, OH

2006 - 2008

Sr. Analyst Pricing and Portfolio Management

- Gross margin management and product development of retail energy products for C&I customers
- Implemented portfolio planning and sector analysis concepts
- Responsible for forecasting energy trends (commodity pricing, LMP, demand, supply, carbon legislation, emerging market opportunities)
- Recognized natural gas and electricity fundamentals expert
- Responsible for development and implementation of new billing system to accommodate smart metering

American Electric Power Company - Columbus, OH

2004-2006

Associate Commercial Operations

- Hourly trader in ECAR/PJM
- Structured commodity pricing development for municipal and large industrials
- Experience with LMP pricing, capacity requirements, and ancillary charges
- Development of forecasts for weekly US gas storage injections
- Development of pricing models for both RT and DA power markets
- Provide market forecasts with day ahead and monthly traders

U.S. Department of Energy, National Energy Technology Laboratory/SAIC - Morgantown, WV 2001-2004

Economist / Project Manager

- Project Manager alternative fuels implementation program in association with USEPA Clean Cities and USAID
- Senior economic modeler for carbon trading strategies and national energy forecasting models
- Authored non-market valuation methodology techniques
- State inventory of carbon trading programs
- Social benefit analysis of Title IV of Clean Air Acts
- Assessment of natural gas infrastructure constraints
- Work directly with EIA in generating and updating energy market forecast

Organization Involvement

PJM/ Organization of PJM States (OPSI)

- Long-Term Capacity Evolution Advisory Committee
- Demand Response Task Force
- Markets and Reliability Committee
- Scarcity Pricing Working Group
- Market Implementation Committee
- Members Committee
- Governance Assessment Special Team
- SMART Transmission Study Stakeholders Group

MISO/ Organization of MISO States (OMS)

- Demand Response Working Group
- Planning Committee
- Eastern Interconnection Planning Committee
- RECB Task Force
- EISPC
- CARP
- MAWDRI

NASUC/ FERC/NARUC/NIST/NERC

- Electricity Committee
- Transmission SubCommittee
- Smart Grid Task Force
- Smart Grid Clearinghouse
- SGIC Advisory Committee
- Electricity Sector Steering Group (ESSG)

Academic Experience

West Virginia University, Department of Resource and Environmental Economics (2005) PhD candidate

- GIS/ArcView analysis of social/economic impact of Section 401 of the Federal Clean Water Act for coal producing regions
- GIS/ArcView feasibility study of fly-ash disposal in abandoned mine sites along the Allegheny River in the Northern Appalachian coal basin (Transmission Network Planning)

University of Alaska Fairbanks, Department of Resource and Applied Economics (2000) M.S.

- Implementation assessment of PEM fuel cells for distributed power generation
- Cost benefit analysis of alternative fuel implementation for distributed generation
- Cost benefit analysis of Mackenzie Delta natural gas pipeline project

Ohio State University - Biochemistry (1991-1993)

- Ice core sampling of carbon deposition with Loni Thompson

West Virginia University - Political Science and Economics (1995)

B.A.

From Stipulation in Case No. 07-1224-GA-EXM

JOINT EXHIBIT 2

DOMINION EAST OHIO POST SCO AUCTION COMMODITY SERVICE OPTIONS

	Service Options			
Type of Choice-Eligible Customer	Standard Service Offer (SSO) (1)	Standard Choice Offer (SCO) (2)	Monthly Variable Rate (MVR) (3)	Energy Choice or Opt-Out Aggregation
New customer (4)	Yes	Yes, without election (5)	No	Yes, but not until an initial SSO bill is issued
Customer whose opt-out governmental aggregation program is terminated	Yes	Yes, without election (5)	No	Yes
Customer whose Energy Choice or opt- in governmental aggregation contract expires without renewal	Yes	Yes, with election	Yes, without election (5)	Yes

- SSO commodity service is available to Choice-eligible customers for up to two consecutive billing periods. Choice-eligible SSO customers may be enrolled in opt-out government aggregation programs.
- SCO service is the NYMEX + offer based on the SCO auction result that is made available by Energy Choice suppliers that
 participate in the SCO assignment process. Such suppliers will be assigned customers on a rotating basis. SCO customers
 may be enrolled in opt-out government aggregation programs.
- may be enrolled in opt-out government aggregation programs.

 3. MVR commodity service is the NYMEX + offer that is posted by Energy Choice suppliers that participate in the MVR assignment process. Such suppliers will be assigned customers on a rotating basis. MVR customers may be enrolled in opt-out government aggregation programs.
- out government aggregation programs.

 4. New customers include those (a) establishing service at DEO for the first time, (b) relocating within DEO's service territory and whose Energy Choice or aggregation agreement is not portable, and (c) restoring service more than 10 days after being disconnected for non-payment.
- 5. Represents the default commodity service provided to customers who have not elected another type of commodity service.

Exhibit SH-3

DIFFERENCE BETWEEN MVR VS. SCO WITH SCO AT \$0.00

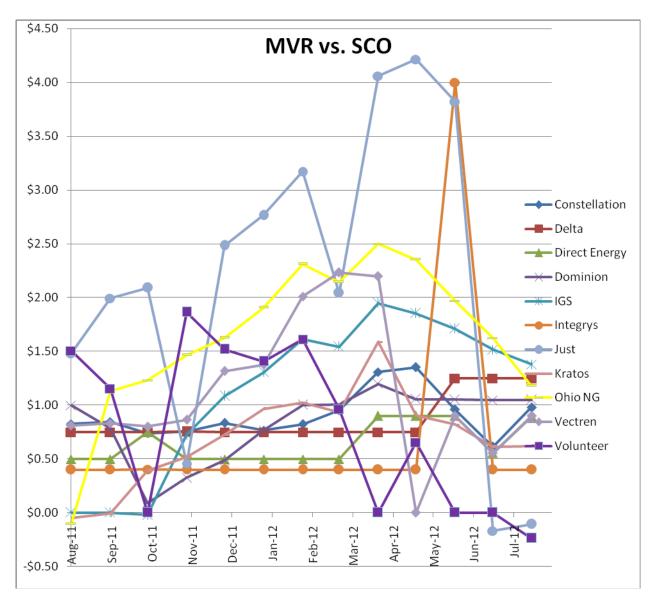


Exhibit SH-4

12 Month Fixed Offers vs. 12 Month SCO Average

12 month fixed vs.	8-12/2011 -	
DEO SCO	8/11/2012	Delta (\$/mcf)
DEO SCO 12 month	\$	
average	5.02	
	\$	\$
Constellation	7.42	2.40
	\$	\$
Direct Energy	8.12	3.10
	\$	\$
Dominion	7.78	2.76
	\$	\$
IGS	7.52	2.50
	\$	\$
Integrys	7.73	2.71
	\$	\$
Ohio NG	8.10	3.08
	\$	\$
Vectren	7.62	2.60

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Testimony of Stacia Harper was served electronically upon the following parties identified below on this 4th day of October 2012.

/s/Colleen Mooney

Colleen L. Mooney

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Summary: Testimony of Stacia Harper electronically filed by Colleen L Mooney on behalf of Ohio Partners for Affordable Energy